Effect of Audit Tenure on Financial Reporting Quality of Listed Industrial Goods Firms in Nigeria

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Abstract

The adverse effect of poor corporate financial reporting not only impact negatively on the absentee owners but also on all other existing and potential users. This study examined effect of audit tenure on financial reporting quality of listed industrial goods firm in Nigeria covering the period of ten (10) years ranging from 2011-2020. The study adopted ex-post facto research design and secondary data was used as the source of data for this study which was obtained from Nigerian Stock Exchange. Panel regression analysis technique was used to analyse research data. The result showed that audit tenure has a positive and significant effect on discretionary accrual which is taken as a measure of financial reporting quality. The study concludes that audit tenure has significantly positive effect on financial reporting quality and does substantially reduce the discretionary accruals of listed industrial goods firms in Nigeria. The study therefore recommend that stakeholders and decision makers who are interested in the services of external auditors in listed firms in Nigeria should judge and determine the auditors tenure on the basis of effectiveness, efficiency and output and not just on other considerations. This is because large 'earnings' is not necessarily associated with auditors competence and quality of financial reporting of listed industrial goods firms in Nigerian.

Keywords: Financial Reporting Quality, Manufacturing Sector, Audit Tenure, Investor

INTRODUCTION

Changes in the economic environment and growth of corporate structure have brought about the need to separate business ownership from management. In the past, the nature and size of businesses made it possible for owners to manage their firms hence self-accountability was prominent. Separation of owners (principals) from managers (agents) has necessitated owners and managers rapport such that managers have the responsibility of handling the business activities of the firm on behalf of their principals. This in turn brought the need for owners of business organizations to search for an intermediary whose responsibility was to check the stewardship of managers of the firm and assure the owners of fair performance. This intermediary role is what auditing plays so as to be able to establish whether managers' report truly reflect correct and complete position of transactions as presented (DeAngelo, 1981). Auditing involves scrutiny of financial records with a view to ascertaining the true state of financial position of the company as presented by directors. It enhances credibility, provides an independent confirmation of financial information presented by management thus serving to lessen investors' information risk (Watts

& Zimmeranson, 1983; Mansi, Maxwell & Miller 2004). In its role as the link between management and other stakeholders, the auditor assesses how corporate managers apply relevant accounting standards in financial statements preparation. In view of this, accounting information users anticipate auditors to apply technical ability, honesty, and independence, in the audit process to prevent issuance of false financial reports. Thus, for an audit to satisfy the reasonable expectations of various stakeholders, it becomes imperative for the audit assignment to be executed with due regard for financial reporting excellence.It is the duty of a company's directors to prepare financial statement. Nevertheless, Section 359(1) of the Companies and Allied Matters Act (CAMA), 1990 (as amended) provides for audit of financial statements. External auditors are appointed at Annual General Meetings (AGM) by shareholders for this purpose. The audit report being the end product of any audit task is then issued expressing a 'true and fair view' opinion on the financial statements (Blandon & Bosch, 2015; Otuya, Donwa & Egware, 2017).On the basis of going concern concept, a business would continue to exist (has perpetual succession) unless unforeseen incidents bring its existence to a halt.

However, what we are witnessing today is a direct opposite of the view earlier expressed. Businesses are suffering and experiencing serious premature liquidation nowadays, due to global economic meltdown and more importantly, sharp practices by the top executives in the organization- a development that has thrown the whole economic or business world into a state of confusion. The integrity and honesty of management team of corporate bodies have come under close scrutiny as the resources entrusted to their care are vanishing and continuously plummet. Investors lost their confidence and were thrown into quandary of what to invest and the magnitude of such investment.The list is in exhaustive as there are also cases of Satyam Computer (India), Cadbury (Nigeria), and African Petroleum (Nigeria). Following these, as Schummer (2003) observed it, the public has come to believe that corporate executives are more interested in “lining their own golden parachutes” than in looking out for the interests of their stakeholders. The root causes of failure and misleading financial statements of all the entities mentioned above are the paucity of information revealed by their financial reports (described as information asymmetry), various schemes of bottom-line (Earnings) management and other forms of aggressive accounting practices. In addition, lack of reliable, dynamic, ethically upright and professionally qualified auditors to signal (either through whistle blowing or qualified audit report) all inefficiencies, fraudulent tendencies and unwholesome practices of these companies contributed in no small measure, indeed, auditors have hardly issued qualified report in Nigeria.In almost all reported cases of corporate scandals, the accounting profession has always been indicted as contributing significantly to the success of such unwelcome situations. For instance, Arthur Andersen was indicted in the case of Enron, Price Water House Coopers, in the case of Satyam Computer, and Akintola Williams in the case of Cadbury (Nig.) Limited. Transparency of corporate reporting depends principally on financial accounting disclosures, governance disclosures, timeliness and credibility of disclosures, and accounting disclosures (Bushman et al. 2004). Thus, the role of auditors as information assurance providers in supplying key decision makers (management, investors and creditors) with useful, understandable and timely information is vital (Louwers, 2007). The adverse effect of poor corporate financial reporting not only impact negatively on the absentee owners but also on all other existing and potential users. The objective of this study therefore is to examine effect of audit tenure on financial reporting quality of listed industrial goods firm in Nigeria

LITERATURE REVIEW

Conceptual Framework

Auditor Tenure and Financial Reporting Quality

Audit tenure is the length of time an audit firm has been auditing financial statement of an organization. A lot of debates have evolved in the academic literatures and accounting profession on the relationship among audit tenure and audit quality (Jenkins & Vermeer, 2013; Blandon & Bosch, 2015). The center of the argument is the issue of auditor’s independence in the auditor-client relationship; which is the ability of auditors to maintain an unbiased position in performing their audit assignments, issuing audit opinion

and ensuring high quality audit report (Odia, 2015). There have been two opposing views on the effects of audit tenure on audit quality. Some are of the view that as the auditor–client relationship lengthens, the auditor may develop a close relationship with the client and impair independence which will eventually result in poor audit quality and allows for greater earnings management resulting in lower earnings quality (Becker, DeFond, Jiambalvo &Subramanyam1998; Lys & Watts, 1994).The other view is that as audit tenure lengthens, auditors increase their understanding of their clients' business and develop their expertise during the audit exercise and gain better insights into the clients operations and business strategies as well as internal control over financial reporting which will result in higher audit quality (Arens, Elder & Beasley, 2005; ling & Nopmanee, 2015).

Prior studies have recorded mixed result on the relationship of audit tenure and financial reporting quality. Lin and Hwang (2010) in their study, audit quality, corporate governance and financial reporting quality. Found a negative significant relationship between audit tenure and financial reporting, hence the study posit that when audit tenure lengthens, earnings management reduces. It is, however, observed that though the study was conducted in a developed country, its time coverage stopped at 2007. The time coverage on the study may have excluded recent event within the context of earnings quality. However Augustine, Famous and Augustine (2014) in their study, audit quality and accrual based earnings management of quoted companies in Nigeria, found no significant relationship between audit tenure and accrual based earnings management which indicates that the length of time of audit client relationship does not have any effect on earnings management. This study, though conducted in the non-financial firms in Nigeria stopped in 2011; it could have not captured resent event in earnings quality. The study conducted by Mohammed (2016) on the impact of external audit quality on quality of financial reporting by banking firms in Jordan, found a negative significant relationship between audit tenure and financial reporting quality, indicating that manager ability to manipulate earnings is reduced when audit tenure is elongated. It is observe that the study use discretionary accruals from Jones model instead of loan loss provision as it has been established in the literature to be the most applicable in financial firms. Thus, study conducted using loan loss provision in that same sample may yield a different result.

Independence and Financial Reporting Quality

One of the ways to counter financial scandals is to improve the quality of auditing services. This requires that auditors are independent of the reporting entity upon whose financial statements they are exerting professional judgment to express unbiased opinion so that such financial reporting may be reliable for decision making by the entire stakeholders. Independence is the cornerstone of the audit profession, since it is the foundation for the public's trust in the attest function (Caswell & Allen, 2001). Independence, according to Flint (1988) means to be completely objective, unprejudiced by previous involvement in the subject of audit, uncompromised by vested interest in the outcome or its consequences and unbiased and uninfluenced by considerations extraneous to the matter at issue. Put simply, independence connotes a state of mind which depicts demonstration of auditors' disinterestedness in the affairs of company they are auditing aside from the general interest they have as an agent of their client. The essence of auditors' independence is to ensure that auditors are able to discharge their duties in an impersonal, objective and professional manner so that stakeholders' confidence in corporate reporting may be promoted, nurtured and improved. This is because independence is fundamental to the credibility of financial reporting. Thus credibility can only be given by person seen to be independent of the subject of the audit and of any interested stakeholders (Gray & Manson, 2005:39). The European Commission's recommendation on auditor independence regarded independence as important because it was fundamental to the confidence the public had in the audit function. It added credibility to the financial statements and was therefore of value to investors, lenders, employees and other stakeholders. Auditor independence helps to ensure quality audits and contributes to financial statement user's reliance on the financial reporting process. Carrey (1970) as quoted in Panel of Audit effectiveness maintained that, "Independence, both historically and philosophically, is the foundation of the public accounting profession and upon its maintenance depends the profession's strength and its stature."

However, because of the several major instances of corporate misdemeanors especially, in light of the Enron debacle, significant aspects of the audit function in terms of effectiveness and auditor independence have received unwelcome media exposure. In fact, the collapse of Enron has had a very negative impact on the perception of auditor independence. It has also shaken investor confidence in the financial reporting (Jordan & Clark, 2004). Auditor independence has been described in terms of independence in fact and independence in appearance. Independence in fact is a mental state of objectivity and lack of bias. Independence in appearance depends on whether a reasonable investor, with knowledge of all relevant facts and circumstances, can conclude that the auditor is not capable of exercising objective and impartial judgment. Because actual independence (i.e. independence in fact) is a mental state and is in essence embodied in an individual auditor's mind; it is impossible for investors and other users of financial statements to accurately assess actual auditor objectivity (Lindberg & Beck, 2004). According to Okolie (2007:3), the criteria for auditor independence is that the auditor must be intellectually honest and be free from any obligations to or interest in the client, its management, or its owners. To the extent that stakeholders cannot accurately assess auditors' independence, their confidence would wane and deteriorate. It therefore behooves auditors to strive for strict maintenance of their independence in the course of audit exercise.

Financial Reporting

The need for financial reporting stems from the diffusion of ownership of corporate body from its management. Management needs to employ devices which will ensure accurate even though the recording is not directly supervised from the top level. Owners need to employ devices which will ensure truthful reporting in financial statements. These devices are internal control and external audit respectively (Smails, 1955). The traditional objectives of financial reporting were the prevention of improprieties by the promoters and managers of corporate body and giving some assurance to creditors and shareholders that their wealth/interest is being taken care of. The current necessity for financial reporting under the Company and Allied Matters Act (CAMA), 2020 is to satisfy the stewardship role of the board of directors. In other words, the directors are answerable to the shareholders who are the supplier of capital for their stewardship of the company and to other stakeholders. Celik (2002) was of the view that delivering of information regarding company activities and their results to shareholders is the most important factor that ensures effectiveness of decisions taken by shareholders. With respect to capital markets, disclosing information regarding company activities is the primary element that ensures efficacy of capital markets. The Institute of Chartered Accountants of New Zealand (1990) in their statement of concepts for general purpose financial reporting (1993), advanced that the objective of general purpose financial reporting are to provide information to assist users in:

i. Assessing the reporting entity's financial and service performance, financial position and cash flows;
ii. Assessing the reporting entity's compliance with legislation, regulations, common law and contractual agreements, as these relate to the assessment of the reporting entity's financial and service performance, financial position and cash flows; and
iii. Making decisions about providing resources to, or doing business with, the reporting entity.

Regulatory framework for financial reporting in Nigeria

Financial reporting in Nigeria has legislative backing as contained in the Companies and Allied Matters Act Cap.59 Laws of Federation of Nigeria 2020, (CAMA 2020).Other rules and guidelines, according to Ajibolade and Ogundele (2006), consist of the Statements of Accounting Standards (SAS) of the Nigerian Accounting Standards Board (NASB), International Accounting Standards (IAS), International Financial Reporting Standards (IFRS), and pronouncements of other regulatory bodies including, the Nigerian Securities and Exchange Commission, the Nigerian stock Exchange, and the Professional Accounting

Bodies. On July 10, 2003 the Nigerian Accounting Standards Board Act was enacted raising the status of the Statements of Accounting standards from mere guidelines to actual legislation.

Empirical Review

Abudullahi, Norfadzilah, Umar and Lateef (2020), examine impact of audit quality on the financial performance of listed companies in Nigeria. The major corporate failures and other related collapses which occurred around the globe and in Nigeria have raised fears about the reliability of the financial reporting practices by listed companies in Nigeria. This agitated a number of regulatory and professional institutions to advocate for reforms that will enhance transparency in financial reporting and thus increase performance as well as audit quality. Therefore, this study offers proof on the direct influence of audit quality on the financial performance of listed companies Nigeria. We employ 84 companies listed on the NSE with 756 samples for the period of nine years which is from 2010 to 2018 based on panel data approach. Furthermore, the research used secondary approach to retrieve data from Thompson Reuters DataStream as well as the financial statement of the listed companies. This present study employs multiple regression to examine the model. The results reveal that audit fee shows a positively and insignificant relationship with ROA. This implies that if there is decrease in the amount paid to auditors for audit services, then financial performance of listed companies in Nigeria will increase. Consistent with the agency theory, auditor size displays a significant positive relationship with ROA. This positive figure implies that a percentage increase in firms audited by Big4, then financial performance (ROA) will also increase. Auditor independence is also seen to be positive and statistically significantly related to the ROA. Finally, auditor independence is found to be more powerful than auditor size on the financial performance. The result of this research will assist the management as well as the executives of the listed companies in Nigeria to put more effort on independence of an auditor. The study recommend that the executives should engage the services provided by audit firms whose integrity and character is unquestionable. It will also assist policy makers and relevant authorities in decision making.

Sunday (2019), examine the relationship between auditors' independence and quality of corporate financial reporting in Nigeria. The study was anchored on the Agency Theory and adopted the content analysis research design. Data were collected from annual reports of listed manufacturing companies for the period 2013 to 2017. Some descriptive and correlation statistics were deployed as tools of analysis while regressions were used to examine the relationship between the variables highlighted in the study. Findings of the study indicate that audit incentives, audit tenure and audit client size have a significant positive relationship with quality of financial reporting. The study also finds that audit reporting lag has a positive but insignificant correlation with financial reporting quality whereas auditor's status such as being one of the big 4 audit firms has a significant negative relationship with quality of financial reporting. The study concludes that longer auditor tenure and higher incentives promote independence of the auditor which by extension improves quality of financial reporting. The study recommends that audit firms should charge reasonable fees to ensure adequate compensation for engagement staff as this will promote independence. The study further recommends that Financial Reporting Council of Nigeria (FRC) and other regulatory bodies should increase the three years mandatory professional requirement for auditors so as to encourage longer auditor tenure.

Itoro and Emmanuel (2019), examine impact of audit quality on financial reports of Deposit Money Banks (DMBs) in Nigeria. The motivation was the corporate collapses and failures experienced in the banking sector amidst the clean audit reports. The methodology adopted was ex-post-facto. Using descriptive and inferential statistics, a sample of 10 deposit money banks was purposively selected for a period of 14 years, resulting in 140 data points. The data were obtained basically from content analysis of published annual reports and accounts, and notes to the financial statements. Using Pearson Product-Moment Correlation and Linear multiple regression; the study revealed that Audit fees and Auditor tenure exert insignificant influence (3.4%, 3.3%) and exhibited significant relationship with the amount of discretionary accruals of deposit money banks in Nigeria. There existed 85.8% positive joint relationship

between audit quality and financial reports. However, auditor tenure has more influence on discretionary accruals than audit fees. It was recommended that the regulatory bodies should strengthen the quality of financial reports by taking measures such as fixing optimal non-discretional accrual levels. Supervisory and regulatory authorities should check the excesses of management of these DMBs, this will reduce the risk of bank failures even with clean reports. The auditors of DMBs in Nigeria given their fees should conduct Earnings Quality Assessment (EQA) and issue "Integrated Audit reports" which will include EQA reports and Internal Control Reports in addition to normal annual audit reports. These measures will reduce and address the issues in financial reports policy which could create threat for auditors. Aliu and Mohammed (2018), examines the effect of auditor's independence on audit quality of listed oil and gas companies in Nigeria over a period of ten (10) years (from 2007 to 2016). The sample size comprises of nine (9) out of the fourteen (14) companies listed in the downstream sector of the Nigeria Stock Exchange selected using purposive sampling technique. The study uses secondary data which were sourced from the audited annual financial statements of the sampled companies. The panel data were analyzed using descriptive statistics, correlation matrix and binary logit regression technique. The findings show that there is a significant positive relationship between auditor's independence and audit quality, while the control variable of company size and leverage showed positive and negative relationship with audit quality respectively. The study recommends that the entire components of audit fees pricing and calculation should be regulated and disclosed in order to provide public insight into the financial dependence of an auditor on a client and whether the fee corresponds with the complexity of the audit assignment.

Godwin, Ganiat and Kabiru (2018), empirically ascertained the relationship between audit quality attributes and financial reporting quality of listed consumer goods companies in Nigeria. The study adopted a correlational research design and adopted 12 out of the entire population of 17 quoted companies in the industrial goods sector using purposive sampling technique to determine sample size. The result of the panel regression with the aid of STATA indicated that audit firm size has a negative significant relationship, auditor tenure has a positive insignificant relationship while audit fees has a negative insignificant relationship with financial reporting quality of quoted industrial goods companies in Nigeria. The study recommended that consumer goods companies should not rely on audit fees paid to auditors as a guarantee of qualitative financial reporting since audit fees contributes negatively and insignificantly to financial reporting quality. Consumer goods companies should not emphasis on elongated tenure of auditors and should reasonably consider the size of audit firms before engaging them.
Zayol, Kukeng and Iortule (2017), examine effect of auditor independence on audit quality Auditor independence and audit quality are two concepts that work inseparably. Many have argued that auditor independence begets audit quality and as such audit quality cannot be different from the system that produces it. This paper reviews literature related to auditor independence and audit quality in order to determine the effect of the former on the latter. The ex post facto research design is employed. Information for this study was obtained from secondary sources to include journals, text books and other internet materials. Based on the review, findings show that there is a strong relationship between auditor independence and audit quality. The review also revealed four threats to auditor independence, which are client importance, non-audit services (NAS), audit tenure, and client's affiliation with CPA firms. However, some studies indicated a positive relationship while others showed contrary due to the type of study design employed, sample size, data collection instruments and analysis techniques used. Most of the studies on auditor independence and audit quality were centered on one or two of the threats and majorly done outside Nigeria. Even the ones done in Nigeria were focused on the banking sector. This study therefore, recommends that more investigations should be conducted in Nigeria taking into consideration the four major threats revealed and extend to other sectors like manufacturing, transport, media and education.

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).

Big bath Theory

The big bath theory suggests that firms experiencing low earnings in a given year may take discretionary write downs to reduce even further the current period's earnings. By so doing, earnings could be managed downward if the manager believes that the firm is not in a position to meet the contractual earnings' target or upward to improve an impending bonus. The notion is, according to Jordan and Clark (2004) that the company and its management will not be punished proportionately more for the big hit it takes to its already depressed earnings. This "clearing of the decks" makes it easier to generate higher profits in later years. They however conclude that the big bath theory is more than just a theory but is instead a practical method of managing earnings. One subset of earnings management involves "big bath" charges, which represents significant nonrecurring losses or expenses taken in the current period to clear the decks for improved future earnings performance (Sikora, 1999) in Jordan and Clark (2004). This is creative accounting at its finest (Zeckhauser, Patel & Degeorge, 1997). The idea works by reporting a steadily increasing growth in earnings year after year, regardless of the actual state of the company. As this results in increase in the company's share price and the market commending management, they decide to take a massive one-off hit to their earnings to set things right. This is accomplished by writing-off huge capital losses and expenditures, declaring a heap of bad debts as well as writing-off other assets perhaps, to take all their lumps in one swift hit. Consequently, the company is able to go back dishing up the kind of steady, predictable growth that the market is accustomed to from this stock. Hopefully, the problems are soon forgotten as a one-off extraordinary expense, and all is forgiven, at which stage the company can go back to being a darling of the stock market with steady growth in earnings and an excellent track record. Henry and Schmitt (2001) noted that companies with negative earnings may be more prone to take big hits than companies with positive earnings. That is, firms with extremely poor earnings are more likely to take big baths. The study of Chenheiter and Melumad (2002) also provides evidence of the existence of big bath theory.

The Financial Accounting Standards Board (FASB) in 2001 issued Statement of Financial Accounting Standard (SFAS) number 142: Accounting for Goodwill and Other Intangible Assets recommending the elimination of the periodic amortization of goodwill but instead; requires that goodwill be evaluated each year for impairment. But because testing for impairment involves significant use of estimates, this opens the door for earnings management. The implication of this theory for this study lies in the fact that, this management practice negates the "matching concept" which holds that periodic income should be properly matched with its corresponding expenses so as not to over burden a particular period's income with previous or future expenses. In addition, this practice also leads to distortion of financial report

through account material misstatement- a situation that further put auditor's diligence to test. Auditor's, in order to serve the interest of general stakeholders must, therefore strive to detect this financial impropriety so that financial statement could reflect the true picture of a concern's operation.

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. Financial reporting quality practice might be an indicator of the existence of an agency problem. Ownership and management are normally separated in modern corporations as shareholders are not always involved in the management of their firms. And this sets the basis for the agency problem (Habbash; 2010).

METHODOLOGY

This study adopted the ex post facto research design since the study is a secondary data research. The population of the study covers all the fourteen (14) listed industrial goods firms on the Nigerian Stock Exchange as at 2020. A ten (10) years period ranging from 2011 to 2020 is selected in order to bring a clearer picture of the problem in a determinable period of time. The sample size of twelve (12) was selected out of the total population of fourteen (14) listed industrial goods firms on the Nigerian Stock Exchange as at 2020, using the purposive sampling technique. The inferential analyses also involved the application the appropriate statistical technique of Panel Regression Analysis; this is due to the nature of the data, the study adopted Godwin, Ganiat and Kabiru (2018) model.

$$DACC = \beta_0 + \beta_1 AT + \epsilon_{it} \qquad (3.1)$$

Where:

β_0	=	The autonomous parameter estimate (Intercept or constant term)
β_1	=	Parameter coefficient of Audit Tenure
DACC	=	Discretionary Accruals
AT	=	Audit Tenure
ϵ_{it}	=	Stochastic Error term

Measurement of variables

Audit Tenure = measured If it is 3yrs and above is dichotomize as 1 and '0' If less than 3yrs
Financial Reporting Quality = Discretionary Accrual: Residual from Modified Jones' Model by Dechow, *et. al.,* (1995)

RESULT AND DISCUSSION

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	AT
Mean	0.803125	0.525000
Median	0.259500	1.000000
Maximum	4.567000	1.000000
Minimum	0.001000	0.000000
Std. Dev.	1.134309	0.501468
Skewness	1.852395	-0.100125
Kurtosis	5.435017	1.010025
Jarque-Bera	98.27387	20.00050
Probability	0.000000	0.000045
Sum	96.37500	63.00000
Sum Sq. Dev.	153.1123	29.92500
Observations	120	120

Source: E-View 10 Output (2021)

Table 1 presents the descriptive statistics of effect of audit tenure on financial reporting quality of industrial goods firms in Nigeria during the period of 2011 to 2020. The table shows that discretionary accruals (DACC) as a measure of financial reporting quality (FRQ) has a mean of 0.803125 with a standard deviation of 1.134309 and the minimum and maximum values of 0.001000 and 4.567000respectively. As observed, the table shows that the audit tenure (AT) during the period has an average value of 0.525000 with standard deviation of 0.501468 and the minimum and maximum values of 0.000000 and 1.000000 respectively. This implies a fair balance in audit tenure during the study period. Also the mean values for audit firm size is 0.426583, while the standard deviations also indicates 0.512510. The minimum and maximum value for audit firm size is 0.000000 and 1.650000 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 discretionary accruals, while the variable with the lowest is audit fee. Skewness which measures the shape of the distribution and equally shows the measure of the symmetry of the data set, indicated that DACC is positively skewed and have values greater than zero which suggests that the distribution tails to the right-hand side of the mean, the case is different for AT which is negatively skewed at -0.100125, but the mean value of 0.525000, is less than the median value of 1.000000. Kurtosis value measures the peakness and flatness of the distribution of the series. If Kurtosis value is less than 3, it means the distribution of the variable is normal, but when it is more than 3, the distribution of the variable is said to be abnormal. Variables with value of kurtosis less than three are called platykurtic (fat or short-tailed) and AT and AFS with a kurtosis value of 1.010025qualified for this during the study period. The Jarque-Bera statistic is for testing normality of a variable. If the variable is normally distributed, the histogram will be bell-shaped and as such the Jarque-Bera test of normality is an asymptotic, or large-sample test. Jarque-Bera also measures the difference between the skewness and kurtosis of each of the variables. DACC and AT has the highest Jarque-Bera value of 98.27387 and 20.00050 respectively.

Table 2: 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	0.001590	1	0.9682

Source: E-View 10 Output (2021)

The Result of Hausman test shows that chi-square statistics value is 0.00159 while the probability values of is 0.9682. This implies that there is enough evidence to rejectthe alternate hypothesis which states that fixed effect is most appropriate for the Panel Regression analysis. It thus stands that error component model (fixed effect) estimator is not the most appropriate because the fixed effects are not 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 randomeffect regression model is most appropriate for the sampled data because the Hausman test statistics as represented by corresponding probability value is greater than 5%.

Decision Rule: The decision rule for accepting or rejecting the null hypothesis for any of these tests will be based on the Probability Value (PV) and the Probability (F-statistic). If the PV is less than 5% or 0.05 (that is, if PV < 0.05).

Table 3: Panel Regression Result (Random Effect)

Dependent Variable: DACC
Method: Panel EGLS (Cross-section random effects)
Date: 08/16/21 Time: 07:55
Sample: 2011 2020
Periods included: 10
Cross-sections included: 12
Total panel (balanced) observations: 120
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.641275	0.312637	2.051177	0.0425
AT	0.308287	0.327971	0.939981	0.0391

Effects Specification

	S.D.	Rho
Cross-section random	0.867942	0.5414
Idiosyncratic random	0.798818	0.4586

Weighted Statistics

R-squared	0.510495	Mean dependent var	0.224432
Adjusted R-squared	0.500916	S.D. dependent var	0.795068
S.E. of regression	0.795432	Sum squared resid	74.65999
F-statistic	0.891104	Durbin-Watson stat	1.165716
Prob(F-statistic)	0.007107		

Source: E-View 10 Output (2021)

From table 3 above, the coefficient of multiple determinations (R^2) is 0.51, this indicates that about 51% of the total variations in return on asset is explained by the variations in the independent variables (AT),

while the remaining 49% of the variation in the model is captured by the error term. This indicates that the line of best fit is 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. Having carried out a standard error test on the parameters estimated and as also indicated by their respective probability values, the parameter estimate for AT is slightly statistically significant, given that the individual probability is0.0391which is less than 5%.However, when taken collectively, the regressors (AT) against the regressed (DACC), the value of F-statistic is 0.891104and the value of the probability of F-statistic is 0.00710. This result implies that the overall regression is both positive and statistically significant at 5%.

Discussion of Findings

This study succinctly examined the effect of audit tenure on financial reporting quality of industrial goods firms in Nigeria using panel series data and regression analysis approach. Audit tenure (AT) for twelve (12) listed industrial goods firms, for 10 years ranging from 2011 to 2020, were the independent variable while the Discretionary Accruals (used to proxy financial reporting quality) was the dependent variable for the study. The effect of the independent variable on 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 audit tenure has a positive and significant effect on discretionary accruals taken as a measure of financial reporting quality. This implies that audit tenure significantly and relevant predictor of financial reporting quality in industrial goods firms in Nigeria. This finding is not in agreement with the research efforts Godwin, Ganiat and Kabiru (2018), who empirically ascertained the relationship between audit quality attributes and financial reporting quality of listed consumer goods companies in Nigeria and concluded that there exist a negative and insignificant relationship between audit quality and financial reporting quality of quoted industrial goods companies in Nigeria. Similarly, the findings of this study is also not in agreement with the research work of Zayol, Kukeng and Iortule (2017), who established four threats (which are client importance, non-audit services, audit tenure, and client's affiliation) as being responsible for the insignificant effect between auditor independence attributes and financial reporting quality.

CONCLUSION AND RECOMMENDATIONS

In the Accounting and Financial literature several studies have investigated the link between audit tenure and financial reporting quality of firms. This research contributes to the strands of literature by investigating the audit tenure on the financial reporting quality of listed industrial goods firms in Nigeria.The policy implication of the finding from the analysis in this study is that audit tenure has contributed immensely and yet to spur Nigeria's industrial goods firms to increased financial performance and reporting quality, as well as provide a spring board that can enable the manufacturing sector at large to emerge as a quality-oriented sector in terms of its financial performance and reporting devoid of earnings management, with its attendant positive multiplier effects on the overall economy. This revelation is instructive, given the magnitude of activities within the industrial goods sector of the Nigerian economy.

The conclusion of the study therefore is that audit tenure has significantly positive effect on financial reporting quality and does substantially reduces the discretionary accruals of listed industrial goods firms in Nigeria. The study recommend that stakeholders and decision makerswho are interested in the services of external auditors in listed firms in Nigeria should judge and determine the auditors tenure on the basis of effectiveness, efficiency and output and not just on other considerations. This is because large 'earnings' is not necessarily associated with auditorscompetence and quality of financial reporting of listed industrial goods firms in Nigerian.

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Effect of Macroeconomic Variables on Loan Portfolio Quality of Listed Deposit Money Banks in Nigeria

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Abstract

The study examined the effect of macroeconomic variables on loan portfolio quality of fourteen listed deposit money banks in Nigeria. The study period span from 2007-2020 and archival data were sourced from audited financial statements of listed deposit money banks and Central Bank statistical bulletin of 2007-2020. The independent variable of exchange rate, inflation and gross domestic product were regressed on loan portfolio quality proxied by non-performing loans. Diagnostic test of variance inflation factor and heteroskedasticity test were conducted to determine the fitness of the data for analysis. Panel regression analysis was adopted to estimate the regression equation. Hausman specification test favoured random effects regression since the p-value of Hausman specification test result was greater than 0.05. Findings from Random effects regression result indicate that exchange rate has no significant effect on loan portfolio quality while both inflation and gross domestic product have a significant effect on loan portfolio quality. The study recommended amongst other things that Central Bank of Nigeria should target fiscal and monetary policies aimed at controlling hyper-inflation and growing a robust economy that would support the intermediation functions of deposit money banks without jeopardizing the loan portfolio quality of banks.

Keywords: Exchange rate, Loan portfolio quality, Inflation, GDP, Panel regression

INTRODUCTION

Loans portfolio quality is one of the measures used in determining the financial performance of banks and is an indication of credit risks exposure that financial institutions make provisions for in their financial statements. The loan portfolio quality of Nigeria Banks is benchmarked against a threshold of 5% by the regulatory authority, the Central Bank of Nigeria. Moreover, the quality of loan portfolio across most countries in the world has continued to decline since the global economic meltdown of 2007-2008. Loan portfolio relates to the sum total of monies loaned out through various lending products to different borrowers. Proper management of loan portfolio is a key factor for financial soundness and bank profitability and hence the need to regulate banks and indentify macro factors that affect growth of bad and doubt loans (Abel 2018). There is growing concern among stakeholders over management of bank loan portfolio quality and it is argued that poor loan portfolio quality of banks is the root cause of bank failure in Nigeria (Ugoani, 2016). In addition, the growing interest of researchers (Clementina & Isu 2014; Diawan & Rodrik 1992; Sethi & Bhatia 2007; Vatansever & Hepsen 2013) in examining the factors that affect loan portfolio quality is not unconnected with the fact that banks plays an important intermediary and stability roles in the economy of any nation and crisis in the banking sector would have overall financial implications on the economy. Likewise, the literature investigating loan portfolio quality have used several alternative indicators: non-performing loans (Castro, 2012; Fainstein & Novikov, 2011; Jimenez & Saurina, 2005 and Pestova & Mamonov, 2012), loan loss reserves (Arpa,Giulini, Ittner & Pauer,2001; Bikker & Hu, 2002; Glogowski, 2008; Laidroo & Männasoo, 2014 and Pain, 2003) or default rates (Trenca & Benyovszki, 2008 and Virolainen, 2004). But the lack of consensus by researchers as the appropriate measurement for loan portfolio quality motivates the need for the present study.

Similarly, studies (Klein, 2013, Fajar & Umanto, 2017) on effect of macroeconomic variables such as exchange rate, inflation and gross domestic product show that economic variables have implication on loan portfolio quality of banks. Nanteza (2015) found a strong relationship between exchange rate and non-performing loans. Inflation rate have a significant effect on the build-up of non-performing loans as shown by studies (Endut, Syuhaha, Ismail & Mahmood, 2013 and Kjosevski, Petkovski & Naumovska, 2019).

The level of economic activities in a country represented by gross domestic product can determine the level of loan portfolio quality as indicated in previous studies (Richardas,2012 & Roland, Petr & Anamaria,2013) on determinants of non-performing loans indicate that GDP affects the level of non-performing loans in different countries banking industry. However, studies by Klein (2013) used VAR analysis to estimate the dependent and independent variables while Fajar and Umanto (2017) employed the dynamic panel data GMM as tool of analysis to investigate the effect of macroeconomic variables on non-performing loans but Tyona, Tyohemba and Eya (2017) used the panel multiple regression analysis to examined the effect of macroeconomic variables on non-performing loan. Findings from empirics indicate that scanty previous studies (Nanteza, 2015 and Messai & Jouini 2013) have been conducted to the best of literature review using multiple regression model as statistical tool of analysis to estimate the variables. This present study adopted panel regression technique to provide the Nigeria evidence of the effect of macroeconomic variables on loan portfolio quality and this methodology gap is what the present research responds to. The following research questions guided the study based on the gaps identified from research problem:

i. How does exchange rate affect loan portfolio quality of listed DMBs in Nigeria?
ii. Investigate the effect inflation rate on loan portfolio quality of listed DMBs in Nigeria?
iii. Examine the effect of gross domestic product growth rate on loan portfolio quality of listed DMBs in Nigeria?

The study would be of immense benefit to the Central Bank of Nigeria in designing and fashioning a macro prudential guideline that will assist deposit money banks in mitigating the effect of uncontrollable macroeconomic variables on loan portfolio quality through inflation and GDP targeting aimed at stability of the economy. The motivation for the study is to examine how macroeconomic variables of exchange rate, inflation and gross domestic product affect the level of loan portfolio quality of deposit money banks in Nigeria and how these variables can be deployed as prudential macroeconomic tools to maintain an optimum loan portfolio quality for banks. The remaining of the paper is arranged as follows after introduction; literature review, methodology, discussion of findings, conclusions and recommendations.

LITERATURE REVIEW

Conceptual Framework

Loan Portfolio Quality

Loan portfolio refers to the total loan exposure of a lender or lending institution at any point in time, while loan portfolio quality is an indication of the performing status of the loan portfolio and it is measured by the non-performing loan (NPL) ratio, that is, the ratio of nonperforming loans to total loan exposure, expressed in percentage (CBN, 2016). When the NPL ratio is low, the loan portfolio quality is said to be high, while a high NPL ratio implies a low loan portfolio quality. In view of the foregoing, it is not out of place to describe loan portfolio quality as the ratio of performing loans to total loan exposure, expressed in percentage. The Basel Committee defined NPLs as any loan that is overdue for more than 90 days (Alton & Hazen 2001; Guy 2011). Non-performing loans are bad debts whose recovery is doubtful because the borrowers are not servicing them. Fofack (2005) defined NPLs as those loans which have ceased earning income for the bank for a long time, that is, the principal and the interest have not been paid for more than 90 days. Vatansever and Hepsen (2013) argued that NPLs are a good measure to ascertain the performance of financial institutions, the economy and the stability of the financial sector.

Exchange Rate

Exchange rate according to Demburg and McDougall (1980) as cited in Jhingan, 2002 is defined as the domestic price of foreign currency which can be determined either administratively or by the market forces of demand and supply of currencies through imports and exports respectively in the foreign exchange market. The importance of this definition is that it focuses on the concept of price as a nature of exchange rate. The basis for exchange rate determination has been on the premise of purchasing power parity (PPP)

concept as enunciated by Cassel (1918). Purchasing power parity (PPP) concept defines exchange rate as the amount of the currency of one country, which endows the holder with the same amount of purchasing power. Expressed differently, purchasing power parity theory states that the same collection of goods purchased with different currencies should have same cost as measured in any of the currencies (Cooper & Fraser, 1990). Exchange rates are defined as the price of one country's currency in relation to another. They may be expressed as the average rate for a period of time or as the rate at the end of the period. This indicator is measured in terms of national currency per US dollar.

Inflation Rate

Demberg and McDougall refer to inflation as a continuous price increase as calculated by an index such as the Consumer Price Index (CPI) as cited in (Jhingan, 2002). In an inflationary economy, it is difficult for the national currency to function as a means of exchange and a store of value without having an adverse effect on the distribution of income, production and employment (CBN, 2016). Inflation is characterized by a fall in the currency value of the country and an increase in the exchange rate of the country with the currencies of another state. Inflation as an indicator of price stability affects the solvency of loan. For long periods of high inflation, the real value of the payments of borrowers begins to decrease, which helps them to pay duties. This is associated with improved quality of the loan portfolio. The Consumer Price Index (CPI) methodology is used to calculate inflation rates in Nigeria as it is readily available and currently available on a monthly, quarterly and annual basis (CBN, 2016). The study adopted the consumer price index as a measure of inflation rate for this study.

Gross Domestic Growth Rate

The real GDP is the sum of the value added in the economy during a given period or the sum of incomes in the economy during a given period adjusted for the effect of increasing prices (Daferighe & Aje, 2009). Nominal GDP is the determination of GDP without taking into account other factors or variables such as inflation. Nominal GDP increases overtime for two reasons (Daferighe & Aje, 2009). The first is that the production of most goods increases overtime. The second is that the naira price of most goods increases overtime. For instance, in a study by Ugbede, Otache and Umar (2012) on the impact of commercial banks credit on Nigeria's GDP they discovered that Commercial banks credit has a high positive impact on the nation's GDP meaning the higher the volume of Commercial banks credit made available, the higher the corresponding GDP. Gross domestic production (GDP) can be defined as the measurement of the total market value of the goods or services produced by the economy of a particular country as well as total income earned by the people living at that country. High rise of GDP implies that economy is performing well coupled with the increase of income of the people. Borrowers with the rising trend of income indicate that they would be able to pay off the loan. Annual growth of GDP indicates that banks can implicitly be assured that lending function of banks would work effectively.

Empirical Review

Exchange Rates and Loan Portfolio Quality

Klein (2013) aimed to evaluate the determinants of NPLs in Central, Eastern and South Eastern Europe (CESEE) economies for the period of 1998-2011. The study used panel VAR analysis in to estimate the equation. The study results confirmed that the level of NPLs tends to increase when unemployment rises, exchange rate depreciates, and inflation is high. The study by Klein (2013) is a cross-country study which is normally affected by the operational environment of the different countries used as samples but the present study will present a Nigeria experience based on economic and regulatory environment which differs from the CESEE economies and this reason justifies the rationale for the current study. Considering Uganda, Nanteza (2015), examined the effect of economic factors on NPLs in Uganda's commercial banks, using a multiple linear regression model. Precisely, the study found that exchange rate, inflation rate, interest rate and GDP growth do not have any significant impact on NPLs in Uganda's commercial banks. The present study considered macroeconomic factors that affect non-performing loans in Uganda but this is a Nigeria

study where the macro-prudential guidelines is different from that of Uganda and this regulatory differences is the gap the present study will fill and address.

However, Tyona, Tyohemba and Eya (2017) investigated the impact of macroeconomic determinant of non-performing loans in Nigeria. Data from 1982-2015 was sourced from secondary sources. Using the error correction methodology, the study reveals a strong positive relationship between non-performing loans and selected macroeconomic variables in the short run including exchange rate Money supply and GDP. The study by Tyona, Tyohemba and Eya (2017) did not consider the time frame of 2016-2020 which time void in previous study done in Nigeria that is filled by the present study as the period of recession and covid-19 witnessed during these periods affected the level of NPLs in Nigeria. The Romanian study by Hada, Barbuta-Misu, Luga and Wainberg (2020) studied the effect of some macroeconomic determinant factors affecting the rate of NPLs in Romania. The study use archival data for the period 2009–2019. The study adopted linear regression analysis to estimate the explained and the explanatory variables. The results from statistical results showed that all selected independent variables (exchange rates, unemployment rate, and inflation rate) have a significant impact on the dependent variable NPL. The study by Hada et al (2020) adopted linear regression analysis as statistical tool but the present study used panel multiple regression analysis after conducting diagnostics tests and this is the void established in the previous study that the present study responds to.

Inflation Rate and Loan Portfolio Quality

Mahmoud and Mohamed (2015) investigated the macroeconomic determinants of non-performing loans in some Arab countries through the period 2000-2012 using the dynamic panel data approach. The outcomes of findings indicate that inflation rate has a negative impact on NPLs, whereas improvement in macroeconomic and financial conditions seems to have a negative impact on the level of NPLs.The study conducted by Mahmoud and Mohamed (2015) is cross country study and the implications of the findings will be different for Nigeria because of the banking operational environment and policy regulation. This void in the operational and policy dynamics of the banking system in Arab countries when compared with Nigeria is the gap filled by present study. Likewise, Makri and Papadatos (2016) examined the determinants of loan quality of Greek cooperative banks during the period 2003-2014. Loan quality is measured by Loan Loss Reserves Ratio and dynamic regression techniques are implemented for the econometric estimations. The outlined results indicate that the macroeconomic environment (i.e. public debt, local unemployment, economic activity and inflation) and the accounting ratios (i.e. past loan quality and profitability) have significant effect on loan quality. The void of how the dependent variable (loan portfolio quality) was measured was filled by the present study. The present study measured loan portfolio quality by non-performing loans while the previous study by Makri and Papadatos (2016) used loan loss Reserve Ratio to proxy loan portfolio quality.

Furthermore, Mondal (2016) examined effects of macroeconomic variables on the increase of NPLs revealed a negative correlation with the inflation rate and spread in the rate of interest and positively affected by GDP. In a similar development to the studies conducted in Arab countries and Greek, Fajar and Umanto, (2017), in a study of 20 banks listed on the Indonesia Stock Exchange (IDX) between Q1 2005 and Q4 2014, using dynamic panel data GMM, reveal that NPLs in the previous period, GDP growth, and inflation, have a significant negative impact on NPLs and that operations expenses to operations income ratio (BOPO) and return on equity (ROE) have a significant positive relationship with NPLs. The present study differs in methodology by using panel multiple regression models to estimate the regression equation which the previous adopted GMM. In a related study in India, Memdani (2017) conducted a study on the determinants of non-performing Assets in the Indian Banking sector and the study assessed if these determinants vary across the three different ownership structures viz., public sector banks, private banks and foreign banks, of banks in India. The panel data for all the banks from 2005 to 2014 is collected from the official website of Reserve Bank of India. The econometric technique of panel data analysis was used. The results reveal that macro economic factors, like log of per capita income and Inflation are significantly determinants of NPLs in Public Sector Banks. The study was conducted in India and the findings of the

study have no implication in Nigeria because of data and variables difference regarding macroeconomic factors used in estimating the regression model and this justifies the reason for the present study. In the same vein, Polat (2018) used data set of 2000-2016 to examine the macroeconomic determinants of NPLs Turkey and Saudi Arabia. By using NPL ratio as the dependent variable and estimating through beta regression analysis, it is found that market capitalization and inflation variables are positively related with NPL for Turkey while GDP, inflation, debt, market capitalization and money supply are positively related with NPL for Saudi Arabia and unemployment and transparency variables are negatively related with NPL for Saudi Arabia. The study by Polat (2018) is a cross-country study conducted overseas whose banking operational and regulatory environment is different from the Nigerian environment.

Gross Domestic Product Growth Rate and Loan Portfolio Quality

Gremi (2013) analyzed the link between the macroeconomic developments especially GDP growth and interest loan rate and the banking credit risk measure by non-performing loan rate (NPLR). The study analyzes the data of commercial banks in Albania over the time period from 2005Q1 to 2013Q1. Employing dynamic panel data approaches, the study found that the banking credit risk is significantly affected by the macroeconomic environment; the credit risk increases when GDP growth and is also negatively affected by a rise of the interest loan rate. The study found out that amount of doubtful and non-performing loans in banks is highly dependent on macroeconomic changes such as GDP.The previous study was an Albania study using quarterly data but the present study is a Nigeria study that would used annual data for estimation of the panel estimation. This void in location of study the annual data used for analysis instead of quarterly data was addressed by the present study. Conversely, Messai and Jouini (2013) conducted a study on determinants of non-performing loans for a sample of 85 banks in three countries (Italy, Greece and Spain) for the period of 2004-2008.The macroeconomic variables of rate of growth of GDP, unemployment rate and real interest rate with respect to specific variables opted for the return on assets, the change in loans and the loan loss reserves to total loans ratio. Panel regression results found the NPLs vary negatively with the growth rate of GDP, the profitability of banks' assets and positively with the unemployment rate, the loan loss reserves to total loans and the real interest rate. The study is a cross-country study and results emanated from it cannot be used for country specific study like Nigeria because the operational environment differs in terms of regulation, supervision and operation. This gap justifies the rationale for the present study.

An empirical examination by Tanasković and Jandrić (2015) assessed the macroeconomic determinants of growth of NPL ratios and found an inverse relationship between GDP and NPL ratio. The study also found that GDP, the ratio of foreign currency loans and exchange rate level changes positively with NPL ratio surge. In addition, Fajar and Umanto (2017) study analyzed the determinants of NPLs using banks listed in Indonesia stock exchange for the period 2005Q1 to 2014Q4 adopting dynamic panel data techniques (systems GMM) in the analysis. The results of the analysis indicate that, past value of non-performing loans positively contributes to the current value, thus confirming the bad loans are not immediately written off. The results further show that GDP growth rate increases individual incomes while inflation reduces the real debt burden. The previous study by Fajar and Umanto (2017) used GMM techniques for analysis while the present study adopted panel multiple regression analysis and this void in method of analysis is the void in previous study addressed and filled by present study. Also, Tyona, Tyohemba and Eya (2017) investigated the impact of macroeconomic determinant of non-performing loans in Nigeria. Data from 1982-2015 was sourced from secondary sources. Using the error correction methodology, the study reveals a strong positive relationship between non-performing loans and selected macroeconomic variables in the short run including Money supply and GDP. The previous study used error correction model while the present study adopted panel regression analysis. The gap in method used in analyzing the independent variables is the void in previous study addressed by present study.

Supporting earlier studies, Fajar and Umanto, (2017), in a study of 20 banks listed on the Indonesia Stock Exchange (IDX) between Q1 2005 and Q4 2014, using dynamic panel data GMM, reveal that NPLs in the previous period, GDP growth, and inflation, have a significant negative impact on NPLs. The previous

study was conducted outside the shores of Nigeria and the rationale for the present study is to provide the Nigerian evidence of determinants of non-performing loans. In furtherance of studies on determinants of NPLs in different jurisdictions, Polat (2018) used data set of 2000-2016 to examine the macroeconomic determinants of NPLs Turkey and Saudi Arabia. The study used NPL ratio as the dependent variable and estimating through beta regression analysis, the study found that market capitalization and inflation variables are positively related with NPL for Turkey while GDP, inflation, debt, market capitalization and money supply are positively related with NPL for Saudi Arabia and unemployment and transparency variables are negatively related with NPL for Saudi Arabia. It has been found that the NPL ratios are well explained by some macroeconomic variables. The study by Polat (2018) is a cross-country study while the present study is a country study that used industry-specific variable of capital adequacy ratio to estimate the panel regression equation for the present study.

Theoretical Framework

Financial Accelerator Theory

Financial accelerator theory was propounded by Bernanke and Gertler (1989).Financial accelerator theory explains how relatively small economic shocks such as inflation and exchange rate instability can have large and persistent effects on aggregate economic activity due to financial market imperfections. Financial accelerator theory shows the mechanism of economic shocks amplification and propagation in an economy. The theory considers the interplay between economic agents' net worth and the external finance premium that arises due to asymmetric information between lenders and borrowers. This theory opines that banks' loan portfolio is likely to grow substantially resulting in improved financial performance during periods of economic expansion and this assertion holds true with the studies of (Fajar & Umanto,2017;Gremi ,2013; Polat ,2018) However, during recession banks will find it more difficult to lend resulting in a contraction in the loan portfolio. Also loan growth over an economic expansionary period may have adverse effect on banks financial performance in a recession period as the borrowers find it difficult to service the their loans. Study by Makri and Papadatos (2016) indicate that the macroeconomic environment (i.e. public debt, local unemployment, economic activity and inflation) and the accounting ratios (i.e. past loan quality and profitability) have significant effect on loan quality.

METHODOLOGY

This study adopted an expost facto research design. The adoption of expost facto research design is as a result of the reliance on secondary data that are quantitative in nature and these data had already been collected by the study population. This research design is appropriate with the purpose of the study, which is to analyze the effect of macroeconomic variables on loans portfolio quality of listed deposit money banks in Nigeria. The population of study is all fourteen listed deposit money banks in Nigeria. This study utilized the panel ordinary least squares model to examine the effect of macroeconomic variables on loan portfolio quality of listed deposit money banks in Nigeria. Random effects panel regression techniques were used to analyze this study because the study involves the combination of time series and cross sectional data. The functional model for this study is stated as;

LPQ = F (INF, EXR, GDP)

The model is stated econometrically in log form as;

$$LPQ_{it} = \beta_0 + \beta_1 EXR_t + \beta_2 INF_t + \beta_3 GDP_t + \varepsilon_t$$

Where;

LPQ_{it} = Loan Portfolio Quality of bank i at time t; INF_t = Inflation rate of bank at time t;EXR = Exchange rate of bank at time t; GDP_t = Gross Domestic Product Growth rate of bank at time t; ε_t = error term ;β_0 = Intercept of the regression line; β_1-β_3= Coefficient of the independent variables.

In summary, the variables will be measured thus:

Variable	Notation	Nature of Data	Measurement	Sources
Loan Portfolio Quality	LPQ	Dependent Variable	The ratio of non-performing loans to total loans.	Khan,M.A.,Siddique,A. & Sarwar,Z.(2020);Castro,(2012); Fainstein & Novikov,(2011)
Inflation Rate	INF	Independent Variable	Consumer Price Index inflation.	Dragisa(2013);Polat (2018);Memdani (2017)
Exchange Rate	EXR	Independent Variable	Exchange rate of the local currency to the US dollar- period average	Jordan and Tucker(2013);Hada et al.(2020);De Bock and Demyanets (2012)
GDP Growth Rate	GDP	Independent Variable	Annual growth rate of Gross Domestic Production.	Fajar and Umanto(2017);Tyona et al.(2017);Roland et al.(2013)

RESULTS AND DISCUSSIONS

In order to ensure that data used for analysis do not give spurious result. A pre-estimation test result that tested descriptive statistics and variance inflation factor was carried out.

Descriptive Statistics

Descriptive statistics gives a presentation of the mean, maximum and minimum, probability values of variables applied including the standard deviations obtainable.

Table 1: Descriptive Statistics

	LPQ	EXR	INF	GDP
Mean	0.171876	208.2707	11.48571	4.007143
Median	0.106950	158.0250	11.83500	4.770000
Maximum	0.860000	380.2600	16.52000	8.040000
Minimum	0.007300	118.5500	5.390000	-1.790000
Probability	0.000000	0.068575	0.709714	0.178844
Observations	42	42	42	42

Source: Author's computation, E-view 9 (2022)

The table1shows the summary of the descriptive statistics with observed figures for mean, maximum, minimum and probability values are given. The average value of loan portfolio quality (LPQ) is 0.1718. The minimum value of loan portfolio quality (LPQ) is 0.0073 with maximum value of 0.8600 and standard deviation of 0.1972. The average value of exchange rate for the 14 years period is N280.27 while the maximum value was N380.26 with a minimum value of 118.55.The mean value of inflation was 11.48% for the period of 2007-2020 with maximum value of 16.52% and a minimum value of 5.39%. GDP growth rate mean showed 4% for the period of 2007-2020 with a maximum value of 8.04% and a minimum value of-1.79%. The probability values of the independent variables are all greater than 0.05 meaning the variables if taken together cannot explain joint the effect of exchange rate, inflation and GDP on loan portfolio quality of listed deposit money banks in Nigeria.

Variance Inflation Factors

Table 2: Variance Inflation Factors

Variable	Coefficient Variance	Uncentered VIF
EXR	0.001372	1.926183
INF	0.102468	2.543295
GDP	0.425015	2.696193

Source: Author's computation, E-view 9

The tolerance values and the variance inflation factor are two good measures of assessing multicolinearity between the independent variables in a study. The result on table 2 shows that variance inflation factor were consistently smaller than ten (10) indicating complete absence of multicolinearity (Gujarati, 2017).

Hausman Test

The Hausman test is employed to choose between fixed effects and random effects model. The test basically tests whether the error terms are correlated with the regressors. The decision rule is to accept fixed effect regression effect if p-value is less than 0.05 and random effects is accept if p-value is greater than 0.05. Similarly, Random effects regression, Hausman test result, serial correlation, normality and hetreoskedasticity results are summarized and interpreted accordingly as shown in table 3.

Discussions of Findings

Table 3: Random Effects Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.077406	0.252865	0.306116	0.7612
EXR	0.017972	0.094257	0.190667	0.8498
INF	0.124925	0.043359	2.881198	0.0065
GDP	0.281846	0.110961	2.540039	0.0153
R^2	0.102			
Prob(F-statistics	0.245			
Hausman Test	1.000			
LM Test-Obs. R^2	0.0644			
Hetreoskedasticity-Obs. R^2	0.7837			

Source: Author's computation, E-view 9

The regression line LPQ = 0.077406 + 0.017972EXR + 0.124925INF + 0.281846GDP indicates that loan portfolio quality would reduce by 0.017972 units for every 1 percentage increase in exchange rate (EXR) likewise loan portfolio quality would increase by 0.124925units for every 1 percentage increase in inflation rate (INF) and finally loan portfolio quality increased by 0.281846 units for every 1 percentage increase in Gross Domestic Product (GDP). The probability value of exchange rate is 0.8498 which is greater than the critical value of 0.05 which means that the null hypothesis is accepted that exchange rate has no significant effect on loan portfolio quality of deposit money banks in Nigeria is accepted. However, the probability value of inflation rate shows that the critical-value of 0.05 is greater than the calculated value of 0.0065 meaning that the null hypothesis is rejected and the alternative hypothesis that inflation rate has a significant effect on loan portfolio quality of deposit money banks in Nigeria is accepted. Similarly, GDP probability value of 0.0153 is less than the critical value of 0.05 at 5% level o significance which invariably means that the alternative hypothesis that GDP has a significant effect on loan portfolio quality of deposit money banks in Nigeria is accepted.

The F-Statistic of 1.442046 and its corresponding P-value of 0.245 indicates that the model is unable to explain fully the determinants of loan portfolio quality of banks in Nigeria. The Coefficient of Determination (R^2) of 0.102 indicates that about 10% of variation in LPQ can be explained by exchange rate (EXR), Inflation (INF) and Gross Domestic Product (GDP). This implies that ability of the regression line to predict Loan Portfolio Quality is about 10%. The remaining 90% are attributed to other independent variables that are not captured in the regression. The study therefore, rejects Null Hypothesis which states that inflation and Gross Domestic Product have no significant effect on loan portfolio quality of listed deposit money banks in Nigeria but accepts the Null hypothesis that Exchange rate have no significant

effect on loan portfolio quality of listed deposit money banks in Nigeria. The Breusch Pegan-Godfrey Test of Heteroskedasticity indicates observed R^2 of 0.7837. Thus, the observed R^2 of 0.7837 is greater than 0.05 and therefore the study accepts the null hypothesis that the residuals are not heteroskeadasticity but homokesdasticity and is desirable. The Hausman Specification Test indicates that Random Effect Model is most appropriate to Fixed Effect Model given the P-value of 1.000 is greater than the critical value of 0.05. Therefore, Random Effect is most desirable and appropriate to Fixed Effect Regression. The Breush--Godfrey serial correlation LM test for serial correlation as shown in the above table was performed on the residuals and the results showed observed R-squared of 0.0644, which is in excess of 0.05, which lead us to reject the presence of serial correlation in the residual.

Macroeconomic Variables and Loan Portfolio Quality

Results from regression analysis indicate that Exchange rate (EXR) has no significant effect on loan Portfolio Quality and this finding aligns with the study of Nanteza (2015) but is at variance with the studies of (Klein, 2013; Tyona, Tyohemba & Eya, 2017 and Hada et al., 2020) that found a significant effect between Exchange rate and Non-performing loans. Conversely, Mahmoud and Mohamed(2015), Makari and Papadatos(2016), Fajar and Umanto(2017), Memdani(2017) and Polat(2018) all found a significant relationship between inflation rate and non-performing loans which is in line with the finding of this study. The present study shows that Gross Domestic Product has a significant effect on Loan Portfolio Quality proxied by non-performing loans. The findings of the present study is in agreement with Gremi(2013),Messai and Jouini(2013), Fajar(2017),Tyona,Tyohemba & Eya, (2017) and Polat(2018) whose investigations indicated that Gross Domestic Product has a significant effect on non-performing loans.

CONCLUSION AND RECOMMENDATION

Exchange rate stability do have a positive insignificant effect on loan portfolio quality which means that exchange rate fluctuations can affect positively the loan portfolio quality represented by non-performing loans but the effect is not huge to affect significantly the level of loan portfolio quality. The inflation rate in Nigeria economy have a positive significant effect on loan portfolio quality meaning the level of loan portfolio quality gets better with increasing inflation rate which means the reduced level of default for non-performing loans. The increase in the level of Gross Domestic Product which represents the economic growth of Nigeria would result in positive significant effect on loan portfolio quality resulting in reduced non-performing loans of banks. Loan portfolio quality is affected by interplay of macroeconomic variables such as exchange rate, inflation and Gross domestic product. Government through its regulatory agencies such as CBN should therefore ensure that hyper-inflation is controlled and a robust economic growth driven by fiscal and monetary policies aimed at ensuring that deposit money banks plays a healthy intermediary function of creating credits without excessive burden of non-performing loans. An average inflation rate of about 11% and an average GDP growth rate of 4% are needed to drive a desired loan portfolio quality of 5% which should be backed with bank regulations requirements that would ensure that bank customers' deposits are not eroded by non-performing loans.

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Effect of Dividend Policy on the Stock Price of Listed Deposit Money Banks (DMBs) in Nigeria

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Abstract

This study examines dividend policy and its effect on stock value of deposit money banks in Nigeria for the period 2010-2019 using secondary data which are extracted from the Central Bank of Nigeria Statistical Bulletin, 2020. The study uses equity/stock price of quoted deposit money banks in Nigeria as proxy for firm value of deposit money banks in Nigeria as dependent variable; while, dividend payout ratios, retained earnings ratios, dividend yields and earnings per shares are use as independent variables to measure dividend policy. Hypotheses are formulated and tested using time series econometric techniques. The research shows a positive significant effect of dividend payout ratio on the stock price of deposit money banks in Nigeria. Retained earnings ratios have a positive significant impact on the market value of deposit money banks in Nigeria. Dividend yields have a positive significant effect on the stock value of deposit money banks in Nigeria. There is a positive significant effect of earnings per shares on the stock value of deposit money banks in Nigeria. The coefficient of determination indicates that about 62% of the variations in firm value of deposit money banks in Nigeria can be explained by changes in dividend policy variables (DPR, RER, DY, EPS). The study concludes that dividend policy has a significant effect on the firm value of deposit money banks in Nigeria. This study support dividend relevance theory.

Keywords: Dividend Policy, Firm Value, Deposit money banks, Nigerian Stock Exchange

INTRODUCTION

Dividend policy is a financial management decision that has to do with a company taking an optimum investment decision that will strike a balance between payment of dividend to shareholders and retention of earnings for future reinvestment in the company. Dividend policy is a firm corporate decision which determines the amount of dividend payments and the amount of retained earnings for reinvesting in new projects. Thus, the policy is related to dividing the firm's earnings between payments to shareholders and reinvestment in new opportunities. Basically, dividend policy is the determination of the payout policy that management follows consistently in determining the size and pattern of cash distributions to shareholders over time. However, in corporate finance, one of the most important decisions is concerned with the shareholders as dividend or it must be reinvested in new opportunities and if it must be distributed, what proportion of profit must be paid to shareholder and what proportion must be returned to the business. Nnana and Chiwendu (2019) when responding to this question, managers must consider which dividend policy will lead to maximization of shareholder's wealth posits that managers should not only concentrate on this question as to how much of firm's income are required for investment, instead, they also must consider the effect of their decision on stock's price. Dividend is also related to capital structure indirectly and different dividend policies may require policies which form the focus of this study, involve the determination of the payout policy that management follows in determining the size

and pattern of cash distribution to shareholders over time. The work of Malu and Audu (2019) stated that the investment, financing and dividend decisions are interdependent and must be resolved simultaneously in a way that will maximize shareholders wealth.

Thus, in the valuation process, a study by Awudu (2019) shows that the value of an asset, real or financial, is determined by the size, timing, and risk of expected future cash flows that accrue to the owner of the asset. Similarly, market valued share prices that are based on expected dividends and the risk attached to ownership of the share. Peter and lwua (2018) stated that for the current shareholders, the value of a share is the selling price of the share plus any embedded unpaid dividends payable whilst owning the share. Share price is therefore a key determinant of the value of the firm hence it is safe to reason that to maximize shareholders wealth, shareholders should be afforded the highest combination of dividends and the increase in the share price. Dividend policy remains one of the major financial decisions that often challenge management of corporate organizations such as the banking industry. It is a financial management function that determines the proportion of the firm's profit that will be distributed to the shareholders and the proportion that will be retained for further investment this is referred to as optimal dividend policy. Hence, dividend policy remains one of the most controversial issues in corporate finance. The relationship between dividend policy and share price has remained controversial among scholars in corporate finance (Baudere & Hassan 2019). The intensity of the debate has remained largely unresolved in both the global and local area. Dividend policy has the potential to positively or negatively affect stock prices in the capital market. Which has a direct effect on the value of a firm? With the existence of different theories of dividend proposing different views, approaches and values for dividend payment had created a policy deviation for managers who choose different dividend policies may lead to fluctuations of stock prices. The broad objective of this study is to ascertain empirically the effect of dividend policy on the stock price of listed Deposit Money Banks (DMB) in Nigeria. However, the following specific objectives are as follows;

i. To examine the effect of dividend payout ratio on the stock price of listed DMB in Nigeria.
ii. To examine the effect of retained earnings ratio on the stock price of listed DMB in Nigeria.
iii. To examine the effect of dividend yield on the stock price of listed DMB in Nigeria.
iv. To examine the effect of earnings per share (EPS) on the stock price of listed DMB in Nigeria.

In the course of the study, the following hypothesis are formulated in a null form;

i. Dividend payout ratio has no significant effect on the stock price of listed DMB in Nigeria.
ii. Retained Earnings ratio has no significant effect on the stock price of listed DMB in Nigeria.
iii. Dividend yield has no significant effect on the stock price of listed DMB in Nigeria.
iv. Earnings Per Share has no significant effect on the stock price of listed DMB in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Equity Stock Price (ESP)

The price of a company stock or equity is the last traded or current price market of listed stocks on the stock exchange at a particular date. Price of stock is determined by the interplay of demand and supply of those particular shares on the stock exchange determined by market participants and interplay of demand and supply (Sukesti, Ghozali, Faud, Kharis Almasyhari & Nurcahyono, 2021). The stock price is a determinant of the worth or value of the company. Laksitaputri (2012) submit that the price of a traded stock reflects all available information to investors in an efficient capital market. Earnings affect the investors' expectations, attitudes and sentiments of dividend payments. Study by Shafiqul, Miah and Karim (2016) quoting the work of Anike (2014) revealed that dividend, price earnings ratio and leverage also affect stock price.

Dividend Payout Ratios (DPR)

Generally, dividend is a periodic payment to the common stock holders of a company from earnings after tax as a reward for their investment Nwaobia, Alu & Olurin (2017). Akinsulire (2014) define dividend payout ratio as the ratio of ordinary dividends to retained earnings. In order words, dividend payout ratio is a financial policy made by a company that determine the percentage of its net earnings to be distributed to shareholders as dividend if declared. It is measured as dividend paid divided by total profit for the year. This ratio helps both current and potential investors to make an informed decision and estimate their future income from the company. This ratio is measured by dividing gross dividend paid for the year to shareholder by net income after tax and after preference stock dividend expressed as a percentage. It compares the dividend amount with the company's earnings per share. A positive result is expected but it could be negative if dividend is paid from reserves instead of current earnings. A low payout ratio indicates a conservative dividend payment while a high payout ration indicates a generous payment out of profits (Alfred 2007). Simon (2009) in his work on share valuation model assert that the value of a company share is dependent upon the amount of dividend paid to shareholders because higher dividend payment to shareholders makes the company share attractive to investors.

Retained Earnings (RER)

Retained earnings are the portion of a company's net profits left for the business after payment of dividend to its ordinary shareholders. It is the portion of net profit not distributed to shareholders but retained for future business expansion and capital acquisition. It is a veritable source of internal finance available for a firm to finance acquisition of fixed assets and to finance working capital. Amount retained in a business is meant to increase the value of shareholders and it is a strategic decision left for the management of the company to make (Akinkoye & Akinadewo 2018). Retained earnings is measured after deducting cash dividend and stock dividend from income attributable to common stockholders. Wright (2014) submits that retained earnings are classified as part of equity and as a result are classified as of the owners' equity in the balance sheet.

Dividend Yield (DY)

Dividend yield refers to how much money a company has paid out as dividend in a particular year. Dividend yield is measured by comparing the gross amount paid out to shareholders with the share price of common stock at the date of dividend payment. Alternatively, it is measured by comparing dividend paid per share to the share price of the company. The yield is stated as a percentage. A company with good dividend payment always has higher yield ratio. High payout ration signifies higher risk while a company with lower dividend ratio are viewed to be more stable and consistent growth and steady payments.

Earnings Per share (EPS)

Earnings per share is the naira value of income earned by each unit of common stock at a determined period of time. It is a measure of capital utilization by the company. A higher EPS means a better capital utilization and vice versa (Alfred 2007). Investors rely and use this ratio for an informed investment decision. EPS is measured by dividing net income after tax and after preference stock dividend by the number of common stocks in issue. EPS is measured by dividing total dividend paid in a particular year by total number of ordinary shares at the payment date.

Empirical Review

Bauduru and Audu (2019) used a different method and examined the association between dividend policy and stock price volatility rather than returns. He added, some control variables for examining the association between share price volatility and dividend yield. These control variables are earning volatility, firm's size, debt and growth. These control variables do not only have clear effect on stock price volatility but they also affect dividend yield. For instance, the Bauduru and Audu (2019) earnings

volatility has effect on share price volatility and it affects the optimal dividend policy for corporations. Moreover, with assumption that the operation risk is constant, the level of debt might have positive effect on dividend yield. Size of firm would be expected to affect share price volatility as well. That is, the share price of large firms is more stable than those of small firms as the large firm tend to be more diversified. Furthermore, small firms have limited public information and this issue can lead to irrational reaction of their investors. Amollo (2016) evaluated the effect of dividend policy on firm value for commercial banks in Kenya, the study sought to elicit the unresolved issues of cooperate financial publications on dividend policies and market value of Commercial banks in Kenya, using quantitative method. The result found that there is a strong positive correlation between dividend payout and firm value among commercial banks in Kenya. Taking a look at the Nigerian perspective, on dividend payout pattern Maude, Jimoh and Okpanachi (2015) observed that there have been no agreed agreements as to the "Tightest, middlest or leftest road hypothesis on dividend payout''. Their study found that inflation, share price, and earnings per share have significant impact on dividend payout.

Musa (2009), in his paper utilizes the parsimonious multiple regression model developed by Musa (2005) to examine the dividend policy of 53 firms across sectors quoted on the Nigerian Stock Exchange (NSE) during the period 1993 to 2002. The model employs five metric variables to predict the outcome of dividend policy of listed firms in Nigeria; -previous dividend, current earnings, cash flow, investment and net current assets, and three non-metric variables- growth, firm size and industry classification. The results of the study reveal that the five measured variables have significant collective effect on the dividend policy of the quoted firms. However, three of the variables- current earnings (E), previous dividend [DIVi (t-1)] and cash flow (CF), have been found to have strong effect in the model. Finally, the tests find that none of the three non-metric variables provides a statistically significant improvement to the base model. Lawrence, Robert and Monday (2015) investigated the impact of dividend policy on share prices in Nigerian Banks for a period five year (5) their study spanned from 2010 to 2015; the result found out that dividend policy has significant positive effect on share valuation of listed deposit money banks in Nigeria. Opeyemi, Olusegun, Olakayode and Olusola (2018) examined what determines the dividend policy among listed deposit money banks in Nigeria between 2006 to 2015 using panel data, their study found that, board size, leverage financial crises and political factor dummy variables had negative impact on dividend policy, while other variables like board independence, profitability has negative effect. In the empirical study of the relationship between dividend policy and the stock price of banks in Nigeria, Fodio & Salusi (2004) using Ordinary Least Square Method analyzed 11 banks listed on the Nigerian Stock Exchange between 1998 and 2002 and the regression analysis establish a strong positive relationship between the value of banks and their dividend payout ratio with a 72% coefficient of correlation. Their study therefore, supports the dividend relevancy theory and concludes that a bank can continually attract differing cluster of investors if it is consistent with its dividend payout ratio.

Theoretical Framework

This study explores some theories, which explain the underlying principles guiding the dividend policy of corporate organizations especially deposit money banks (DMB's). These theories underpin this study.

Relevance theory of dividends

This theory was developed by (Lintner, 1956) in his pioneering research of the relationship between dividend policy and share value concluded that there is a significant relationship between the dividend policy of a firm and the value of its shares, the relationship is boosted by two major determinants, current earnings and dividend distribution for the previous fiscal year. The share price of a firm is boosted when there are increasing and steady payments of dividends which increases the market value of the shares (Glen, Karmokolias, Miller, Shah, 1995; Pettit, 1972; Watts, 1973). To ensure continuous growth, firms tend to maintain efforts aimed at ensuring that dividends payouts are not skipped or reduced (Saxena, 1999; Woolridge and Ghosh, 1985). Current work by (Grullon, Michaely & Swaminathan (2002); Ham, Kaplan & Leary (2020) and Lotto (2020) support the relevance of dividend payment to shareholders

Irrelevance theory of dividend credited to Modigiliani and Miller

The pioneering work which is often overlooked was done by Williams (1938) in his work on capital structure irrelevance theory cited by Gifford, (1939) was pivotal to the work of (Miller and Modigliani, 1961) presented an opposing view of the relevance theory of dividends. The theory postulates that a firm's value is determined only by its basic earning power and its business risk and that its dividend policy has no relevance. Their assumptions of a perfect and efficient market are not widely embraced by researchers. Recent works predicated upon MM dividend irrelevance theory was conducted by (Toby 2014, Udobi 2016, Udobi & Iyiegbuniwe 2018, Okeke & Okeke 2018, Idewele & Murad 2019) supported the theory while holding other variables constant.

Signaling theory

This theory was propounded by Lintner's (1956). The Miller and Modigliani, (1961) shaped the foundation for signaling theory. The major rational which has been highlighted for the payment of dividends by firms is premised on the signaling hypothesis, which explains dividends as a means to predict the firm's future prospects. In his research observed that managers are hesitant to reduce dividends because of the negative backlash or impact they believe it will have on the stock price of the firm, dividends will also not be increased if the managers are not certain it will positively boost the profitability of the firm. Dividend changes should be followed by a positive and equal proportion of change in profitability for the signaling theory to be supported. This theory was supported by (Chaabouni 2017, Farrukh et al., 2017). Also, Brav et al. (2005), Novianti, Al-Hasan, Asaduzzaman, & Karim, 2013, Medyawati & Yunanto, (2013) reiterated the importance of information content of payment while Baker and Weigand (2015) probed previous studies for overlooking the other strategies involved in dividend payments.

Residual theory of dividend

The Residual theory of dividends has remained very popular; it states that dividends should only be paid when the firm has financed all its positive NPV projects. The theory was a fallout from the dividend irrelevance theory of Miller and Modigiliani (1961). The theory states that once the firm has provided funds for all the projects which more than cover the minimum required return, investors should be given the residual. Thus, any income remaining after these projects are funded is distributed as dividend. Because dividend comes from the unspent profit after investments, the theory is called the residual theory of dividend. The investment policies of banks' have a huge effect on its dividend payout policy; usually, a large percentage of earnings of banks with less investment outlays are shared as dividends. There is a negative relationship between firms with significant amount committed to investments in projects and dividend payout (Fama and French, 2002; Glen et al., 1995; Smith and Watts, 1992). It should be noted that in a world with no external financing dividends policy should be residual. However, in a world with some transaction costs related with issuing dividends and obtaining investment finance through the sale of new shares, dividend policy will be influenced by, but not exclusively determined by, the 'dividends as a residual approach' to dividend policy.

Clientele effect

This is the concept that shareholders are attracted to firms that follow dividend policies that is consistent with their objectives. This theory follows the work of (Lintner, 1956) on the relevance of dividend payment by companies. The clientele effect encourages stability in dividend policy. The clientele force acting on dividend policy at first glance seems to be the opposite of the residual approach. With the clientele argument, stability and consistency are required to attract a particular type of clientele, whereas, with the residual argument, dividends depend on the opportunities for a reinvestment the volume of which may vary in a random fashion from year to year, resulting in fluctuating retentions and dividends.

Agency theory

The Agency theory by Jensen and Meckling, (1976) argument says that firms are encouraged to distribute a high proportion of earnings so that investors can reduce the principal-agent problem and achieve greater goal congruence. When a corporate organization pays dividend commensurate with investors' expectation it curbs agency conflicts. In order to remain competitive and operate sustainably in the business environment it is imperative for a firm to pay dividend. Agency costs are not high in firms that have significant managerial ownership holdings because of better alignment of shareholder and managerial control (Jensen and Meckling, 1976) and also in firms with large block shareholders that are better able to monitor managerial activities (Shleifer and Vishney, 1986). Investments with negative net present value (NPV) can be avoided when dividends are distributed to shareholders and debts paid using unbudgeted cash (Amidu and Abor, 2006; Jensen, 1986). Recent works on agency theory and dividend policy was done by (Jebaraj, Mat, & Abdul Wahab, 2016; Tahani & Aymen, 2017) and submitted that dividend payment will reduce agency conflicts. The theoretical framework for this paper is based on the Relevance theory of dividend policy propounded by (Lintner 1956). The study will examine if the dividend policy of deposit money banks in Nigeria follows the Lintner model.

METHODOLOGY

The study adopted ex-post-facto research design to source requisite information. An ex- post-Facto research design is a systematic empirical inquiry that requires the use of variables which the researcher does not have the capacity to change its state or direction in the course of the exercise (Kerlinger, 1973 & Onwumere, 2009). Data for this study was collected from the Central Bank of Nigeria Statistical Bulletin, 2019. Data collected and used for the variables form the basis of the study that covers 10-years (2010-2019). The study uses equity/stock price of quoted deposit money banks as proxy for firm value of deposit money banks 'in Nigeria and employs as the dependent variable; whereas, dividend payout ratios, retained earning ratios, dividend yields and earnings per shares are use as independent variables to measure dividend policy.

Model Specification

Multiple linear regression models are used to test each of the null hypotheses proposed for this study. Based on the formulated hypotheses, a model is adapted from the work of Daudu & Abilikama (2018). The model is stated as:

ESP =f(DPR, RER, DY, EPS).

$$ESP = \beta ao + \beta 1DPR_{it} + \beta 2RER_{it} + \beta 3DYit + \beta 4EPS_{it} + e_{it}$$

Where:

ESP = Equity/stock price of quoted deposit money banks as proxy for market value of deposit money banks.

ao= intercept of the model
DPR= Dividend Payment Ratios,
RER= Retained Earnings Ratios,
DY= Dividend Yield and
EPS= Earning Per Shares
it = term trend or panel data
B1 – B4 = coefficient of parameter estimates
e= error term

Variables Measurement

	Variable Name	Variable Acronym	Type	Variable Measurement	Sources
1	Dividend Payout Ratio	DPR	Independent	This refers to the fraction of earnings pay to shareholders as dividend. Dividend Per Share Earnings Per Share	(Nishat and Irfan, 2003), (Charlene Rhinehart, 2021)
2	Retain Earnings Ratio	RER	Independent	This is the remaining proportion of income after payment of dividend. Net Income - Total Div. Net Income	(Nishat and Irfan, 2003), (Peace Nwadike 2020)
3	Dividend Yield	DY	Independent	Dividend Yield or Dividend Price Ratio is the measured by dividing dividend per share by market price of the share. Div Per Share X 100 Price Per Share	(Nishat and Irfan, 2003), (Miranda Marquit, 2020)
4	Earnings Per Share	EPS	Independent	Earnings Per share is the portion of a company income divided by common shares in issue. Net Income - Dividend No. of. Shares in Issue	(Nishat and Irfan, 2003), (Charlene Rhinehart, 2021)
5	Stock price	SP	Dependent	Stock Price is the last traded market price of a particular firm measured as P1-P0 X 100 P0 x 100	Bala and Idris (2015); Ayuba (2018)

***Source: Computed by author based on literature**

Data for this study consist of 10-year annual observation period of (2010-2019). The study uses equity/stock price of quoted deposit money banks as proxy for firm value of deposit money banks in Nigeria and employs as the dependent variable; whereas, dividend payout ratios, retained earnings ratios, dividend yields and earnings per shares are use as independent variables to measure dividend policy.

RESULTS AND DISCUSSIONS

The descriptive statistics is used to describe the basic characteristics of the data series used in the analyses. The summary results of the descriptive statistics are presented on table 1.

Table 1: Descriptive Statistics

Variables	Mean	Maximum	Minimum	Std. Dev.
ESP	35.6416.3	25.4751.6	124.5912	43.657.23
DPR	66.74075	42.43712	12.74653	45.36210
RER	33.25925	35.46332	17.14253	32.53687
DY	47.23546	26.81353	54.63526	66.24357
EPS	38.72353	44.83420	35.14253	60.76378

Source: Author's E-Views computation, 9

Mean value for the variables are: equity/stock price of quoted deposit money banks (35.6416.3), dividend payout ratios (67%), retained earnings ratios (33%), dividend yields (47%) and earnings per shares (38%). From the table 1 above, the standard deviation value depicts how ESP move between the minimum and maximum values and a higher standard deviation implies the higher rate of deviation from the mean.

Unit Root Test

The Augmented Dickey-Fuller (ADF) unit root test statistics was used to test for stationarity: and to establish the order of integration of each. The null hypotheses of non- stationarity of deposit money banks are tested against the alternative hypotheses.

The results were presented on table 2.

Table 2: Unit Root Test Statistics

Variables	Level	1st Differ	Decision	Remarks
ESP	-4.645387	2.727353	1(1)	Stationary
DPR	-1.25366	-3.225362*	1(1)	Stationary
RER	-3.625372	3.85769**	1(1)	Stationary
DY	-2.467593	-4.136576*	1(1)	Stationary
EPS	2.545353	-3.624362	1(1)	Stationary

Source: E-views Econometrics 9., * **) indicate statistical significance at the l percent and 5 percent level, respectively. The critical values at the I percent and 5 percent EPS significance levels and the critical values of ADF are from Mackinnon.

Table 3 Vector Error Correction Model

Dependent Variable
Method: Least Squares
Date: 17/08/2021 Time: 04:55
Sample (adjusted): 2010-2019

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	43.45301	0.625432	1.243571	0.0125
D(DY)	217.6559	0.073624	2.058259	0.0021
D(EPS)	1489.577	0.523425	2.946748	0.0246
D(DPR)	23.45441	0.378373	1.026358	0.0244
D(RER)	37.53641	1.036472	1.203647	0.0110
ECM(-1)	-0671163	0.124252	1.351792	0.0251

R-squared	0.621641	Mean dependent var	113131.400
Adjusted R- squared	0.591505	S.D. dependent var	1385.207
S.E. of regression	1342.239	Akaike info criterion	20.99736
Sum squared resid	1.696009	Schwarz	21.27219
Log likelihood	-329.9578	Hanan-Quinn criter	21.08846
F-statistic	6.435256	Durbin-Watson stat	1.974626
Prob (F-statistic)	0.000000		

Source: Author 's Computation using E-views 9

From Table 3, the least square outputs will be used to test the four hypotheses outlined in the study. The error correction term will tell us the speed with which our model returns to equilibrium following short run fluctuations not captured in the Johansen test. The ECM coefficient of -0.671163 indicates that ECM (-) is well specified and the diagnostic statistics are good. The negative sign shows the short run

adjustment of the independent variables to the dependent variable. The ECM term also shows a 676 speed of adjustment towards equilibrium. This implies that 67% of disequilibrium caused by exogenous shocks or short run fluctuations in the previous period is corrected in the current year. The results also show that DY is positive and statistically significant to EQP both in the short and in the long run. Hence, EPS is also positive and statistically significant to EQP both in the short and in the long run. Furthermore, the results of the overall significance of the model using F-statistics indicate that the entire model is statistically significant.

CONCLUSION AND RECOMMENNDATIONS

The study has examined the effect of dividend policy on the firm value of listed Deposit Money Bank in Nigeria between 2011 -2019. The findings from the various results led to the following conclusions. Therefore, the study concludes that dividend policy has a significant effect on the firm value of deposit money banks in Nigeria. The proxy used to measure the effect of dividend policy in the study shows a positive effect of; dividend payout ratio, retained earnings, dividend yield and earnings per share on the firm value of DMB in Nigeria with diverse connection among employed variables. Banks should be careful and sensitive in the management of dividend policy as this directly affect their equity values. A purposeful and careful juggling of the components of dividend policy is absolutely necessary to produce the required effect on equity price of their banks. A well thought through mix of cash dividend, script issue/bonus, and a good combination of what to pay out and what to retain to plough back for growth and expansion must be ensured at all time. A carefree management of dividend policy as result of lack of transparency and manipulation of accounts will ultimately result to loss of confidence in the bank and inevitably induce mass offloading of shares by shareholders with the consequent depreciation in value when supply of such shares overwhelm demand. Capital structure of banks should be properly managed by leveraging from the dividend policy management of each bank. Through understanding of the relationship between the two very demanding strategic management functions will enhance profitability consistent performance and appreciable growth and expanding of quoted commercial banks in Nigeria.

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Effect of Compensation Practices on the Performance of Selected Hotels in Abuja Metropolis - Nigeria

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Abstract

*Compensation practices involve a strategic approach to providing monetary and non-monetary rewards to employees, influencing a more engaged workforce, high productivity and performance increase. Most firms see compensation as a cost to be minimised rather than an investment to be optimised, thereby resulting in poor performance. Thus this study seeks to examine the effect of compensation practices exemplified in "pay for performance" and non-monetary rewards on the performance of selected hotels in Abuja metropolis. A survey research design was adopted with a population size of 1706 employees and a sample size of 324 employees using Taro Yamane's formula. Primary data was obtained by administering structured questionnaire to the respondents. SPSS package was used for multiple regression analysis to estimate the cause and effect relationship between compensation practices and performance of the selected hotels. Findings shows that compensation practices has a positive and significant effect on the performance of the selected hotels, "pay for performance" has a positive and significant effect, while non-monetary rewards has a negative but significant effect on the performance of the selected hotels. The study recommended that Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja should adopt "pay for performance" such as merit pay, lump sum bonuses and grants as compensation to motivate skilled workforce for improved performance. Also non-monetary rewards like recognition, carrier development, and work life balance should be improved as it has a lasting influence on the workforce enhancing competitive advantage and improved perform*ance.

Keywords: Compensation practices, pay for performance, non-monetary rewards and performance

INTRODUCTION

In this era of global competition, attracting and retaining effective, efficient and knowledgeable workforce for improved and sustainable organizational performance is imperative, as employees are key to the attainment of organisational goals and objectives. As stated by Goel, (2008); Pattanayak, (2008), employees are strategic for competitive advantage in the firm. For optimal performance, businesses need to continually explore ways to leverage on its workforce being the firm's most valuable resource. In spite of enormous technological advancement in running an organization, human beings can never be sidelined as they shape the strategies and implementations of objectives in achieving the goals of the firm. According to Osibanjo, Abiodun and Fadugba, (2012), a satisfied worker is ready to identify and remain with the organisation which is a function of effective compensation packages and reward system of the organisation. Compensation management involves incorporating employees' processes and information

with business process and strategies to achieve firm's goals and objectives (Adeniyi 2013). Falola, Ibidunni and Olokundun, (2014) are of the opinion that firms need to engage in a variety of compensation practices in rewarding employees to get appreciable result in terms of retention of employees and improved firm performance. `Compensation policy aids in outlining employment relationships, contractual responsibilities and the implicit psychological contract between the employee and the employer (Zacher, 2015).

A major challenge for companies is the design and implementation of operational compensation strategies and policies. The structure of a favorable pay mix is essential for the motivation, behaviour and commitment of employees as well as for events in the human resource value chain like recruiting, developing and retaining staff. With stiff competitive economic environment, firms can achieve sustainable competitive advantage by effecting strategies that rely on their internal strengths and also taking advantage of environmental opportunities. Compensation is one of the effective tools in motivating employees to give in their best thereby improving performance. Most Nigerian hotels see compensation as a cost to be minimized, rather than an investment to be optimized**.** Hence compensation is poorly managed and performance is adversely affected. Human capital is a critical asset and not just a cost element. For better service delivery resulting in high organisation performance, effective compensation practices is crucial. Hence, the main objective of this study is to examine the effect of compensation practices on the performance of selected hotels in Abuja metropolis, Nigeria. Other specific objectives include to:

i Investigate the effect of "Pay for performance' such as merit pay, lump sum bonuses and grants on the performance of selected hotels in Abuja city center.

ii. Examine the effect of nonmonetary rewards such as staff recognition, carrier development and work life balance, on the performance of selected hotels in Abuja city center.

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In line with the objective of the study the following hypotheses are stated in a null form, they are:

Ho_1: Pay for performance has no significant effect on the performance of hotels in Abuja city center.

Ho_2: Non-monetary rewards have no significant effect on the performance of hotels in Abuja city center.

Previous studies such as Nnorom, Akpa, Egwuonwu, Akintaro, Shonubi and Herbertson (2016) investigated the effect of compensation administration on employee output in Dangote Headquarters, Lagos Nigeria. A survey research design was adopted and questionnaire was used to collect data from 50 respondents. Also, Oladejo and Yinus (2014) did a study on the Assessment of the effect of Compensation Plan on specialists Performance of some Quoted Food and Beverages Manufacturing Companies in Nigeria, and Jensen and Murphy (1990) in one of the earliest studies empirically studied the relationship between CEO compensation and firm performance. A large sample of US firms was examined during the period of 1974–1986. However, none of these studies used hotel industries in their studies. Therefore, this research fills the gap by examining the effect of compensation management on the performance of hotels. The study focused on examining the effect of compensation practices on performance of selected hotels in Abuja city centre, using pay for performance and non-monetary rewards as proxy for independent variables and hotel performance as dependent variable. Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotels are used as case studies.

LITERATURE REVIEW

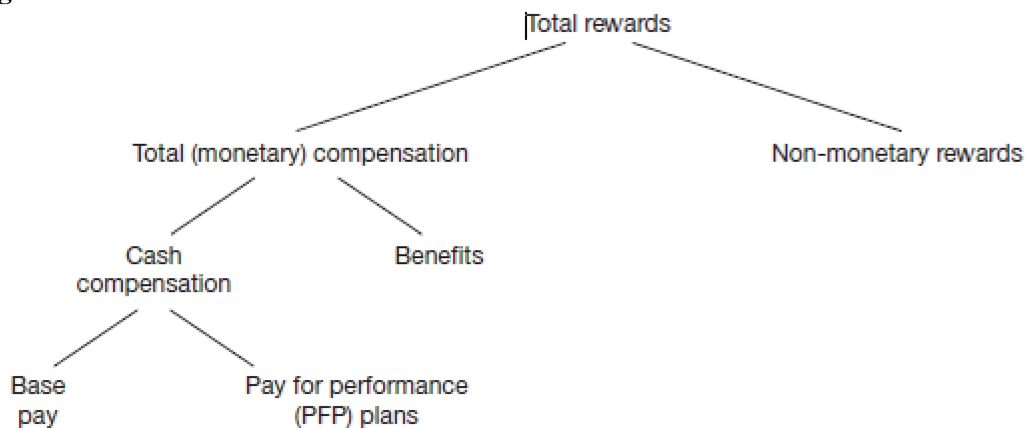
Conceptual Framework

Compensation

Compensation is the remuneration given to employees as a result of their employment relationship. This may be direct payment in the form of wages and salaries, bonuses, commission, incentives and indirect

payment in form of financial benefits like insurance Dessler (2011). Total rewards include monetary compensation and nonmonetary rewards as shown in figure 1 below:

Figure 1:



Source: Storey, J., Wright, P. M. & Ulrich, D. (2009).

As stated by Akter and Moazzam, (2016), compensation covers financial returns, benefits and tangible services employees obtain as part of an employment contract. This includes wages and salaries, bonuses, incentive-payments and commissions.

Compensation practices

Compensation practises are organized practice that encompasses balancing the work-employee relation by giving monetary and non-monetary rewards to employees. It is an integral part of human resource management which enhances employee's motivation and improves firm effectiveness. (Patnai & Padhi, 2012)

Pay

As stated by Armstrong and Murlis, (2004), Pay is the reward given to workers for work done which include base pay, variable pay contingent pay, benefits and compensation; although a clear distinction between these terms are hardly maintained. They assert that base pay is a fixed pay and usually constitute the largest compensation reward to employees in the organisation, contingent pay is the pay for performance, contribution, competence or service, variable pay are bonuses or cash payments that are dependent on individual, team or organisation performance while benefits and compensation include sick pay, leave allowance, and bonuses like entitlement to company cars, holiday, leave entitlements, transport, and meal. From societal perspective, pay is regarded as a measure of justice. Inequitable pay, like pay disparity between men and women with same job specification in same company can be seen as pay injustice. Likewise, executive pay is supposed to improve stockholders wealth (Milkovich, Newman, & Milkovich, 2005).

Pay for performance (PFP)

Pay-for-performance is a compensation practice where reward is tied to a quantifiable output (Jensen & Murphy, 1990; Cadsby, Song & Tapon, 2007). In practice, performance based pay consists of two components: the fixed component and the variable component which is pay for performance. As stated by Goktan, (2011), pay for performance is a contingent reward given to employees based on a quantified quality of performance. Pay for performances are mainly implemented to motivate and attract skilled employees leading to improved productivity (Fehrenbacher & Pedell 2012). Pay for performance is a new compensation practice, including varieties like profit sharing, merit pay, stock grants and options and lump-sum bonuses (Park & Sturman, 2016).

Nonmonetary rewards

Non-monetary rewards have a lasting influence on the workforce enhancing competitive advantage and improved performance**.** For instance, Prospect for Career advancement is a motivator enhancing staff satisfaction and reduction in turnover Cascio, (2002)**.** Carrier development yields talented and productive workforce enhancing sustainable competitive advantage (Prince, 2005). As stated by Cole (2005), employee development boost their morale, increase confidence and motivation to work with more efficient use of resources reducing waste, thereby lowering cost of production. Pitts,(2005) postulates that, recognition is a cost-effective way of enhancing improvement and motivating people, to feel engaged in an organisations culture. Non-financial reward aids in building long-term effect, satisfaction and confidence in employees (Armstrong, & Brown, 2006). The importance of incentives is to make employees elicit behaviors and outcomes that show they are appreciated (Whetten & Cameron, 2007). As stated by Khan, Shahid, Nawab and Wali, (2013) non-monetary rewards are vital to employees in the workplace. Sun, (2013) asserts that recognition is the most powerful tool to motivate employees' engagement in the workplace. Rose, (2014) is of the opinion that non-monetary rewards are non-cash awards given to employees in recognition of a high level of performance; which is not tied to accomplishment of a predetermined objective. These rewards are cost effective in motivating, attracting and retaining quality staff in spite of the economic condition.

Performance

Performance model is based on the perception that a firm is the voluntary relationship of productive assets, that includes human, physical and capital assets, for accomplishing a common purpose (Barney, 2002). Performance is the attainment of definite task measured against preset or identified principles of accuracy, totality, cost and speed (Ekundayo, 2015). Asset suppliers will only be committed to the firm when aspirations are met comparative to alternative use of the assets. The crux of performance is the creation of value, which is the overall performance standard for any organization.

Empirical Review

Nnorom, Akpa, Egwuonwu, Akintaro, Shonubi and Herbertson (2016) investigated the effect of compensation administration on employee output in Dangote Headquarters, Lagos Nigeria. A survey research design was adopted and questionnaire was used to collect data from 50 respondents selected using total enumeration method. Regression analysis was used and validity and reliability was verified to attain a Cronbach alpha equal to 0.71. The correlation coefficient of 0.892, shows that there is 89.2% correlation between compensation administration and staff productivity. Also, R^2 of 0.795 shows that 79.5% change in staff productivity is caused by changes in compensation management. It was discovered that effective compensation management has significant positive effect on employee productivity. Oladejo and Yinus (2014) did a study on the Assessment of the effect of Compensation Plan on specialists Performance of some Quoted Food and Beverages Manufacturing Companies in Nigeria. The investigation and speculation tried at 5 % level of importance ($p < 0.000$) shows that remuneration plan has critical and constructive outcome on workers performance which will inevitably build the general performance and sustenance of the industry. Pay structure was likewise observed to be the foundation of all strategies regarding the procurement and usage of human resources. To this end, it is suggested that organizations should utilize compelling remuneration designs enhancing effective human capital in order to stay focused and eventual survival.

Obasan (2012) studied the effect of Compensation Strategy on Corporate Performance: Evidence from Nigerian Firms. Primary data obtained from structured questionnaires and selected interviews in three conglomerates which are among the largest employers of labour in Nigeria manufacturing industries were used. 150 questionnaires were administered on the respondents, fifty for each company. The questionnaires were randomly distributed to staff and managers of the selected business units in the

companies. Data obtained were analysed using quantitative and descriptive methods. The regression analysis shows that there is a probability of having enhanced workers productivity improved by 0.783 and organizational performance rise by 0.415 for a unit adjustment in compensation. These findings reveal that effective compensation strategy has the potential to specifically improve workers productivity and overall firm productivity. Findings also revealed that compensation strategies has significant and positive effects on performance and firms strategy is vital for attracting, motivating and retaining employees. Jensen and Murphy (1990) in one of the earliest studies empirically studied the relationship between CEO compensation and firm performance. A large sample of US firms was examined during the period of 1974–1986. An estimate of the pay for performance sensitivity (PPS) was computed; they found out that firm performance positively influences CEO compensation.

Theoretical Review

Equity Theory

Equity Theory by Adams (1965) shows a comparative analysis an employee makes on his rewards compared with similar jobs with equal skill, task and qualification. This affects staff behaviour in job performance. Equality theory is associated with two relations used in the reward analysis. These are: my pay compared to others pay; and position relative to pay compared to others. Inequality from these analyses may result in dissatisfaction and consequent low commitment and performance. Some moderating factors as stated by Rajiv, Konstaus and Raj (2000) includes, clarity of structure, valence, fairness in salary administration and employee future plans which are internal factors and external moderating factors including industrial practice, employability by competitors and communication pay grievance efficiency. Avari, Amin, Ahmed, Selimanand Gamasari, (2011) argues that perceived inequalities result to behaviours leading to psychological stress, low commitment, reduced product quality and effort to justify the inequality.

Expectancy Theory

Expectancy theory as propounded by Vroom (1964) is a process theory which clarifies the psychological process an employee perceives and interprets firms' compensation translating into motivation, commitment and performance increase. The theory clarifies the way individuals use to make decisions on various behavioral options. People choose alternatives with highest motivation forces (MF), based on three different views which includes expectancy, instrumentality, and valence. Expectancy is the possibility that effort will result in good performance; Instrumentality is the prospect that good performance will lead to desired outcomes. Valence is the value people personally place on rewards. This research is anchored on this theory.

METHODOLOGY

The survey research design was adopted for this study as the information or data needed required the use of structured questionnaire administered to the respondents who are both senior and junior staff of the selected hotels in Abuja city centre, Nigeria. The population consists of all the employees of the five selected hospitality firms in Abuja city centre. These hotels are Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja. These selected hotels have a total of 1706 employees comprising of both senior and junior staff gotten from the various hotel's human resource departments. The population of the five selected hospitality firms in Abuja city centre is listed in the table 1.1.

Table 1.1
Population of Employees of the selected hotels in Abuja city center

S/N	HOTEL	NUMBER OF SENIOR STAFF	NUMBER OF JUNIOR STAFF	TOTAL
1	FRASER SUITS ABUJA	25	95	120
2	SHERATON HOTEL AND TOWERS ABUJA	185	128	313
3	TRANSCORP HILTON ABUJA	178	754	932
4	THE WELLS CARTON HOTEL APARTMENT	40	180	220
5	VALENTIA HOTEL ABUJA	44	77	121
TOTAL		**472**	**1234**	**1706**

Source: Human resource department of the selected hotels, 2020

Thus, the population of the selected hotels in Abuja city center in this study is 1706. Taro Yamane (1967) formula was used to determine the sample size as stated below:

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

Where N is the population size
e is the margin error (assume 5%)
1= constant
e=0.05
$n = 1706/1+1706(0.05)^2$
n=1706/1+1706 (0.0025)
n = 1706/1+4.265
n = 17061/5.265
n= 324

Therefore, the sample size of the study was 324 employeees of the selected hotels in Abuja city centre. Furthermore, the study used a purposive sampling technique in selecting the 324 employees from the total population of 1706. A purposive sampling method using proportional method was used in selecting samples in each of the hotels, these are:

Table 1.2
Proportions of employees of the selected hotels in Abuja city centre, Nigeria

HOTELS	Population	Proportion	Sample
FRASER SUITS ABUJA	120	120 x 324/1706	23
SHERATON HOTEL AND TOWERS	313	313 x 324/1706	59

TRANSCORP HILTON ABUJA	932	932 x 324/1706	177
THE WELLS CARTON HOTEL APARTMENT	220	220 x 324/1706	42
VALENTIA HOTEL ABUJA	121	121 x 324/1706	23
TOTAL	1706	-	324

Source: Researchers Computation (2020)

From the above table 1.2, Transcorp Hilton hotel Abuja will receive the highest number of questionnaire of 177. Also, additional 2 copies of questionnaires was added to all to ensure a successful return of 324 copies of questionnaires. Ordinary Least Square (OLS) simple regression was used to determine the effect of the independent variable on the dependent variable. Also, the SPSS software of 20.0 was used for this study. The statistical test of parameter estimates was conducted using their standard error, t-test, F-test, AR, and R^2. A multiple regression models was employed to estimate the cause and effect relationship between compensation management and performance of the selected hotels in Abuja city center, Nigeria. This was expressed in this study as stated below:

$Y = \alpha + ß_I x$
Where y = dependent variable, α = intercept, $ß_I$ is coefficient and x is the independent variable.. The above model was further expressed as:
$PHs = \alpha + ß_I PFP + ß_2 NMR + \mu$ …...equation 1
Where: PHs = Performance of Hotels (measured as efficiency), PFP = Pay for Performance and NMR = Nonmonetary Rewards

RESULT AND DISCUSSSION

Table 2: Assessment of pay for performance in selected hotels in Abuja city centre, Nigeria

Items	**5**	**4**	**3**	**2**	**1**
Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja frequently rewarded staff by giving merit pay to top performers	23(7.10)	44(13.58)	78(24.07)	88(27.16)	91(28.09)
Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja frequently gave lump sum bonuses for staff who perform well in the organizations	33(10.19)	53(16.36)	91(28.09)	79(24.38)	68(20.99)
Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja frequently give grants to staff as a form of reward for work well done.	45(13.89)	29(8.95)	101(31.17)	87(26.81)	62(19.38)

Source: Survey, 2020

From the above table, it was discovered that (7.10%) of the respondents strongly agreed and (13.58%) agreed to the statement that Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells

Carton Hotel Apartment, and Valentia hotel Abuja frequently rewarded staff by giving merit pay to top performers. 27.16% strongly disagreed and 28.09% disagreed with the said statement while 24.07% were undecided. The table revealed that (10.19%) of the respondents strongly agreed and (16.36%) agreed to the statement that Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja frequently gave lump sum bonuses for staff who perform well in the organizations. 24.38% strongly disagreed and 20.99% disagreed with the said statement while 28.09% were undecided. From the table also, 13.89% of the respondents strongly agreed and 8.95% agreed to the statement that Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja frequently give grants to staff as a form of reward for work well done. 26.81% strongly disagreed and 19.38% disagreed with the said statement while 31.17% were undecided.

Table 3: Mean of pay for performance in selected hotels in Abuja city center, Nigeria

Variables	5	4	3	2	1	∑FX	N	Mean	Remarks	Ranking	Sectorial mean
Merit pay	23	44	78	88	91	907	324	2.80	low	1st	2.74
Lump sum bonuses	33	53	91	79	68	876	324	2.70	low	3rd	
Grants	45	29	101	87	62	880	324	2.72	Low	2nd	

Author Computation, 2020

The above table shows that the pay for performance in selected hotels in Abuja city center, Nigeria such as merit pay, grants and lump sum bonuses given to staff of the selected hotels in Abuja were ranked first, second and third respectively. This implies that employees of selected hotels in Abuja city enter, Nigeria are fairly remunerated. The study also realised that the sectoral mean of 2.74 proved that the organizations pay for performance is fairly good for staff.

Table 4: Assessment of None monetary rewards in selected hotels in Abuja city center, Nigeria

Items	**5**	**4**	**3**	**2**	**1**
Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja frequently give staff recognition for standard performance.	32(9.88)	47(14.51)	91(28.09)	121(37.35)	33(10.19)
Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja frequently sponsor staff education for carrier development as a reward for good performance	44(13.58)	67(20.68)	90(27.78)	119(36.27)	4(1.23)
Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja frequently allowed employees flexible working hours to enhance work life balance.	39(12.04)	55(16.98)	87(26.86)	110(33.95)	33(10.19)

Source: Survey, 2020

From the above table, it was discovered that (9.88%) of the respondents strongly agreed and(14.51%) agreed to the statement that Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja frequently give staff recognition for standard performance. 37.35% strongly disagreed and 10.19% disagreed with the said statement while 28.09% were undecided. The table revealed that (13.58%) of the respondents strongly agreed and (20.68%) agreed to the statement that Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja frequently sponsor staff education for carrier development as a reward to good performance. 36.27% strongly disagreed and 1.23% disagreed with the said statement while 27.78% were undecided. From the table also, (12.04%) of the respondents strongly agreed and (16.98%) agreed to the statement that Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja frequently allowed employees flexible working hours. 33.95% strongly disagreed and 10.19% disagreed with the said statement while 26.86% were undecided.

Table 5: Mean of Non-monetary rewards in selected hotels in Abuja city center, Nigeria

Variables	5	4	3	2	1	∑FX	N	Mean	Remarks	Ranking	Sectorial mean
staff recognition	32	47	91	121	33	896	324	2.77	Low	3rd	2.91
Carrier development	44	67	90	119	4	1000	324	3.09	Low	1st	
flexible working hours	39	55	87	110	33	929	324	2.87	Low	2nd	

Author Computation, 2020

The above table shows that the non-monetary rewards in selected hotels in Abuja city center, Nigeria such as carrier developemnt, flexible working hours and staff recognition were ranked first, second and third respectively. This implies that employees of selected hotels in Abuja city enter, Nigeria are ineffectively recognized, educated and as well as given flexible working hours. The study also realised that the sectoral mean of 2.91 proved that the selected hotels do not properly give employee recognition, education and flexible working hours.

Table 6: Assessment of Performance (measured as efficiency) in selected hotels in Abuja city centre, Nigeria

Items	**5**	**4**	**3**	**2**	**1**
There is efficient increase in customers patronage in hotels, Abuja	121(37.35)	99(30.56)	16(4.95)	44(13.58)	44(13.58)
Hotels in Abuja have high revenue per occupied rooms (REVPOR)	118(36.42)	87(16.85)	12(3.70)	54(16.67)	53(16.36)
The management of hotels in Abuja give quality service delivery	110(33.95)	91(28.09)	14(4.32)	48(14.81)	61(18.83)

Source: Survey, 2020

From the above table, it was discovered that majority of the respondents strongly agreed (37.35%) and agreed (30.56%) to the statement that there is efficient increase in customers patronage in selected hotels in Abuja. 13.58% strongly disagreed and 13.58% disagreed with the said statement while only 4.95% were undecided. It was also observed that the majority of the respondents, 36.42% and 16.85% strongly agreed and agreed respectively to the statement that hotels in Abuja have high revenue per occupied room. 16.68% and 16.36% strongly disagreed and disagreed respectively, while only 3.70% were undecided. From the table also, the majority of the respondents 33.95% and 28.09% strongly agreed and

agreed respectively to the statement that management of hotels in Abuja give quality service delivery. 14.81% and 18.33% strongly disagreed and disagreed respectively, while 4.32% were undecided.

Table 7: Mean of Performance (measured as efficiency) in selected hotels in Abuja city center, Nigeria

Variables	5	4	3	2	1	∑FX	N	Mean	Remarks	Ranking	Sectorial mean
Customers patronage	121	99	16	44	44	1181	324	3.65	High	1st	3.53
Revenue per occupied room (REVPO)R)	118	87	12	54	53	1135	324	3.50	High	2nd	
Quality service delivery	110	91	14	48	61	1113	324	3.44	High	3rd	

Author Computation, 2020

The above table shows that the efficient performance of hotels in Abuja city center, Nigeria was ranked first, second and third respectively.. This implies that selected hotels in Abuja city enter, Nigeria performs efficiently.. The sectoral mean of 3.53 also indicates a high performance..

Table 8: Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
PH	324	1.00	5.00	3.0062	1.54598
PFP	324	1.00	5.00	2.2593	1.23196
NMR	324	1.00	5.00	2.9136	1.53955
Valid N (listwise)	324				

Source SPSS version 20.00

Table 8 revealed 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 (PH) is 3.00, pay for performance (PFP) is 2.25 and the mean value of non-monetary rewards (NMR) is 2.91. 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	.951[a]	.905	.904	.47910

a. Predictors: (Constant), NMR, PFP

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	698.305	2	349.153	1521.100	.000[b]
	Residual	73.682	321	.230		
	Total	771.988	323			

a. Dependent Variable: PHF

b. Predictors: (Constant), NMR, PFP

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.206	.058		3.577	.000
	PFP	.147	.051	.117	2.879	.004
	NMR	-.847	.041	.843	-20.662	.000

a. Dependent Variable: PH
Source: econometric output, 2020
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 pay for performance has a positive and significant effect on the performance of Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja while non-monetary rewards has a negative but significant effect on the performance of Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja. These effects are significant since the P-values are less than 5%. Thus, the study rejects the null hypothesis and concluded that pay for performance has a positive and significant effect on the performance of Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja, while non-monetary rewards have negative but significant effect on the performance of Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja. The $R^2 = 0.90$ indicates that only 90% of variation on compensation management can be used to explain the performance of Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja. 10% 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 compensation management has a positive and significant effect on the performance of Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja. Other findings were that non-monetary rewards have negative but significant effect on the performance of Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja. Pay for performance has a positive and significant effect on the performance of Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja. The study is in line with the findings of Obasan (2012) who found significant effect relationship between the variables. The negative effect of non-monetary reward is that management do not give adequate recognition, carrier development and flexible working hours to motivate employees to put in their best for high performance.. This has adverse effect on the hotel performance. The study is also in line with expectancy theory which states that employee perceives and interprets firms' compensation, translating into motivation, commitment and performance increase.

CONCLUSION AND RECOMMENDATION

The study concluded that compensation management has a positive and significant effect on the performance of Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja. Other findings were that non-monetary rewards have negative but significant effect on the performance of Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja. Pay for performance has a positive and significant effect on the performance of Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja. The study recommended that

i. Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Wells Carton Hotel Apartment, and Valentia hotel Abuja should continue to use pay for performance variables such as merit pay, lump sum bonuses and grants to encourage workers to perform efficiently in the organizations.
ii. Fraser suits Abuja, Sheraton hotel, Abuja, Transcorp Hilton hotel, The Well Carton Hotel Apartment, and Valentia hotel Abuja should try to improve on non-monetary rewards given to employees in their organization to boost performance.

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Effect of Corporate Governance on Performance of Pension Fund Administrators in Nigeria

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Abstract

The study investigates the effect of corporate governance on the performance of Pension Fund Administrators in Nigeria. The study used ex-post facto research design. The population consists of 21 registered Pension Fund Administrators by National Pension Commission in Nigeria. The study used purposive sample method to select 10 registered Pension Fund Administrators in Nigeria. The study collected data from the companies' financial statements and descriptive statistics, correlation test and panel regression were used for the analysis. The findings showed that there is negative and insignificant effect of corporate governance on the performance of selected Pension Fund Administrators in Nigeria. Other findings were that BS has a negative and insignificant effect on return on asset of selected Pension Administrators in Nigeria. Also, BSC has a negative and significant effect on return on asset of selected Pension Administrators in Nigeria. It also found that AIC has a negative and significant effect on return on asset of selected Pension Administrators in Nigeria. BS has a negative and insignificant effect on Tobins-Q of selected Pension Administrators in Nigeria. Also, BSC has a negative and insignificant effect on Tobins-Q of selected Pension Administrators in Nigeria. It also found that AIC has a negative and insignificant effect on Tobins-Q of selected Pension Administrators in Nigeria. The study recommended that Pension Fund Administrators in Nigeria should improve on the board size, board composition and should also employ competent audit committee in the organization. They should re-strategies corporate governance in order to remove the insignificant effect in the organization in order to have effective return on asset in the future.

Keywords: Corporate Governance, board size, board composition, return on asset and Tobins-Q

INTRODUCTION

Good corporate governance practices help companies to improve their performance and attract investment, while enabling them to realize their corporate objectives, protect shareholders' rights, meet legal requirements, and demonstrate to a wider public how they are conducting their businesses. These practices have become critical to worldwide efforts to stabilize and strengthen global capital markets and protect investors. Effective corporate governance contributes to sustainable economic development by enhancing the performance of companies and increasing their access to outside capital. In emerging markets, good corporate governance serves a number of public policy objectives. It reduces transaction cost and cost of capital and leads to capital market development. Corporate governance concerns the relationship among management, board of directors, controlling shareholders, minority shareholders and other stakeholders. Good corporate governance does not only enhance the efficiency performance but also increased their access to outside capital, good corporate governance contributes toward economic stability that reduces the vulnerability of the financial crises. It reduces cost of capital and transaction cost. Corporate governance concerns with the relationship among management, board of directors, controlling shareholders, monitoring shareholders and other stakeholders.

The fundamental issue that motivate this study is the structural deficiency of corporate governance in Pension Fund Administrators in Nigeria and their stakeholders inability to live up to expectation in exercising their oversight functions on Corporate Management which includes absence of effective judicial system to enforce corporate governance practice like board size, board composition and audit committee to ensure effective performance in terms of ROA. Over the years, Pension fund administrators have constitutes corporate governance such as board size, audit committee and board composition in order to realized return on asset and Tobin's Q. Despite the administrators constituting corporate governance such as board size, audit committee and board composition, yet, Pension Administrators hardly pay the pensioners the desired returns due to decrease in performance in terms of return on asset and Tobin's Q. From the body of literatures, studies such as Anifowose, Soyebo and Tanimojo (2020);,Mohsin (2020) Rahman, Saima and Jahan (2020); Julius and Lucky (2020) Anetoh, Anetoh, Okeke, Obiora and Uzoamaka (2020); Enekwe, Agu and Eziedo (2020) and Imeokparia, Adesanmi and Fadipe (2021) study the variables in Nigeria, Kenya, Lagos, USA using various organizations such as University of Nigeria, Nsukka to addressed the study. Also, none of these studied used combination of the performance measures such as return on asset and tobins –Q. However, this study will also fill the research gap since none of the studied reviewed in the literature used two performance measurements such as return on asset and tobins –Q. The objective of this study is to examine the effect of corporate governance on the performance of Pension Fund Administrators in Nigeria. The specific objectives are to: determine the effect of corporate governance on return on asset of Pension Fund Administrators in Nigeria and evaluate the effect of corporate governance on Tobin's Q of Pension Fund Administrators in Nigeria. The hypotheses are stated below as:

Ho_1: corporate governance has no significant effect on return on asset of Pension Fund Administrators in Nigeria

Ho_2: corporate governance has no significant effect on Tobin's Q of Pension Fund Administrators in Nigeria.

This study is divided into five sections. After this introduction, literatures are reviewed; conceptual, empirical and theoretical reviews. The next section after the review is the methodology adopted in carrying out the research, followed by results and discussions, then finally the study's conclusions and recommendations.

LITERATURE REVIEW

Conceptual Framework

Corporate Governance

The World Bank defines corporate governance as the structures and processes for the direction and control of companies. Corporate governance concerns the relationships among the management, Board of Directors, controlling shareholders, minority shareholders and other stakeholders. Good corporate governance contributes to sustainable economic development by enhancing the performance of companies and increasing their access to outside capital (World Bank 2010). Ogboghomeh and Ogbeta (2014) define corporate governance as the management of firms through which a company is guided and monitored for the purpose of striking a balance between protecting its interests and that of the other related parties (stakeholders) in addition to the environment and society. For Oso and Semic (2012), corporate governance is a system of making directors accountable to shareholders for effective management of the companies in the best interest of the company and the shareholders along with the concern for ethics and values. Velnampy (2013) refers to corporate governance as a set of rules and incentives by which the management of a company is directed and controlled. Hence, good corporate governance maximizes profitability and long term value of the firm for shareholders. It refers to the private and public institutions, including laws, regulations and accepted business practices, which together govern the organization, in a market economy, between Corporate managers and entrepreneurs (corporate insiders) on one hand, and on the other hand, those who invest resources in corporations (Wan & Idris 2012).

Board Size

Enobakhane (2010), defines board size as the total number of directors that an organization has in its board structure. This is calculated as, the total minimum number of directors (at least five) needed by the Central bank over the total number of directors in the board of directors at the end of the annual financial year. It goes without doubt that the number and quality of directors in a company has an effect on how the board functions, hence its company performance. Empirical research has shown that the best board size that influences the firm's performance is inconclusive. The possibility of a large board size has the likelihood of having more knowledge and skills at their disposal, which will enhance performance (Williams 2002). Romano and Guerrini (2012) argued that when boards grow, they become less likely to function effectively. Also, Board size refers to the total number of directors on the board of any corporate organization (Romano & Guerrini 2012).

Board Composition

Enobakhare (2010) defines board composition as the total number of directors brought from outside the company to sit on the board divided by the board size in a given period. Board composition is often a debated corporate governance issue, since it could influence board deliberations and the capability to control top management decisions and results. Actually, non-executive and independent directors are considered one of the most important mechanisms for ensuring corporate accountability and firm growth (Romano & Guerrini, 2012). Conversely, De Andres and Vallelado (2008) assert that an excessive proportion of non- executive directors could damage the advisory role of boards, since executive directors facilitate the transfer of information between directors and management and give information and knowledge that outside directors would find difficult to gather. Board Composition refers to the distinction between inside and outside directors, and this is traditionally shown as the percentage of outside directors on the board (Goergen & Renneboog 2000).

Audit Committee

The Sarbanes-Oxley Act (SOX 2002, section 2) defines an audit committee as "a committee (or equivalent body) established by and amongst the board of directors of an issuer for the purpose of overseeing the accounting and financial reporting processes of the issuer and audits of the financial statements of the issuer". A competent, committed, independent, and tough-minded audit committee has been described as "one of the most reliable guardians of the public interest" (Levitt, 2000). Audit committee is an oversight committee who helps in overseeing the financial reporting process and in monitoring company's management from manipulating figures for their own interest which are supported by agency theory (Emmanuel, Ayorinde, & Babajide 2014; Deloitte 2015). Al-Thuneibat (2006) defined the audit committee as the committee that is composed of non-executive directors in the establishment.

Performance

Akintonde (2013) opined that performance is a multi-dimensional construct, the measurement of which varies depending on whether the measurement objective is to assess performance outcomes or behaviour will be matched with expected reward by managers. Armstrong (2004) in Akintonde (2013) defined performance as the outcomes of work because they provide the strongest linkage to the strategic goals of the organization, customer satisfaction, and economic contributions. Performance could be regarded as behaviour i.e. the way in which organizations, teams, and individuals get work done. Hornby, Michael, Joanna, Diana, Dilys, Patrick and Victoria (2010) see performance as the act or process of performing a task, an action that involves a lot of effort, or how well or badly you do something or something works.
According to Madhyam (2010), some of the measures of financial performance are abbreviated as CAMELS (Capital, Adequacy, Management, Earning, Liquidity and Sensitivity Analysis) which guides the banking sector to establish their financial soundness. 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.

The most commonly used performance measures are accounting based which include: return on assets (ROA), return on equity (ROE), return on investment (ROI) and Tobin's Q. Accounting based measurement of performance is the most popularly used. Returns On Assets (ROA) was widely used as it was found in the studies of Abbasali, Esfandiar, Milad and Mohammed (2012), Babalola (2012), Muhammad, Zaighum, Saeed and Muhammad (2012), Osuji and Odita (2012), Khalaf (2013) and Raheel, Shahnaz, Bashir and Umara (2013). The Tobin's Q ratio is a quotient popularized by James Tobin of Yale University, Nobel laureate in economics, who hypothesized that the combined market value of all the companies on the stock market should be about equal to their replacement costs. While Tobin is often attributed as its creator, this ratio was first proposed in an academic publication by economist Nicholas Kaldor in 1966. In earlier texts, the ratio is sometimes referred to as Kaldor's v. (Ahmed, & Mather, 2015). Tobin's Q is considered a forward-looking measure for firm performance as it can capture the market value of a firm's assets (Dezsö& Ross, 2012). A simple version of Tobin's Q is applied widely in corporate finance literature (Vafaei, Ahmed & Mather, 2015). Hence, this study will in addition use Tobin's Q as the Market-Based performance measure. Tobin's Q by definition is measured as the sum of market value of equity and book value of liabilities divided by the book value of total assets at the balance sheet date. Where Tobins Q = Market capitalization + total debt/total asset (Vafaei, Ahmed, & Mather, 2015; Elvin & Abdul Hamid, 2016)

Empirical Studies

Victor and Eze (2013) examined the effect of corporate governance practices on the performance of pension scheme in Nigeria. The objective of this study is to determine the effect of corporate governance practices on the performance of pension scheme in Nigeria. Theoretical and empirical studies of this work relied on the relationship between corporate governance practices and performance of pension scheme in Nigeria. It is also important to note that the new pension reforms and policy thrusts could have impacted more positively on the system if the issue of systemic crisis had reduced considerably. It was concluded in this study that there is significant positive effect of corporate governance best practices on the performance of pension scheme in Nigeria. Ekpe (2016) examined the impact of corporate governance and perceived trust in pension management in Nigeria. Qualitative research method was adopted for the study. An extensive review of literature in terms of research findings from other related studies were also employed. The study in hand provides an overview of the pension scheme in Nigeria and it major challenges. Major findings indicate that an adherence to the principles and practice of good corporate governance will bolster the trust of stakeholders in pension industry in Nigeria. The study therefore concluded that good corporate governance system has the potential of enhancing the trustworthiness of corporate organizations and their leaders and effective regulatory framework within which corporate organization operate can provide stakeholders with the peace of mind that their interest and rights would be protected

Osisioma, Egbunike and Adeaga (2015) investigated the impact of corporate governance on deposit money banks' performance in Nigeria in order to ascertain whether certain financial soundness indicators affect the performance (i.e. return on asset-ROA) of Deposit Money Banks-DMBs in Nigeria. These financial soundness indicators are: capital adequacy ratio (CAR), liquidity ratio (LR), loan to deposit ratio (LDR), deposit money bank lending rate (DMBLR), nonperforming loan to total credit (NPLTC), and cash reserve ratio (CRR). They are surrogates for corporate governance. The population of the study comprised of 24 deposit money banks licensed by Central Bank of Nigeria (CBN) and insured by Nigeria Deposit Insurance Corporation (NDIC). The study adopted Panel Survey research design because the study examined the trend and changes in data collected; which also involved time series and cross-sectional data (that is, eight-time series and twenty-four deposit money banks which is one hundred and ninety-two (192) observational pooled data). Top's man formula was used to determined sample-size of 100 respondents. Primary and secondary data were used for the study; the primary data is derived from the questionnaires distributed to the shareholders (respondents) of deposit money banks, while the

secondary data were gathered through the annual reports of NDIC and CBN statistical bulletin from 2006 to 2013, the data covered the period of eight years. The DMBs' shareholders were classified into three nomenclature based on the banks' paid-up capital requirement (i.e. #10billion, #25billion and #50billion for regional, national and international banks respectively). The study indicated that there is no statistical significant difference between corporate governance practices among the DMBs based on the perceptions of the shareholders and there is significant relationship between DMBs' performance and corporate governance proxy variables and also the corporate governance proxy variables have impacted both positively and negatively on DMBs' performance in Nigeria.

Ebenezer and Appiah (2017) examined the impact of corporate board size on firm performance for a sample of 137 listed firms in Ghana and Nigeria. Their findings suggest a statistically significant and positive relationship between board size and firm performance, implying that in Ghana and Nigeria allowing corporate board size to be dependent of firm size tends to improve firm performance. Their findings are consistent across different kinds of models that deal with different types of endogeneities and corporate performance proxies. Their results provide empirical support for agency theory, which suggests that optimal corporate board size effectively advised, monitor and discipline management thereby improving firm performance. Isaac (2009) examined the impact of board size on firm performance for a large sample of 2,746 UK listed firms over 1981-2002. The UK provides an interesting institutional setting, because UK boards play a weak monitoring role and therefore any negative effect of large board size is likely to reflect the malfunction of the board's advisory rather than monitoring role. They find that board size has a strong negative impact on profitability, Tobin's Q and share returns. Oyewale, Oloko and Olweny (2016) studied the impact of board size on the financial performance of listed manufacturing companies in Nigeria was investigated in this study. The manufacturing sector in Nigeria consists of 74 companies from where 34 companies were purposively selected. The study used both primary and secondary data. Secondary data was extracted from the published financial statement of the selected companies while primary data was collected with the use of questionnaire from the 170 respondents drawn from the selected 34 companies. The result indicates that there is a significant positive linear relationship between board size and financial performance of listed manufacturing companies in Nigeria.

Ida and Asunka (2016) examined the association between the characteristics of audit committees and performance of firms. Data were collected from a sample size of 36 trading stocks on the Ghana Stock Exchange for the financial year of 2015. The number of meetings and financial experts among other characteristics were the predictors of the performance of the traded stock on the Ghana Stock Exchange (GSE). To test the hypothesis for the study, Logit cross-sectional regression using SPSS 17.0 version was utilized. This study revealed a relationship between the characteristics of the audit committees and the performance of the firms. Meanwhile, the number of independent members on the audit committee had no influence on the performance of the firms. However, the number of independent members of the audit committee with finance or accounting degrees impacted negatively on the firm's performance. Rateb (2018) investigated the effect of audit committee characteristics on the company's performance. The sample consists of 165 non-financial companies listed on the Amman Stock Exchange (ASE) over the period 2014-2016. The results of the study show that the audit committee size, independence and gender diversity have a significant positive relationship with firm's performance, whereas experience and frequency of meetings has an insignificant association. The results of the study could be beneficial for managers and boards in making suitable choices about audit committee characteristics and corporate governance mechanisms to enhance the company's performance. The study gives policymakers a better understanding of the different characteristics required of an audit committee, for incorporation in future policy preparation to protect the shareholders' interests. The relationship between audit committee characteristics and company performance is still ambiguous.

Mohammad and Faudziah (2018) examined the association between audit committee and firm performance of the Jordanian firms. This study used OLS regression to test the relationship between

independent variable and dependent variable as discussed in the section explaining the study method. The data comprised of 228 firms industrial and services. As this study Jordan attempts to bridge the gap in the existing literature by investigating the association between audit committee and firm performance in the emerging market of Jordan. The findings indicated a positive direction but insignificant relationship between audit committee size and ROA. Whereas, audit committee size with Earning Per Share (EPS) shows a positive direction and significant. Furthermore, the result shows audit committee meetings is significant and has positive direction with ROA. Correspondingly, audit committee meetings with EPS represent positive direction but insignificant. Richard (2014) established the effect of audit committee characteristics on firm performance among listed firms in Nairobi securities exchange, Kenya. To establish the effect of audit committee size on firm performance, to ascertain the impact of the number of independent auditors on firm performance, to determine the effect of audit committee gender diversity on firm performance and establish the effect of audit committee experience on firm performance. The study uses the agency theory and institutional theory. This study adopted an explanatory design. The study was conducted in firms listed on the Nairobi Securities Exchange for the period ranging from 2006 to 2011. The study thus utilized data from 46 companies as the other 14 companies had either been recently listed or had inconsistently traded in the NSE. Descriptive statistics such as means, standard deviation, frequencies and percentage were used to analyze data. In addition, Multiple Regressions was used because of its ability to use multiple independent variables to estimate their effect on a single dependent variable. Research findings showed that audit committee experience, committee gender diversity, audit committee size and number of independent auditors has a significant effect on firm performance.

Gabriela (2016) analysed the impact of various audit committee characteristics on firm financial performance using the evidence from non-financial UK companies listed on the London Stock Exchange. After recent accounting scandals, the role of the audit committee has come under continuous scrutiny. The main findings of this study suggest that the features of audit committees have an impact on UK firm performance. He suggested that there is a significant positive relationship between the audit committee size, frequency of its meetings and its financial experience and firm financial performance. On the contrary, the audit committee independence appeared to be negatively correlated with firm performance. Zubair (2016) evaluated the impact of Audit Committees (AC) on the performance of listed Deposit Money Banks (DMBs) in Nigeria. The specific objectives of the study are to evaluate the impact of components of Audit Committees (size, independence, meetings and financial expertise) on return on assets, net interest margin, Tobin's Q, financial standard compliance, and investors' confidence of Deposit Money Banks in Nigeria. The study employs qualitative and quantitative research methods using correlation and survey research designs. Panel regression and the Kendall's coefficient of concordance technique of data analysis were used for the analysis. The population of the study includes all the listed Deposit Money Banks. The secondary data was analyzed using sample size of 16 through census sampling technique. The primary data was analyzed using a sample size of 281 from a population of 950 members of registered shareholders' Associations using Yamane (1968) formula. The study reveals a significant positive relationship between components of audit committee (size, independence, meetings and financial expertise) and the performance of listed deposit money banks in Nigeria, and that audit committee function has significant positive impact on investors' confidence. Specifically, the findings reveal that financial performance during the period improved with the presence of Audit Committee member who is an expert in accounting and finance, which implies that an increase in the audit committee by one member increases financial performance significantly. Also an increase in the independent non-executive directors in the audit committee membership by one member enhances the financial performance significantly.

Muhammad, Suleiman and Sani (2017) examined the effect of audit Committees' Quality (audit committee members, audit committee meetings and audit committee financial expertise) on financial performance with a focus on the Nigerian food and beverages sector. The population of the study comprises of food and Beverages companies that are listed in the Nigerian Stock Exchange. The study

samples were selected using purposive sampling method. Data were collected from the Annual report and accounts of the selected companies for a period of ten years (2007-2016). The study also employed correlation and structural equation modeling for analyzing the data. The results revealed a significant positive effect between audit committee meetings, audit committee financial expertise and financial performance. The result of the study also shows an insignificant negative effect between audit committee members and financial performance of the Nigerian food and beverages sector. Amarjit and Neil (2011) examined the impact of board size and the CEO (Chief Executive Officer) duality on the value of Canadian manufacturing firms. A sample of 91 Canadian manufacturing firms listed on Toronto Stock Exchange (TSX) for a period of 3 years [from 2008-2010] was selected. The co-relational and non-experimental research design was used to conduct this study. The empirical results show that larger board size (large number of directors) has a negative impact on the value of Canadian manufacturing firms. The findings also show that the CEO duality has a positive impact on the value of Canadian manufacturing firms. In addition, firm size, firm performance, and potential growth of the firm positively impact on the value of Canadian manufacturing firms. Suleiman, Modar and Fida (2018) Explored whether the percentage of women on boards of directors and top and medium-level executive management positions in Jordanian banks had an effect on these banks' financial performance. To do so, the study employs a multiple regression model on data from Jordanian banks for the period from 2009 to 2016. The findings show that, contrary to the findings of many studies from developed countries, there is no statistically significant relation between the percentages of women on boards and top and medium –level executive managements of Jordanian banks and these banks' financial performance.

Ogboi, Aderimiki and Enilolobo (2018) investigated the relationship between corporate board diversity and performance of quoted deposit money banks in Nigeria. The aspects of board diversity studied consist of gender diversity, ethnic diversity, board composition, and foreign directorship. Return on asset (ROA) and Tobin Q were used as performance indicators. The fixed effect Generalized Least Square Regression was used to examine the effect of board diversity on bank performance for the period: 2011-2015. Results showed that gender diversity and board composition was positively linked to financial performance, while ethnic diversity and foreign directorship were not significantly related to financial performance. The results also revealed that ethnic diversity is positively related to market performance, while board composition and foreign directorship are negatively related to market performance. Ahmadu and Aliyu (2017) assessed the effects of board diversity on financial performance of quoted deposit money banks in Nigeria, using secondary data from the annual reports of sampled banks over the period 2010-2014. The study adopted both descriptive and panel data regression techniques. Descriptive statistics in the form of mean, minimum and maximum values were used to provide a descriptive account of the data set while panel data regression in the form Pooled Ordinary Least Squares, Fixed Effects Model and Random Effects Model were used to assess the effects of the board diversity variables (gender diversity; ethnic diversity; foreign directorship; board composition and board size) on banks' financial performance proxy by return on equity (ROE). The results revealed that gender diversity and foreign directorship have no significant effects on banks financial performance, while ethnic diversity, board composition and board size impacts negatively on banks financial performance measured by return on equity. Wicaksana, Yuniasih and Handayani (2017) explored the relation between company's board diversity and earning management in Indonesian Listed Companies. As independent variable, board diversity measured by index of variation of the diversity of gender, nationality, age, and educational background. While as dependent variable, earning management measured by discretionary accruals. This research also used company's size and type of industry as controlling variable. Data collected from Indonesian Stocks Exchange (IDX) for the past 6 years using purposive sampling method producing 298 observations, then analyzed using multiple linear regressions. The result of the research shows that board diversity has negative effect on earning management means the higher board diversity, the lower earning management.

Theoretical Discussion

Resource Dependence Theory

Pfeffer and Salancik (1978) originally developed the resource dependency theory. Unlike agency theory, their original ideas were inductively derived from empirical studies. Their key contribution is the observation that the board, and in particular the constitution of the non-executive element of a board, can provide the firm with a vital set of resources: 'When an organization appoints an individual to a board, it expects the individual will come to support the organization, will concern himself with its problems, will variably present it to others, and will try to aid it' (1978). Seeing the board as a source of resources for a company opens up a very different way of thinking about the board's role in creating high performance. Resources can take a variety of forms each of which can be argued to add to the 'capital' of a company (Hillman & Dalziel, 2003). Resource Dependence Theory suggests that firms exist so that they can critically use the resources available to maximize their efficiency performance (Pfeffer, 1978). Resources available to the firm include human capital, experience, independent suggestions and knowledge from either males or females (Hillman & Dalziel, 2003). A diversified board can have an impact on the firm if it is able to link the firm to its external environment and its resources including skills, experiences of board members, prestige and legitimacy (Ntim, 2013). As women represent more than 50% of the world population, obviously they are major consumers and represent a group of talented people. This means that the presence of women on the corporate board can help add new resources and improve the efficiency of the firm (Burke & Mattis, 2000).

Methodology

The study adopted ex-post facto research design. The population consists of all registered Pension Fund Administrators by National Pension Commission in Nigeria. According to National Pension Commission (2018), there are 21 registered Pension Fund Administrators in Nigeria. The population of Pension Fund Administrators in Nigeria are listed in the table as follows:

Table 3.1: Population of the Study

Name Pension Fund Administrator	Years of Establishment
Radix Pension manager Limited	February 15, 2017
IEI-Anchor Pension manager Limited	December, 2008
Investment 1 Pension manager Limited	May, 2010
Legacy Pension manager Limited	7th April, 2005
NPF Pension manager Limited	2004
Oak Pension manager Limited	1997
AIICO Pension manager Limited	April, 2006
APT Pension manager Limited	28th June, 2005
AXA Pension manager Limited	1989
Crusader Pension manager Limited	1990
Fidelity Pension manager Limited	2004
First Guarantee Pension manager Limited	5 August, 2004
FUG Pension manager Limited	2006
NLPC Pension manager Limited	January 25, 2006
PAL Pension manager Limited	April 14, 2005
Leadway Pension manager Limited	25th August, 204
Premium Pension manager Limited	2008
Sigma Pension manager Limited	2008
QTrust Fund Pension manager Limited	1993
ARM Pension manager Limited	1994
Stanbic IBTC Pension manager Limited	19 May 2004

Source: National Pension Commission (2018)

Thus, the population of Pension Fund Administrators in Nigeria in this study is 21 and this study used purposive sampling method to select the sample size from the population of the study by considering Pension Fund Administrators that was established on or before the year 2004 since the study begins from 2014 to 2019. Pension Fund Administrators established after 2004 is not considered in this study.

Table 3.2 Sample Size of theStudy

Name Pension Fund Administrator	Years of Establishment
NPF Pension manager Limited	2004
Oak Pension manager Limited	1997
AXA Pension manager Limited	1989
Crusader Pension manager Limited	1990
Fidelity Pension manager Limited	2004
First Guarantee Pension manager Limited	5 August, 2004
Leadway Pension manager Limited	25th August, 2004
Trust Fund Pension manager Limited	1993
ARM Pension manager Limited	1994
Stanbic IBTC Pension manager Limited	19 May 2004

However, the reasons for selecting 10 Pension Fund Administrations in Nigeria are because their companies were established longer or during the pension fund reform Act of 2004. The reason for this selection is also that these Pension Fund Administrators have adequate data needed to carry out this study since they have engaged in pension fund activities by observing the rules and principles of Pension Act, 2004 and Amended Act, 2014. The researcher also discovered that the reason for rejecting 11 Pension Fund Administrators in Nigeria is inadequate data since these organizations were established above the period considered in this study. Therefore, they may not have adequate data or information need to complete this study with unique findings. The data for this study is extract from the annual reports of these selected Pension Fund Administrators in Nigeria. The secondary data is extracted for the period 2004 to 2017 on, return on assets, Tobins Q, corporate governance (board size, board composition and audit committee). The study used various statistical tools to analyze the data such as measurement of the variables, descriptive statistics, and correlation analysis and panel regression.

3.4.1 Measurement of the Variables

Variables	Measures	Authors
Corporate governance	Board size, board composition and audit committee	Self-selection
Tobins Q	Market capitalization + total debt/total asset Where Market Capitalization is cost per share X number of share	Vafaei, Ahmed, & Mather, 2015; Elvin & Abdul Hamid, 2016
Board size	total number of directors on the board of any corporate organization	Romano and Guerrini (2012)
board composition	total number of directors brought from outside the company to sit on the board divided by the board size in a given period	Enobakhare (2010)
Audit Committee	audit committee as the committee that is composed of non-executive directors in the establishment.	Al-Thuneibat (2006)

Panel regression technique is used for this study and the election of variables for the estimated model was guided by existing empirical study on the subject (Verbeek, 2004). However, Verbeek (2004) sets out the framework for panel study as:

$y_{it} = \ + \ x_{it}\square_{it} + \ {}_{it}$…………………………………………………………………………………………………1

ROA$_{it} = \alpha + \beta_1 BS_{it} + \beta_3 BCS_{it} + \beta_3 AIC + \varepsilon_{it}$ ……………………………………………..…2

Tobins Q $_{it} = \alpha + \beta_1 BS_{it} + \beta_3 BCS_{it} + \beta_3 AIC + \varepsilon_{it}$ ……………………………………….…3

Where:

Tobins Q $_t$ is the market performance of firm i at time t
BS$_{it}$ is board size of firm i at time t
BCS$_{it}$ is board composition of firm i at time t
AIC$_{it}$ is audit committee of firm i at time t
Haussmann test is carried out to decide which model is most appropriate between fixed or random effects model. That isHo = Random Effect while HA = Fixed Effect
In this study, Hausman test is used to test fixed effects model and random effects model (REM).

RESULT AND DISCUSSION

Table 1: Descriptive statistics of the Variables

	ROA	TOBINS_Q	BS	BCS	AIC
Mean	0.155787	0.647972	2.638765	0.391333	6.316667
Median	0.093723	0.333480	2.484903	0.340000	6.000000
Maximum	1.438547	4.545220	4.880000	0.770000	7.000000
Minimum	0.012931	0.036165	0.450000	0.110000	6.000000
Std. Dev.	0.240071	0.771207	0.726376	0.154168	0.469102
Skewness	3.557471	2.934018	-0.007367	0.293241	0.788232
Kurtosis	17.14862	13.34410	5.729901	2.690718	1.621309
Jarque-Bera	627.0147	353.5856	18.63144	1.099038	10.96506
Probability	0.000000	0.000000	0.000090	0.577227	0.004159
Sum	9.347208	38.87834	158.3259	23.48000	379.0000
Sum Sq. Dev.	3.400415	35.09082	31.12969	1.402293	12.98333
Observations	60	60	60	60	60

Source: E-view, version 9.00

The mean value of ROA is 0.155 and the median value is 0.09. This shows that the presence of an outlier as can be confirm the difference between minimum value and maximum value. However, an outlier is an observation that lies an abnormal distance from other values in a random sample from a population. The mean value of Tobins-Q is0.64 and the median value is 0.33. This shows that the presence of an outlier as can be confirm the difference between minimum value and maximum value. The mean value of BS is 2.63 and the median value is 2.48. This shows that the presence of an outlier as can be confirm the difference between minimum value and maximum value. The study also revealed that the mean value of BCS is 0.39 and the median value is 0.34. This shows that the presence of an outlier as can be confirm the difference between minimum value and maximum value while the mean value of AIC is 6.31 and the

median value is 6.00. This shows that the presence of an outlier as can be confirm the difference between minimum value and maximum value.

Table 2: Correlation Matrix of the Variables

	ROA	BS	BCS	AIC
ROA	1.000000	-0.074480	-0.068517	-0.166571
BS	-0.074480	1.000000	0.202903	-0.034251
BCS	-0.068517	0.202903	1.000000	0.012812
AIC	-0.166571	-0.034251	0.012812	1.000000

Source: E-view, version 9.00

Table 2 indicates that there is a negative association (relationship) between the variables in the study. This implies that there is weak negative association board size and return on asset of selected Pension Administrators in Nigeria. Also, there is weak negative association between board composition and return on asset of selected Pension Administrators in Nigeria. The finding also revealed that there is weak negative association between audit committee and return on asset of selected Pension Administrators in Nigeria. There is no strong correlation between the variables and then there is no problem of multicollinearity.

Table 3: Correlation Matrix of the Variables

	TOBINS_Q	BS	BCS	AIC
TOBINS_Q	1.000000	-0.033434	-0.107999	0.112151
BS	-0.033434	1.000000	0.202903	-0.034251
BCS	-0.107999	0.202903	1.000000	0.012812
AIC	0.112151	-0.034251	0.012812	1.000000

Table 3 indicates that there is a negative/positive association between the variables in the study. This implies that there is weak negative association between board size and Tobins-Q of selected Pension Administrators in Nigeria. Also, there is weak negative association between board composition and Tobins-Q of selected Pension Administrators in Nigeria. The finding also revealed that there is weak positive association between audit committee and Tobins-Q of selected Pension Administrators in Nigeria. There is no strong correlation between the variables and then there is no problem of multicollinearity.

Table 4: 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	4.185522	3	0.2421

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
BS	-0.026841	-0.023856	0.000587	0.9019
BCS	-0.211373	-0.134071	0.002011	0.0847

AIC	-0.046818	-0.070434	0.000415	0.2465

Source: Researcher's Computation Using E-Views 9.0, 2021

The Hausman test indicates that random effect model is the most appropriate to fixed effect model given the probability value of more than 0.05. Thus, the null hypothesis which states that random effect model is more appropriate and is accepted.

Table 5: Panel Regression result

Dependent Variable: ROA
Method: Panel EGLS (Two-way random effects)
Date: 10/18/21 Time: 07:31
Sample: 2014 2019
Periods included: 6
Cross-sections included: 10
Total panel (balanced) observations: 60
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.723265	0.440107	1.643384	0.1059
BS	-0.023744	0.044959	-0.528117	0.5995
BCS	-0.129142	0.200645	-2.643632	0.0224
AIC	-0.071919	0.065471	-11.98483	0.0067
	Effects Specification			
			S.D.	Rho
Cross-section random			0.076485	0.0974
Period random			0.000000	0.0000
Idiosyncratic random			0.232774	0.9026
	Weighted Statistics			
R-squared	0.634522	Mean dependent var		0.121361
Adjusted R-squared	-0.517201	S.D. dependent var		0.226979
S.E. of regression	0.228923	Sum squared resid		2.934724
F-statistic	0.667443	Durbin-Watson stat		1.785922
Prob(F-statistic)	0.001579			
	Unweighted Statistics			
R-squared	0.035070	Mean dependent var		0.155787
Sum squared resid	3.281162	Durbin-Watson stat		1.597357

Source: E-view, version 9.00
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 significant. The result also shows that BS has negative effect on return on asset of selected Pension Administrators in Nigeria. The study also revealed that BCS has negative effect on return on asset of selected Pension Administrators in Nigeria while AIC has negative effect on return on asset of selected Pension Administrators in Nigeria. Thus, we can conclude that BS has a negative and

insignificant effect on return on asset of selected Pension Administrators in Nigeria. Also, BSC has a negative and significant effect on return on asset of selected Pension Administrators in Nigeria. It also found that AIC has a negative and significant effect on return on asset of selected Pension Administrators in Nigeria. The $R^2 = 0.63$ indicates that only 63% of variation on corporate governance (board size, board composition and audit committee) can be used to explain return on asset of selected Pension Administrators in Nigeria but 36% can be explained by other factors not noted in the regression model which is refer to as error term.

Table 6: 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	7.514760	3	0.0472

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
BS	-0.285171	-0.114008	0.005088	0.0164
BCS	-0.484298	-0.497821	0.017113	0.9177
AIC	-0.013582	0.102481	0.003549	0.0514

Source: Researcher's Computation Using E-Views 9.0, 2021

The Hausman test indicates that fixed effect model is the most appropriate to random effect model given the probability value of less than 0.05. Thus, the null hypothesis which states that fixed effect model is more appropriate is accepted.

Table 6: Panel Regression result

Dependent Variable: TOBINS_Q
Method: Panel Least Squares
Date: 10/18/21 Time: 07:37
Sample: 2014 2019
Periods included: 6
Cross-sections included: 10
Total panel (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.675786	1.427402	1.174011	0.2463
BS	-0.285171	0.155959	-1.828503	0.0738
BCS	-0.484298	0.623337	-0.776943	0.4411
AIC	-0.013582	0.208282	-0.065210	0.9483
	Effects Specification			
Cross-section fixed (dummy variables)				

R-squared	0.557792	Mean dependent var	0.647972
Adjusted R-squared	0.493824	S.D. dependent var	0.771207
S.E. of regression	0.692445	Akaike info criterion	2.291962
Sum squared resid	22.53559	Schwarz criterion	2.745736
Log likelihood	-55.75885	Hannan-Quinn criter.	2.469458
F-statistic	2.182088	Durbin-Watson stat	1.807686
Prob(F-statistic)	0.028617		

The regression result shows that the model is fit for the study since the f-statistics is significant at 5% level of significant. The result also shows that BS has negative and insignificant effect on Tobins-Q of selected Pension Administrators in Nigeria. The study also revealed that BCS has negative effect on Tobins-Q of selected Pension Administrators in Nigeria while AIC has negative effect on Tobins-Q of selected Pension Administrators in Nigeria. Thus, we can conclude that BS has a negative and insignificant effect on Tobins-Q of selected Pension Administrators in Nigeria. Also, BSC has a negative and insignificant effect on Tobins-Q of selected Pension Administrators in Nigeria. It also found that AIC has a negative and insignificant effect on Tobins-Q of selected Pension Administrators in Nigeria. The R^2 = 0.55 indicates that only 55% of variation on corporate governance can be used to explain Tobins-Q of selected Pension Administrators in Nigeria but 45% can be explained by other factors not noted in the regression model which is refer to as error term.

Discussion of Findings

The study found out that there is negative and insignificant effect of corporate governance on the performance of selected Pension Fund Administrators in Nigeria. Other findings were that BS has a negative and insignificant effect on return on asset of selected Pension Administrators in Nigeria. Also, BSC has a negative and significant effect on return on asset of selected Pension Administrators in Nigeria. It also found that AIC has a negative and significant effect on return on asset of selected Pension Administrators in Nigeria. BS has a negative and insignificant effect on Tobins-Q of selected Pension Administrators in Nigeria. Also, BSC has a negative and insignificant effect on Tobins-Q of selected Pension Administrators in Nigeria. It also found that AIC has a negative and insignificant effect on Tobins-Q of selected Pension Administrators in Nigeria. The study is in line with the findings of Osisioma, Egbunike and Adeaga (2015) who found a statistical no significant effect of corporate governance on performance. The study also disagree with the findings of Victor and Eze (2013) who positive and significant effect of the variables. The study is also in line with Resource Dependence Theory which suggests that firms exist so that they can critically use the resources available to maximize their efficiency performance (Pfeffer, 1978). Resources available to the firm include human capital, experience, independent suggestions and knowledge from either males or females (Hillman & Dalziel, 2003). A diversified board can have an impact on the firm if it is able to link the firm to its external environment and its resources including skills, experiences of board members, prestige and legitimacy (Ntim, 2013). As women represent more than 50% of the world population, obviously they are major consumers and represent a group of talented people. This means that the presence of women on the corporate board can help add new resources and improve the performance of the firm (Burke & Mattis, 2000).

CONCLUSION AND RECOMMENDATIONS

The study concluded that there is negative and insignificant effect of corporate governance on the performance of selected Pension Fund Administrators in Nigeria. Other conclusions were that BS has a negative and insignificant effect on return on asset of selected Pension Administrators in Nigeria. Also, BSC has a negative and significant effect on return on asset of selected Pension Administrators in Nigeria. It also found that AIC has a negative and significant effect on return on asset of selected Pension Administrators in Nigeria. BS has a negative and insignificant effect on Tobins-Q of selected Pension Administrators in Nigeria. Also, BSC has a negative and insignificant effect on Tobins-Q of selected

Pension Administrators in Nigeria. It also found that AIC has a negative and insignificant effect on Tobins-Q of selected Pension Administrators in Nigeria. The study recommended that

i. Pension Fund Administrators in Nigeria should improve on the board size, board composition and should also employed competent audit committee in the organization. They should re-strategies corporate governance in order to remove the insignificant effect in the organization in order to have effective return on asset in the future.

ii. Pension Fund Administrators in Nigeria should re-address and re-strategies board size, board composition and audit committee in order to ensure effective performance in terms of Tobins-Q in the future even if there is insignificant effect of variables now.

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Effect of Land Delivery and Affordable Housing by Federal Housing Authority (FHA) in Abuja, Nigeria

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Abstract

This study examines the extent to which access to land influences the ability of the Federal Housing Authority (FHA,) in the delivery of affordable housing to the middle and low-income earners in Nigeria, with a specific focus on the Federal Capital Territory (FCT), Abuja. The study adopted survey approach with questionnaire as major instruments of data collection. The study selected a sample size of 207 out of staff population of 430; this sample population was arrived at using Taro Yamane 0.05 level of significance. In analyzing the data, the study employed Descriptive, Multi Linear Regression and Pearson Correlation Coefficient with the aid of the Statistical Package SPSS version 20. The hypothesis of the study was tested with Multi Linear Regression. The findings of the study revealed that there is no significant difference among the staff of FHA in their perception of difficulty in access to land as a major challenge to the delivery of affordable housing in Abuja. Consequently, the study recommends that the Federal Government should take measure(s) that could enhance the FHA's access to land with a view to reducing the cost of its houses for the citizenry. The amendment to the Land Use Act (1978) to simplify the process of securing land titles and eliminate the existing dual ownership of land titles in the country is long overdue.

Keywords: Abuja, Access to land, Affordability, Delivery, FHA, Housing

INTRODUCTION

There is consensus among economists that land is the original and primary factor of production. This presupposes that in the milieu of production, land has no substitute; and that other factors of production, namely, labour, capital, and entrepreneur can only be useful with the availability of and access to land. Omirin (2002) shared this position when he asserted that access to land and property rights is a major key in economic growth and development. Similarly, Owoeye and Adedeji (2015) posit that "land is fundamental to development, growth and housing delivery in any society." Housing provision is one of the basic needs of man in every society. The significance of decent housing in modern society cannot be overemphasized. Housing is essential to human being not just as a source of protection from the effect of sun, rainfall, and other climate conditions, but it also serves as a basic gathering point where important economic, social, and political activities are nurtured and pursued (Oladimeji, 2015). Hence, access to land is vital to achieving efficient and sustainable housing delivery. Sustainable access to affordable housing delivery in Nigeria has, however, remained a challenge especially for the low and middle-income earners. According to Emiedafe (2015),"Nigeria with a population of about 174 million people is currently facing a national housing deficit of about 17 million units."The level of the deficit has worsen over the years jumping from 7 million in (1991) to 12million in (2002) and14 million (2010). It is instructive that access to affordable housing in the country is worsening in spite of housing delivery efforts by both government and private sector organizations. In other words, middle and low-income earners are increasingly unable to afford decent housing supply despite the continuous attempt at increasing housing stock by both formal and informal housing organizations in the country. Against this back-drop that land is one of the essential factors in housing delivery; this study examines the effect of

access to land in the delivery of affordable housing in Nigeria with specific focus on the Federal Housing Authority (FHA) in Abuja.

Access to decent and affordable housing is one of the universal needs of man across societies. Over the years, successive Nigerian governments have tried to achieve the goal of affordable housing with several policy measures. Such policy measures include the establishment of the FHA in 1973 with a mandate to accelerate access of Nigerians to afford-able housing and the setting of goals of particular housing units to be achieved within a given time frame (Amdii, 1993). Other examples of housing programs in Nigeria include the Shagari housing policy (1979), the 12,000 housing units target of 1994 and the 40,000 housing units per annum of the year 2002 (Oladimeji, 2015). In spite of plethora of these policies/programs, achievements in the delivery of affordable housing in the country remained a by small poor. Olorunisola (2013) revealed that new housing construction by FHA is only 10,000 units per annum while 90% of housing delivery is through private developer. This ugly trend has limited the existing housing stock in the country there by raising the prices of the available stock. Thus, Nigerians spend between 36% and 40% of gross income on rents. This level of expenditure has made decent housing unaffordable for the middle and low-income groups in the country. Furthermore, houses constructed by the FHA are not priced at cheaper rates compare to those of private developers. The contradiction in Abuja and other major cities in the country is that despite increasing housing stock, the number of people who could not secure affordable housing is on the rise. One pertinent question in this scenario is to ask for the place of access to land in the delivery of afford-able housing especially for a government housing delivery agent such as the Federal Housing Authority (FHA)? This study therefore attempts to examine the effect of access to land on the delivery of affordable housing by the FHA in Abuja. From the foregoing, the basic hypothesis underlying this study is stated thus;

H_{01}: There is no significantly relationship between FHA difficulty to access land and its delivery of affordable housing in Abuja.

LITERATURE REVIEW

Conceptual Clarification

Access to land remains a central issue to productive activities in general and housing provision in particular. Food and Agriculture Organization of the United Nations (FAO, 2002) observed that access to land is governed by land tenure systems. Land tenure is there relationship, whether legally or customarily defined, among people, as individuals or groups, with respect to land. In other words, land tenure system determines who can use what land, for how long, and under what conditions. Similarly, Quan (2006) defined access to land broadly as the process by which people individually or collectively gain rights and opportunities to occupy and utilize land (primarily for productive purposes but also other economic and social purposes) on a temporary or permanent basis. Omirin (2002) conceived acquisition of land as comprising of availability of unusable lands, affordability such lands, as well as by security of owner's right. From the conceptualizations above, key elements in access to land are: What processes and procedures are involved and how simple or complexes are they? And how affordable or otherwise to the citizen is the cost of acquisition of land?

Furthermore, FAO (2002) opined that the manner in which rights to land are distributed and used can be very complex. The group identified the various categories of land tenure as; Private - The assignment of rights to a private party who may be an individual, a married couple, a group of people, or a corporate body such as a commercial entity or non-profit organization. For example, within a community, individual families may have exclusive rights to residential parcels, agricultural parcels, and certain trees. Other members of the community can be excluded from using these resources without the consent of those who hold the rights; Communal - A right of commons may exist within a community where each member has a right to use independently the holdings of the community. For example, members of a community may have the right to graze cattle on a common pasture. Open access on the other hand refers to specific rights are not assigned to any-one and no one can be excluded. This typically includes marine tenure where

access to the high seas is generally open to any one; it may include range lands, forests, and soon where there may be free access to the resources for all. An important difference between open access and communal systems is that under a communal system, non-members of the community are excluded from using the common areas. Thus, State Property rights are assigned to some authority in the public sector. For example, in some countries, forest lands may fall under them and ate of the state, whether at a central or decentralized level of government. Apart from the various forms of ownership discussed above. Quan (2006) pontificated that the processes of access to land include participation in both formal and informal markets, land access through kinship and social networks, including the transmission of land rights through in heritance and within families, and land allocation by the state and other authorities with control over land and land owners. In Nigeria, the current land tenure system is in formally a combination of both the State tenured system and private ownership. From the foregoing, land tenure is the relationship, whether legally or customarily defined, among people, as individuals or groups with respect to land.

Affordable Housing

The concept of affordable housing has received tremendous attention from scholars to the point where it is regarded as being diverse, complex and elusive. Milligan, Phibbs, Fagan and Gurran (2004) in Urban Research Center (2008) opined that "affordable housing connotes housing that is responsive to the needs of households who do not have sufficient income to access adequate housing in the market without some form of assistance." The UN-Habitat (2011) broadly defined affordable housing as adequate housing in terms of quality and location, which does not cost so much as to prohibit its occupants from meeting other basic living costs or threatens their enjoyment of basic human rights. Scholars have also used the term decent housing to imply qualitative housing with essential amenities such as space, ventilation, and toilet. This means that two factors are essential in affordable housing; namely: quality of the houses in terms of facilities available, and the cost of acquiring the houses. Adejumo (2008) elucidated on the second condition when he argues that affordable housing is a term used to describe dwelling units whose total housing costs are deemed affordable to a group of people within a specified income range.
The central issue of affordable housing is, therefore, economic and relates to households housing and non-housing expenditure and income as well as financial assistance like credit, loans, and subsidies open to them (Suhaidaetal.,2011). It is instructive to note that there are varied approaches to measurement of affordable housing. In the United States and Canada, a commonly accepted guideline for housing affords-ability is a housing cost that does not exceed 30% of a house-hold gross income. In some other instances, affordable housing is used to describe housing that a family group can acquire within a given period of time ranging between 15 and 30 years. In the words of the Center for Urban Pedagogy (2009)," when the government says affordable housing it means affordable for families in the middle or at the lower end of the income scale. " The fore going review shows that affordable housing refers to decent housing whose cost of either purchase or renting does not exceeds 30% of a household's in come. The concept of affordable housing becomes prominent in housing literature in the face of the existing reality of expensive nature of housing in the open market.

Watt (2011) views 'affordability' as a measure of whether housing may be afforded by certain groups of households, while 'affordable housing' refers to particular products outside the main housing market. Hence, the term 'affordability' denotes an individual's capacity to exercise choice in the marketplace (Gabriel et al., 2005). Lack of affordable housing supply has been the main cause of declining housing affordability and associated problems. Despite the rising demand for affordable housing, such investments have not been viewed as commercially viable for housing developers, and there has been limited investment by the non-government housing sector (Susilawati, 2009). Agbola (2005) have noted that for housing to be affordable for the low income earners, it must be tailored to total income level. Inexpensive housing is used to define dwelling units whose total housing budgets are considered reasonable to a group of people in a definite salary scale. However, the governmental agency of 2002 on housing and inner-city development, defines low income earners as all employee or entrepreneurs whose yearly revenue in 2001 is N100,000 or below (with N260 = £1). When the monthly budget of a home

surpasses 30 – 35 % of family wages, then the housing is measured excessive for that family. The United States Department of Housing and Urban Development (HUD) policy makers specified that for housing system to be reasonably priced, the family should not pay other than 30% of its full income on rent payment and services, where they possess their own home, not higher than 30% on their mortgages, insurance, taxes and utilities. Housing becomes affordable only if it meets this 30% test (Adediji, 2006). A review of city housing in Nigeria points out that rental fee accounts for about 60% of the income of an ordinary worker with the remaining 40% for food, clothing, health, transportation and other requirements; a percentage that tosses the wage earner into extreme insufficiency. This completely ignores the United Nations description of inexpensive housing. Affordability is hence the fundamental of any societal housing scheme. If the system is not low-cost, then it is not justifiable.

Adedeji (2006) stated that a household survey in Nigeria indicates that accommodation takes a generous portion of a salary earner and has remained a standard for judging any regime's performance in the socio-economic and political spheres of a country. The private sector understands housing from a broad viewpoint than the public sector, because humans are measured by the kind of houses they live in and its location. This means that the category of house one occupies is a measure of his/her personality and economic worth in the society. In Nigeria, the drive toward achieving the housing for all is continuously becoming an illusion due to the size of the population. With about 200 million in population and an estimate of housing need of over 1 million and is always rising as the day goes by, this has become a hard task. Greatest number of city residents in Nigeria lives in shanty-towns and derelict homes short of simple conveniences, unhygienic surroundings and water. By the emergence of a different National Housing plan and the resurgence of numerous primary mortgage institutions (PMIs) in the last 15 years, either as independent or as businesses of depositary organizations coupled with an aggressive operation of the private developers, the housing needs are far from being realized (Nubi, 2000).

Effect of Access to Land on the Delivery of Affordable Housing

Access to land is one of the major factors in housing provision in genera land affordable housing in particular. UN-HABITAT (2011) demonstrated that the availability ofland at affordable prices is fundamental to expanding the supply of affordable housing and limiting the growth of new slums. Land remains a central constraint of increasing the supply of affordable housing in Asia. Low and middle-income households are, therefore, priced out of land markets in the vast majority of cities and have poor access to well-located land. Similarly, Abusah (2004) in his study of access to land for housing development: A review of land title registration in Accra, Ghana, used a questionnaire to obtain its data. He found that the backlog in the delivery of land and housing to Ghanaians cast doubt on government ability to give effect to the constitutional ideal of a more equitable dispensation of access to land. "The delays in, and long waiting periods for title registration increasingly lead to frustrationand friction to would-be homeowners and investors alike" (Abusah,2004). The situation in Nigeria is not too different from those ofAsia countries and Ghana as shown above. Available literature revealed that access to land remains a complex subject in the sense that both customary rules and State participation are the dominant land tenure practices in the country. Prior to British rule, access to land was governed by customary rules with its attendant's insecurity of tenure, incessant rancor, fraudulent sales of land, and marginalization of non-land holding family members, among others (Owoeye & Adedeji, 2015). The challenges associated with the customary landtenure system led to the promulgation of Land Use Act of1978 with the aim of creating cheaper and easier accessibility for Nigerians.

However, the promulgation of the Land Use Act has not brought about any significant improvement in access to land for productive purposes in Nigeria. In the words of Owoeye and Adedeji (2015), "therefore customary and state systems prevail in the country with the consequence of double purchase of the same land by the hoodlums locally called "Omooniles."Adejumo(2008) corroborated this position thus: The constraints imposed by the land use act, a moribund and repressive act that hinders mortgage financing and creates enormous obstacles to private sector involvement in the housing industry and which as constrained the transfer of titles and made mortgage finance extremely difficult. As a result of land use act,

obtaining the certificate of occupancy (popularly known as C of O) has become a big-time avenue for large-scale corruption. Ugonabo and Emoh (2013) in their study of the major challenges to housing development and delivery in Anambra State identified lack of secure access to land among the multiplicity of factors inhibiting effective housing development in the state. Evidence abounds in urbanization studiesin developing countries to buttress the fact that where land has been made available, even the poor have been able to provide themselves with some form of housing." This assertion applies with equal force to Anambra State as even the very poor ones have been able to incrementally develop their residential houses even if it means one year one block until the building gets to livable stage" (Ugonabo&Emoh,2013). The existing gap which this study tries to fill is the extent to which the FHA is constrained in its delivery of affordable housing by access to land in Abuja giving that one of the key responsibilities of the FHA is to accelerate access of Nigerians to affordable housing.

Empirical Literature

Iheme, Effiong and Ekung (2015) assessed the effect of government policy on housing delivery in Nigeria. The objectives were to determine housing needs of the low income group in Nigeria and to determine the impact of government policies on affordable housing provision to the low income group. Survey method was used to collect data from 44 respondents through the administration of questionnaires which was analyzed with statistical tools. The findings from the study shows that insufficient fund is closely related to other finance related factors identified as barriers to the accessibility of public housing by the low income group who are non-public servants. Such factors as high interest rate, low per capita income, lack of security of income, lack of collateral and high cost of public houses. The study suggests the creation of a viable secondary mortgage market, improvement of land registration and allocation, compassionate urban renewal programmes, cost saving house designs amongst others. Akinyode (2018) aimed at developing how the expected level of affordable housing delivery could be achieved. It was conducted within the framework of consumers' satisfaction on their affordable housing to determine their desired affordable housing. It employed extensive qualitative research approach through purposive sampling technique with the aid of semi-structured questionnaires. Data were collected through personal interview among 27 participants within four categories of the stakeholders. This was to allow in-depth understanding of the subject matters and help in developing grounded up theory to achieve the objective. Data analysis went through five steps namely Data Logging, Anecdotes, Vignettes, Data Coding and Thematic Network. Member checking, triangulation and audit trail techniques were used to validate the result. The result revealed that the consumers' inclusion was not being given proper recognition in housing policymaking. The study therefore suggested workable strategies through which consumers' inclusion in housing policymaking can be properly implemented.

Daniel and Hunt (2014) examines housing policy changes and factors that influence housing supply outcomes at the local level. The study, first of all, reviews the state of housing provision in the national context. The focus is then turned to the city of Jos in north-central Nigeria, where institutional arrangements for the provision of housing are critically examined. Primary data was obtained through interviews with industry role players (government officers and house builders) and the views of people were sampled through a questionnaire survey. This data was then combined with secondary source material to examine financial mechanisms, subsidy provision and local-level organizational frameworks for partnership. The findings suggest that a shift from a state-led to an enabling approach for housing did stimulate the activities of private house-builders and primary mortgage institutions. However, their activities are not spread across the regions of Nigeria. The issue of equitable allocation of public housing across the regions of Nigeria by the federal agencies has not been addressed by the enabling policy framework. Further, the idea of decentralization of housing provision was introduced but did not result in the formulation of strategies by the local authorities in Jos. The national housing policy itself appears to be ambiguous and difficult to implement by the authorities in Jos. The ambiguities arose because there is a lack of policy enforcement mechanism, political commitment, and a poor local organization and coordination framework. These failures create uncertainties and risks for private house builders that

partnered the government to access finance and subsidies for the provision of low-income housing in Jos. Also, there is limited participation of households due to lack of awareness on public policies. On the basis of the study's findings, some policy recommendations are made.

Ojebode (2016) develop a PPP framework for the implementation of affordable housing delivery in Nigeria. To do this, the research develops a framework based on five components: capacity development, operating environment, project development, project financing and government commitment. The research also uses the Institutional Analysis and Development (IAD) Framework to analyze and initiate housing policy reform for PPP arrangement. The IAD Framework helps to understand key variables and the process to evaluate the effectiveness of using PPP as a mechanism for affordable housing delivery in Nigeria. The research was based upon in-depth literature review and primary data collection using semi-structured interviews with various practitioners in the public and private sectors using PPP for housing delivery in Nigeria. The research provides further evidence on constraints that are hindering the effectiveness of PPP on affordable housing delivery in Nigeria, including lack of regulation guarantee, poor financial projections, poor feasibility assessments, poor communication, inadequate financial resources, project cancellation and contract renegotiation etc. PPP needs to develop a clear statement of objectives for affordable housing delivery, well communicated strategy, a clear institutional framework, independent oversight, sustainable financing mechanisms and allow flexibility for implementation in order to mitigate these constraints.

Theoretical Framework

The Elite Theory

The Elite theory remains one of the theories which best explains the Nigerian housing sector particularly, and the public policy in general. Elitism is a pattern of decision-making characterized by limited mass pai1icipation in community issues and their domination by small groups of specialized or general leaders. It assumes that all political systems are divided into two strata, namely the ruling minority and ruled majority and that policy reflects the preferences of the few ruling minority. The position has been stressed by Mosca that:

> In all societies two classes of people appear - a class that rules and a class that is ruled. The first class, always the less numerous, performs all political functions, monopolizes power and enjoys the advantages that power brings, whereas the second, the more numerous class, is directed and controlled by the first, in a manner that is now more or less legal, now more or less arbitrary and violent, and supplies the first, in appearance at least, with material means of subsistence and with the instrumentalities that are essential to the vitality of the political organism (1939).

Parry (1976) argued further that because of their power, organization, political skills or personal qualities, the members of the elites are always potentially capable of exploiting their positions as so as to preserve the elite's domination. An implication of this is that the supposed elites constitute a coherent, united and self-conscious group. Similarly, Presthus (1964) contends that:

> Elitism connotes domination of the decisional process by a single group or a few men, limited rank and file access, little or no opposition, and a failure on the part of most of the adult community to use their political resources to influence important decisions. It refers to the tendency of power, defined as the chances of a group to achieve its ends despite opposition, to rest in relatively few hands.

The elite power may be derived from expertise, class, status or wealth but what distinguishes a power elite from the rest of the society is the "decisive control" of such resources both in developed or in developing societies. The power elites whether in developed or in developing societies tend to equate their ends with those of the groups and communities to which they belong and mobilize others to fight the elite individual causes, beliefs and interests as if those were their causes, beliefs and interests. In the elite

mode of operation, policies flow "downward" from the elite to masses; they do not arise from mass demands since the people are deemed to be apathetic and ill-informed about public policy. More so, in order to preserve their own self-interests, the elite tend to adopt incremental changes rather than revolutionary changes.

METHODOLOGY

The study location of this research is the headquarter of theFHA Abuja. The study population comprised of all the staffof FHA. The FHA has staff strength of 430. By applying Taro Yamane formula of 0.05 significance level,207 sample size was arrived at.The study adopted descriptive and survey technique in obtaining its data. Data for the study were generated through a combination of both primary and secondary data. Questionnaire and unstructured interview provided primarydata while secondary data is obtained through textbooks, journal articles, and Internet materials. Descriptive, Multi Linear Regression and Pearson correlation coefficient will be used in the analysis and test of hypothesis, and a statistical tool (SPSS Ver. 20) was used to undertake this study.

RESULTS AND DISCUSSION

From the distributed questionnaires (207), 29 were return invalid which is a result of incomplete data or no data at all, while 178 responses were certified valid.

Table 1: Respondents' opinion

	SD	D	U	A	SA	Total
Does the difficulty to access land constrain the FHA in the delivery of affordable housing in Abuja?	0 (0)	0 (0)	1 (0.6)	20 (11.2)	157 (88.2)	178 (100)
Have FHA overcome its challenges of access to land thereby accelerating the delivery of affordable housing to the middle and low-income groups in Abuja?	0 (0)	0 (0)	0 (0)	18 (10.1)	160 (89.9)	178 (100)
Does of FHA, differ in its perception of difficulty in access to land as a major challenge to the delivery of affordable housing in Abuja?	0 (0)	0 (0)	0 (0)	60 (33.7)	118 (66.3)	178 (100)
Affordable housing delivery is affected by land difficult assessment.	6 (4.6)	12 (9.2)	1 (0.6)	52 (29.2)	125 (70.2)	178 (100)

Sources: Field survey, 2021

SD = Strongly Disagree, D= Disagree, U – Undecided, A = Agree, SA = Strongly Agree

Table 2: Respondents' Demography

Respondents Age	20-25	26-31	32-37	38-43	44-A
	20 (11.2)	38 (21.3)	72 (40.4)	31 (17.4	17 (9.6)
Respondents Sex	**Male**	**Female**			
	111 (62.4)	67 (37.6)			
Respondents Education Level	**Waec**	**B.Sc**	**M.Sc**	**Ph.D**	
	20	78	73	7	

	(11.2)	(43.8)	(41.0)	(3.9)	
Respondents Cadre	**Sup**	**Op**	**Man**	**Dir**	
	63 (35.4)	56 (31.5)	46 (25.8)	13 (7.3)	

Sources: Field survey, 2021

Table 3 Descriptive statistics

	Mean	Std. Deviation	N	Min	Max
ACQU	4.88	.347	178	3	5
CHAL	4.90	.302	178	4	5
PERC	4.66	.474	178	4	5
AFFO	4.70	.473	178	3	5

SPSS v20 computation

Table 4: Correlation Table

	ACQU	**CHAL**	**PERC**	**AFFO**
ACQU	**1**	**-0.066**	**0.123**	**-0.058**
CHAL	**-0.066**	**1**	**-0.042**	**-0.097**
PERC	**0.123**	**-0.042**	**1**	**0.171**
AFFO	**-0.058**	**-0.097**	**0.171**	**1**

Sources: Computed with SPSS ver. 20
Table 5: Collinearity test

COLLINEARITY STATISTICS		
	Tolerance	**VIF**
ACQU	**0.981**	**1.019**

SPSS v20 Computation

From the table 1, responses to the question "if difficulty to access land constrain the FHA in the delivery of affordable housing in Abuja?" 88.2% of the respondents strongly agree that difficulties encountered in accessing land poses a constrain in affordable housing delivery, 11.2% agree that it pose a constrain while 0.6% where undecided. Furthermore, 89.9% of the respondents strongly agree that FHA have overcome its challenges of access to land thereby accelerating the delivery of affordable housing to the middle and low-income groups in Abuja, 10.1% of the respondents also agree to this. However, 66.3% of the respondents strongly agree that FHA, differ in its perception of difficulty in access to land as a major challenge to the delivery of affordable housing in Abuja, this could be attributed to the fact that FHA have delivered relatively affordable housing to the middle class in Abuja, so therefore, difficulty to access land in Abuja no longer count as a challenge to deliver affordable housing. 33.7% of the respondents agree that FHA differ in its perception of difficulty to access land is not a major challenge of delivering affordable housing in Abuja.

Meanwhile, 70.2% of the respondents strongly agree that affordable housing delivery is affected by land, 29.2% agree while 0.6% were undecided if affordable housing is affected by land access.
From table 2, 11.2% of the respondents are of the age of 20-25 years, 21.3 % are of between the ages of 26-31 years, 40.4% are between the ages of 32-37 years, 17.4% are between the ages of 38-43 years and 9.6% are of the age of 40 and above. From the analysis its evident that people within the age bracket of 32-37 are majority of the respondents while 40 years and above was our least participator in the survey.
62.4% of the respondents are male while 37.6% are female. Also, 3.9% are Ph.D holders, 41.0% of the respondents are M.Sc/Mba certificate holders, 43.8% are B.sc/Hnd certificate holders while 11.2% of the respondents are secondary school leavers this implies that higher percent of FHA workforce are university graduates. The result of the descriptive statistics presented in Table 3 summarizes the raw data used for the analyses. The average ratios (mean) are; 4.88% for ACQU, 4.90% for CHAL, 4.66% for PERC, 4.70% for AFFO. Standard deviation of the result is; 0.347% for ACQU, 0.302% for CHAL, 0.474% for PERC, 0.473% for AFFO. While minimumis 3 and maximum 5 for ACQU, minimumis 4 and maximum 5 for CHAL, minimumis 4 and maximum 5 for PERC, minimumis 3 and maximum 5 for AFFO.

From table 4, the correlation analysis shows that difficulty in land acquisition have a positive relation with itself and FHA perspective, while it maintains a negative correlation with FHA challenges and FHA affordable housing with -0.066 and -0.58 respectively. FHA challenges has a negative correlation with FHA difficulty in land acquisition (-0.066), FHA perceptive (-0.042 and FHA housing affordability with -0.097. FHA perceptive has a negative correlation with FHA housing challenges (-0.042) while maintain a positive correlation with land acquisition difficulty (0.123) and FHA affordable housing (0.171). It however, showed FHA affordable housing a negative correlation with FHA land acquisition (-0.058) and FHA housing challenges (-0.097). The result from the Regression Models in table 4 showed that the Variance Inflation Factor (VIF) of the models is less than 10 (1.019) which indicates absence of Multicollinearity. Also, the Tolerance which is more than 0.1 (0.981) indicates the absence of Multicollinearity.

Test of Hypothesis

Null Hypothesis (H_0): There is no significantly relationship between FHA difficulty to access land and its delivery of affordable housing in Abuja.

Table 6Regression Matrix Table

	Adjusted R-Square	**Anova**	**Coefficient**	**Remark**	**Tolerance**	**VIF**
ACQU	0.028	0.047	0.253	Sig p value <0.5	0.981	1.019

Sources: Computed with SPSS ver. 20

From the table 6, the adjusted R square (0.028) for the regression of effect of difficulty to access land on FHA affordable housing delivery shows that the model possesses high explanatory power as 28% of the variance of dependent variable is explained by the independent variables.While the remaining 72% is explained by other variables not captured in the study. The Anova significant level is 0.047 which is less than the study 0.5 level of significance this implies that model is statistically significant. The coefficient significance of the difficulty in land acquisition (ACQU) is 0.253which is well below the study level of significance 0.5. This implies that for every 1% decrease in the difficulty to access land in Abuja will result in 253% increase in FHA affordable housing delivery The null hypothesis “There is no significantly relationship between FHA difficulty to access land and its delivery of affordable housing in Abuja” is rejected while the alternate hypothesis “There is a significantly relationship between FHA difficulty to access land and its delivery of affordable housing in Abuja” is accepted.

Discussion of Findings

The result of the test of the hypothesis shows that there is a significance relationship between FHA difficulty to access land and its delivery of affordable housing in Abuja, this implies that if FHA incur little or no extra cost in its land acquisition it will reflect on the prices of the house. The extra cost that accrue to them during land acquisition are in turn transferred to the cost of buildings which makes these building unaffordable to the low income earners. Acquisition of land is a major constraint to FHA in providing housing for the middle and low-income earners. Both the management and non-management staff of FHA are in agreement that land acquisition is a major problem to the effective and smooth operation of FHA. A close examination of the difficulty reveals that the procedure of securing land titles in the country is cumbersome and expensive. This situation has not only limited housing development, but it has also delayed the efforts of government agencies in housing provision inthecountry. The finding of this study is in conformity with Aluko (2012) who rightly pointed out "the policy in the country is faced with many problems that make land acquisition difficult for corporate estate developers". As a result of this defective land policy (Land Use Act of 1978), the FHA land application usually takes along time and is subjected to the same commercial rates whichother corporate and non-government organizations in the housing sector pay. This arrangement is considered less than adequate for a government agency like the FHA, if it is to deliver affordable housing for the middle and low-income earners. Besides, subjecting a Government agency designed to promote access to home-ownership to the same market forces with privately owned organizations can only frustrate the efforts of such agency as the privately owned institutions will certainly perform better.

Ikejiofor (1999) buttressed the difficulty in accessing land as a major challenge to housing development when he opined that "extensive and intensive literature searches reveal consensus among analysts that accessibility to land poses the greatestdifficulty to urban housing production in many developingcountries." According to Ugonabo and Emoh (2013) the fundamental difficulty in achieving land accessibility is the promulgation of Land Use Act of 1978 (Cap L5 LFN, 2005) which created a dual structure of land delivery systems, as customary and state systems prevail in the State with the con-sequence of double purchase from the customary ownersand the State which has the effect of complicating the landaccessibility process. They maintained that the Act ratherthan facilitate easier access to land has made it extra difficult for intending developers to get land while top government officials have been using it arbitrarily. "Ironically, anagencyoftheFederalgovernmentresponsibleforhousing provision Federal Housing Authority (FHA) also identifieddifficulties in land acquisition as a major hindrance to housing delivery in the country" (Ugonabo&Emoh, 2013).

CONCLUSION AND RECOMMENDATIONS

Land is the number one factor of production. Without easyaccess to land, no productive activity could be undertaken. The delivery of affordable housing by the FHA has been largely constrained as the agency is usually subjected to a tortuous and complex process in securing access to land for housing delivery. In addition, the FHA is not given exemption (or subsidy) in payment of charges for land allocated it by the FCT Administration. Theagencyalso, has to pay compensation to indigenous claimants to a givenland after the approval of the authorities has been obtained. Thus, FHA houses remained expensive and unaffordable for the middle and low-income earners in Abuja. Another important factor in land acquisition with the FHA is the undue delay its applications usually suffer. This delay mostly emanates from administrative bottlenecks in government institutions part of which is the ministry of land and other agencies with responsibility for land allocation matters. This factor usually contributes to the delay in housing deliveryby the authority. To boost the capacity of the FHA in the delivery of affordable housing for the middle and low-income earners, the following measures are recommended to the Federal Government.

An amendment to the Land Use Act (1978) is long over due and should therefore be undertaken. The objective of the amendment should be geared toward simplifying the process of securing access to

landtitles, especially for productive purposes. Dual ownership of land which currently prevails in the land markets must also be eliminated through the amendment. A government agency such as the FHA should be given exemption from paying certain fees in its quest to delivering affordable houses for the masses. Such exemption will reduce the cost of housing delivery by the agency and in variably lowers the cost of its houses. Authorities at the FCT administration should always facilitate processing FHA's request for land there by removing unnecessary delays which usually characterized land allocation.

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Ownership Structure and Tax Aggressiveness of Quoted Deposit Money Banks in Nigeria

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Abstract

This study examines the effect of ownership structure on tax aggressiveness of quoted Deposit Money Banks in Nigeria from 2010-2019. Ownership structure was measured by foreign ownership, institutional ownership, and managerial ownership while tax aggressiveness was measured by effective tax rate. The study adopts ex-post facto research design whilepanel regression analysis was used for the analysis. From the analysis, it was found from the panel regression result that; insignificant positive effects of foreign ownership were found. In the case of institutional ownership, a significant positive effect on tax aggressiveness was found. Conversely, insignificant negative effect of managerial ownership on tax aggressiveness was revealed. The study recommends among others that, CBN should make efforts to encourage the growth of foreign ownership in quoted DMBs in Nigeria. This is to say that, when foreigners are encouraged to owned shares effectively, the tendency of taking advantage of tax loopholes to avoid tax will be reduced.

Keywords: Ownership Structure, Tax Aggressiveness, Foreign Ownership, Institutional Ownership, Managerial Ownership

INTRODUCTION

Corporate tax aggressiveness is one of the most severe compliance issues threatening Nigeria and most nations of the world (Lanis& Richardson, 2011; Uadiale, Fagbemi & Ogunleye, 2010). This menace is usually in form of tax liabilities reduction or engaging in tax avoidance which remains prevalent among corporate firms given the magnitude of the income taxes which take away a more significant proportion of firm's pre-tax earnings and subsequently reduce their distributable profits (Christensen& Murphy, 2004; Hundal, 2004). However, there are several anti-avoidance tax laws in Nigeria and almost every nation of the world to discourage tax aggressiveness policies. Yet, firms do engage in tax aggressiveness policies through the help of tax experts. These experts usually assist them in arranging their activities in such a way that they can take advantage of the loopholes in the tax laws; thereby paying less tax (Funchal & Gottlieb, 2008; Uadiale, Fagbemi & Ogunleye, 2010). There were laws enacted tailored towards curtailing certain sharp practices, especially after the collapse of Enron Corporation, World Com among others. This scenario according to Lanis and Richardson (2011), provoked the United States Congress to enact the Sarbanes-Oxley Act (SOX) also known as the Company Accounting Reform and Investor Protection Act (CARIPA), which imposed stricter rules on executive compensation and accountability, internal controls and punishment of fraud, besides strengthening monitoring by shareholders by a way of improving the precision and reliability of financial statements disclosed by quoted firms (Gompers, Ishii&Metrick, 2003; Funchal& Gottlieb, 2008).

First, the SOX Act made it compulsory for Chief Executive Officers (CEOs) to sign corporate tax returns; and second, required the Board of Directors (BOD) to approve all tax services provided by the company's external auditor. This was so because prior to the enactment of the SOX Act, a firm's external auditor could propose a corporate tax strategy, issue a tax opinion, and then approve the financial statement tax reserve, if any, for the strategy (Bertrand&Schoar, 2003). Therefore, due to the nexus between corporate governance and tax aggressiveness, provisions of the SOX Act which establishes a more rigorous overall governance rules, could have impact on tax aggressiveness (Armstrong, Blouin&Larcker, 2012). Thus, the various rules of SOX Act applied not only to listed American firms, but also to foreign companies alike as companies in Nigeria were not left out. As such, Erle (2008) posited that this greater

conservatism reduced the propensity of manipulating the financial statements; as senior corporate officials were meant to focus more attention on aggressive tax planning. In Nigeria, the emphasis on the need for corporate governancereform generally and most specifically, ownership structure sprung up with the incidence of fraudulent financial reporting as in the case of African Petroleum, Cardbury Plc., Oceanic Bank Plc.,Afribank Nigeria Plc., among others. This was caused by poor management, high gearing ratios, overtrading, creative accounting, and fraud (Osemeke, 2012). Presently, there are numerous codes of corporate governance in Nigeria such as Central Bank of Nigeria (CBN) reviewed Code 2014, for Banks established under the provision of the Bank and Other Financial Institution Act (BOFIA), Security and Exchange Commission (SEC) reviewed code 2011, directed at public companies with securities listed on the Stock Exchange; companies seeking to raise funds from the capital market through securities issuance or listing and all other public companies, National Insurance Commission (NAICOM) Code 2009, directed at all insurance, reinsurance, broking and loss adjusting companies in Nigeria, and Pension Commission (PENCOM) Code 2008, for all licensed pension operators. These codeswere established with the view to enhancing transparency and accountability in the financial sector, so that the Nigerian economy can forge ahead. According to Bebeji, Mohammed and Tanko(2015), despite the provisions of the above-mentioned code of corporate governance, the role played by Chief Executive Officers (CEOs) and board members in the recent collapse of some financial institutions has spurred series of arguments.

According to Lanis and Richardson (2013), managerial actions which is designed to minimize corporate taxes through tax aggressiveness activities are becoming more commonly done by companies around the world. The act of tax aggressiveness raises agency problems since there are dissimilarity in interests between the company and the tax authorities. Type III of agency relationships explains the relationship between companies and third parties, in this case the tax authorities (which are representatives of the government) (Armour, Hansmann&Kraakman, 2009). Conflicts of interest between the company and the tax authorities can be resolved through corporate governance mechanisms. Governance has a stronger relationship with more extreme levels of tax avoidance; hence, good corporate governance can weaken tax aggressiveness (Armstrong, Blouin&Larcker, 2015; Timothy, 2010). According to Fadhilah (2014), institutional ownership monitored management activities as it will encourage an optimal control of managerial which thereby can reduce conflicts of interest. Institutional investors can lower the cost of debt by reducing agency problems which can cut down the chances of tax avoidance. Furthermore, increased ownership concentration provides large holders with sufficient incentives to monitor managers (Ramsey & Blair, 1993).In the same way, foreign investors have the motivations and abilities to play an active role in influencing investee firms' decision-making process because of their independent position and international visibility (Aggarwal, Erel, Ferreira & Matos, 2011), it is natural to expect that foreign investors could influence their investee firms' tax avoidance decision to reflect foreign investors social norms and accustomed governance practices of their home countries.

Although researches abound, most of them are foreign (Poorheidari & Sarvestani, 2013;Annuar, Salihu&Obid, 2013; Aghouei&Moradi, 2015;and more recently Lioupi, 2017). These prior studies on the effect of ownership structure on tax avoidance have focused on some of the ownership structures. For instance, the studies conducted by Lioupi (2017), were specific to Greece, and focused on domestic ownership. Furthermore, Hasan, Kim, Teng and Wu (2016) gave credence to china, as Kraft (2014) attention was in Germany and they both studies were on foreign ownership. In relation to institutional ownership, Sartaji and Hassanzadeh (2014) and Jamei (2017)conducted studies using Tehran stock exchange data, as Fakile and Uwuigbe(2013) although did their work in Nigeria, but other ownership structure variables were not included. Finally, the study by Onyali and Okafor (2018) that was done in Nigeria, used a sample of manufacturing firms.

It is based on the gap in literatures that this study examined the effect of ownership structure on tax aggressiveness of deposit money banks in Nigeria.In the coming sections, an in-depth explanation of the procedures employed in the study is provided.

LITERATURE REVIEW

Ownership Structure

Ownership structure is like the hard core of corporate governance, a firm's "owners," are those persons who share two formal rights: the right to control the firm and the right to appropriate the firm's profits, or residual earnings which in theory, could be separated and held by different classes of persons (Hansmann, 2000). Ownership structure can be broadly classified into two distinct group or views for purposes of definition as explained below. The first view defines ownership structure as different types of equity such as A share, B share, outstanding share or allotment transfer (Zhou, 1999). A second view defines ownership structure according to its "ownership", that is, state shares, state-owned legal person shares, legal person shares, institutional owners, family owners, among others. This view sees ownership structure like the shareholder structure which refers to equity ratio occupied by various shareholders (Wu, 2003).

Foreign Ownership

Foreign ownership is generated by foreign investment made by a company or an individual in one country with business interests in another country, in the form of either establishing business operations or acquiring business assets in the other country, such as ownership or controlling interest in a foreign company. The key feature of foreign investment is that it is an investment made that establishes either effective control of, or at least substantial influence over, the decision making of a foreign business (Huizinga &Nicodeme, 2005). Foreign ownership of shares has been associated with high profitability and efficiency but also has been linked with the presence of tax aggressive practices (Christensen & Murphy, 2004; Annuar, Salihu & Obid, 2014). By general agreement the foreign ownership structure is a field that requires further and more in-depth research (Annuar, Salihu and Obid, 2014). As Huizinga and Nicodeme (2005) state in their study, foreign ownership allows countries to effectively export part of their corporate tax burden leading to imposition of relatively high corporate taxes in countries with high foreign ownership.

The diffusion of foreign corporate ownership was assisted by the elimination of capital controls in industrialized countries, the abolishment of all restrictions on capital outflows in EU and the institutionalization of free movement of capital in the framework of the European Union (Huizinga &Nicodeme, 2005). Huizinga and Nicodeme (2005) calculated the asset-weighted foreign ownership share to be 19.4 percent in Western Europe in 2000, while it stood at 32.9 percent in Eastern Europe.They also noticed that during the period 1996–2000, while the average foreign ownership in Western Europe have been rather stable, it had significantly increased in Eastern Europe. Their empirical analysis suggests that corporate tax levels are positively related to country-level foreign ownership shares and the effect is economically significant. More specifically, an increase in foreign ownership by one percentage point is estimated to increase the average capital income tax rate between a half and one percent. The results of Huizinga's and Nicodeme's empirical analysis made it clear that foreign ownership depicts a large proportion of the overall market and economy and it is worth to be studied further.

Grubert et al. (1993) advanced that foreign-controlled US corporations pay lower US taxes than purely domestic firms based on tax-return data. Kinney and Lawrence (2000) also find that foreign firms pay relatively low taxes in the US. These authors attributed the low taxes paid by the foreign investors to the fact that they tend to take over relatively unprofitable US firms. Demirguc- Kunt and Huizinga (2001) abstracted their data from eighty countries across the globe and concluded that foreign-owned banks pay relatively lower taxes than their domestic counterparts in the host countries. Even though this study by Demirguc- Kunt and Huizinga (2001) shade light into the effects of foreign ownership on tax avoidance, and the very broad and large sample of data, the findings cannot be generalized to place like Nigeria.

Institutional Ownership

It is believed that, the greater the ownership of shares owned by other institutions then they will have the ability to effectively control and supervise management and have the ability to influence the decisions and policies made by management (Easterbrook, 1984). This is based on the agency theory which states that, enlarging the ownership of shares by institutions outside the company can reduce the conflict of interest that occurred and opportunistic behaviour of management, which in turn will reduce the potential possibility of tax aggressiveness action. Research conducted by Nugroho andFirmansyah (2017), Cahyono et al., (2016), Hanna andHaryanto (2016), Mahulae et al., (2016), Prakosa (2014), Embree (2012), Badertscher et al., (2009), Khuranaand Moser (2009) show that institutional ownership has an influence on tax aggressiveness. Khurana and Moser (2009) find that firms with higher levels of long-term institutional ownership are less tax aggressive because institutional owners are more concerned with long-term consequences of aggressive tax strategy. In contrast, higher levels of short-term institutional ownership leads to more tax aggressive as they focus on more short-term profits making. These bring us to a conclusion that, institutional ownership is related to tax aggressiveness.

Managerial Ownership

Chief Executive Officer (CEO) ownership increases, the CEO incentives are more aligned with those of the other shareholders and this then reduces the vertical agency conflict (Jensen &Meckling, 1976). However, CEO ownership in private firms could also give rise to a horizontal agency problem with a dominant owner-manager and a few smaller other shareholders. Likewise, the study expects that CEO owners will refrain from tax avoidance activities in private firms to signal credibility and mitigate concerns by the other shareholders.Ownership by corporate board members creates an incentive to protect their financial interest in the company. Adhikari et al. (2006) pointed out that the impact of ownership structure on the effective tax rate has not been sufficiently explored, particularly in developing countries. As part of this research, the study focuses on aspect of and managerial ownership. In China, Ying (2011) found that the higher the percentage interests of the directors, the lower the effective tax rate is. Similarly, Chan et al. (2013) concludes that companies with a high percentage of managerial ownership are less tax aggressive. Also, Minnick and Noga (2010) suggest that the incentives of directors are an important factor of tax aggressiveness in the American context. Thus, it is established that, direct link exists between CEO ownership and corporate tax aggressiveness.

Tax Aggressiveness

Chen, Chen, Cheng and Shevlin (2010) define tax aggressiveness as the use of tax planning actions for downward management of taxable income. In turn, Frischmann, Shevlin and Wilson (2008) define it as engaging in important tax positions with relatively uncertain supporting facts. Another definition is given by Lisowsky, Robinson and Schmidt (2010), as a set of tax avoidance activities falling along a continuum from legal tax planning to offensive use of offshore tax shelters. Dyreng, Hanlon and Maydew (2008) argue that tax avoidance discloses all the dealing that have an impact on the company's tax obligations. Specifically, they define tax avoidance as anything that declines the company's effective tax rate for a reasonable period of time. According to Chen et al (2010), companies determine the level of tax aggressiveness putting at risk the benefits over the costs in order to manipulate taxes. The profits contain greater savings from taxes, while in contrast the expenses include those for implementation (time and effort, transaction costs), the possible penalties from the tax authorities as well as the possible reputation cost and decline in stock price in reaction to news of tax avoidance. Rego (2003) suggests that corporations which regularly present low tax payments have higher cash flows. There is a lack of revealing in the financial statements regarding taxable income and the exact amount paid or deferred to be paid in the annual profits (Hanlon &Heitzman, 2010). In addition, Hanlon and Slemrod (2009), analyzing the relation between stock prices and news of firms' tax aggressiveness (involvement in tax shelters),

discover that on average the stock price diminishes when there is news about participation in tax shelters, but the reaction is small related to other infractions.

Empirical Literature

Tijjani and Peter (2020) investigated the effect of ownership structure on tax planning of quoted non-financial companies in Nigeria. Data were extracted from the annual reports and accounts of the companies for ten years 2008 - 2017. The data collected were analysed using descriptive statistics and multiple regressions. The study reveals that managerial and institutional ownerships have no significant positive effect on tax planning, while foreign ownership demonstrates insignificant negative effect. Profitability measured using return on assets has a significant positive effect on tax planning of the sampled companies, and leverage shows a no significant negative effect. The objective of the study was achieved however, the application of tax planning in non-financial companies defers from that of the financial companies like banks. Hasan, Kim, Teng and Wu (2016) examine whether foreign institutional investors (FIIs) help explain variation in corporate tax avoidance and whether mechanisms such as tax morality, investment horizon, and corporate governance underlie the relation between FIIs and tax avoidance. The study finds robust evidence that FIIs are negatively associated with corporate tax avoidance given the regression result. Moreover, this negative association is dominated by FIIs from countries with high tax morality, FIIs with long-term investment horizons, and FIIs from countries with high corporate governance quality. The study was conducted in China as credence was not given to Nigeria, giving its peculiarity. Thus, cannot be inferred for any reasonable generalization in the Nigerian context. Also, due to changes in time period of the study, the finding is obsolete and required current study.

Salihu, Annuar and Obid (2013) examine the determinants of corporate tax aggressiveness in a concentrated ownership setting with an emerging capital market. Regression analysis was used and found out that, family, government and foreign ownerships are significantly related to corporate tax aggressiveness in Malaysia. The study was conducted in Malaysia as credence was not given to Nigeria, giving its peculiarity. Thus, cannot be inferred for any reasonable generalization in the Nigerian context. Comparing to the previous studies this study was able to captured more ownership structure variables. Otieno (2013) examines the relationship between ownership structure and tax avoidance of companies listed at the Nairobi Securities Exchange. In order to do this, the research was designed as a descriptive study where relationships were tested. The population comprised of all the 61 companies listed at the NSE. All the 61 listed firms formed the sample of the population. Secondary data collected from the NSE Secretariat, respective company websites and the Africa Financials website was used in the study. Data was then analysed using descriptive analysis and regression analysis. The findings of the study are that ownership structure does not significantly influence tax avoidance as the effects of state ownership, foreign ownership and institutional ownership on tax avoidance were insignificant at 5% level. On the other hand, ROA positively influences tax avoidance while Tobin q and previous year's loss has a negative influence on tax avoidance. The model accounts for 13% of the variance in tax avoidance and it was fit to explain the relationship between ownership structure and tax avoidance. The study makes a number of recommendations for both policy and practice. The study recommends that in terms of policy, ownership structure is irrelevant in explaining tax avoidance and therefore it should not be considered by policy makers in the quest to reduce instances of tax avoidance. Instead, policy makers should focus on the financial performance of firms as the best indicator of tax avoidance. From the results, firms that had higher ROAs were likely to record higher effective tax rates. Lastly, the results of the study also have important implications to listed firms and any other companies in Kenya that pay corporate taxes. In their quest to pay lower effective tax rates, they should understand that their ownership structure is irrelevant and therefore concentrate on legal avenues to manage their tax burdens. The study was conducted in Kenya as credence was not given to Nigeria, giving its peculiarity. Thus, cannot be inferred for any reasonable generalization in the Nigerian context. Also, since the study only account for 13%, other variables stand a chance of improving the model. This gives credence to this study.

Steijvers and Niskanen (2014) investigate the extent CEO ownership and governance (e.g. composition of the board of directors) affect tax aggressive behaviour decisions in private family firms. More specifically, the study extends prior knowledge by studying how board's monitoring behaviour may moderate the relationship between the CEO's involvement in the firm and tax aggressive behaviour of the firm. The data were collected through a private survey which consist of 600 Finnish family and non-family SMEs, and is a panel with observations from the years 2000-2005. The model is estimated based on robust Ordinary Least Squares estimations including several moderating effects. The study finds that private family firms appear to be less tax aggressive than private non family firms. Even though tax aggressive behaviour provides tax savings and allows the CEO to mask rent extraction (e.g. earnings management, perquisite consumption, excessive salaries) to the detriment of other shareholders, the non financial costs being the possible reputation damage and loss of socio-emotional wealth seem to outweigh the benefits. Within the group of private family firms, results show that family firms with a lower CEO ownership share are more eager to engage in tax aggressive behaviour. This result highlights the importance of the unique agency conflict between the CEO (agent and possibly principal) and (other) shareholders (principals) in determining family firms' tax reporting. Finally, the study results show that the presence of an outside director in the board of directors improves the monitoring effectiveness which reduces the tax aggressive behaviour of those private family firms with low CEO ownership shares. The time frame stopped at 2005, which can arguably be said to be outdated.Thus, this study can make a great deal of sense when current years are captured. Hence the need to expand the scope by looking at current period to 2019 will expand the frontier. Due to passage in period of the study, recent finding will aid policy recommendations.

Theoretical Framework

Agency Theory

Agency theory is used as a tool to interpret and understand the relationships between agents and principals. The most common agency relationship in finance occurs between shareholders (principal) and company executives (agents). Agency theory addresses problems that arise due to differences between the goals or desires between the principal and agent. Agency theory is concerned with resolving problems that can exist in agency relationships due to unaligned goals or different aversion levels to risk (Fama& Jensen, 1983). The link between agency theory and the explanation for tax avoidance has been made since early 1970's. The classic article of Allingham and Sandmo (1972) resulted in much theoretical and empirical analysis on why and to what extent an individual would evade taxes. They concluded that to promote an efficient allocation of resources, taxes should be levied primarily on commodities that are inelastic in demand or supply. However, they admitted that their models were rather simplistic and acknowledge the need for further research, both theoretical and empirical. Fama and Jensen (1983) were the first to build the theoretical framework by which tax avoidance is interpreted based around the agency theory. In their study "Agency problems and residual claims" (1983) they stated that agency problems arise from the stage of the contracts, which are not costlessly written and enforced. The contract structures of organizations limit the risks undertaken most agents by specifying either fixed payoffs or incentive payoffs tied specific measures of performance. However, the residual risk -the risk of the difference between stochastic inflows of resources and promised payments to agents- still remains in the cases of those who according to the contract have rights to net cash. These are the cases of the common stock residual claims of open corporations and these agents are called residual claimants or residual. And this is where the problem of separation of "ownership" and "control"-more precisely, the separation of residual risk bearing from decision functions- arises, since the decision process is in the hands of professional managers whose interests are not identical to those of residual claimants.

Hanlon and Heitzman (2010) and Rego and Wilson (2012), also make references in their studies concerning agency theory and its link with corporate tax avoidance. They also stated that tax avoidance is a risky activity in which undiversified, risk averse managers will minimize their investments. Tax avoidance is a policy which can impose significant costs on firms and their managers, including fees paid

to tax experts, time devoted to their solution of tax audits, reputational penalties, and penalties paid to tax authorities (Rego and Wilson, 2012). Thus, they conclude that risk-averse owner-managers likely prefer to undertake less risky tax planning, while relatively risk-neutral shareholders prefer managers to implement all tax strategies that are expected to increase firm value, regardless of risk. Following this rationale, the connection between tax avoidance and risk-averse managers becomes obvious.
And consequently, the connection between tax avoidance and ownership structures is being made too. Crocker and Slemrod (2004) studied corporate tax evasion in the context of the contractual relationship between the shareholders of a firm and the chief financial officer (CFO), who determines the firm's deductions from taxable corporate income. They took as granted the fact that CFO possesses private information regarding the extent of legally permissible reductions in taxable income, and may also inflate the size of the firm's tax shield through illegal evasion. They found out that the incentives of the CFO to engage in tax evasion are affected by the nature of his compensation arrangement and that penalties imposed on the CFO directly are more effective in reducing evasion than are those imposed on shareholders. Many of the issues and theories regarding agency theory have direct communication with the theory concerning corporate governance.

METHODOLOGY

The study applies both ex-post facto and correlational research designs. The study make used of cross-sectional time series (panel) data for the period of ten years spanning through 2010-2019. The study made used of secondary data from Banks' Annual Reports of the listed 13 deposit money banks in Nigeria.The anlysis was carried out using panel multiple regression model. The relationship between the variables is depicted thus:

$$TAX_{it} = \beta_0 + \beta_1 BFO_{it} + \beta_2 BIO_{it} + \beta_3 CEO_{it} + \varepsilon_{it}$$

Where:

The dependent variable is tax aggressiveness (TAX) measured as the effective tax rate. The independent variables (ownership structure) are foreign ownership (BFO), institutional ownership (BIO), and CEO ownership (CEO).

Variables Definitions

The table below discusses how the aforementioned variables are proxied and their respective sources.

Variables	**Type of variable**	**Measurement**	**Source**
Tax Aggressiveness	Dependent	Is the effective tax rate measured as current income tax expense divided by pre-tax income	Chen, et. al. (2010); Otieno (2013);Khurana& Moser (2009)
OWNERSHIP STRUCTURE VARIABLES			
Managerial ownership	Independent	measured as the total amount of management-owned shares divided by the firm's total shares of the company	Boussaidi&Hamed (2015);Steijvers&Niskanen (2014); Onyali& Okafor (2018)
Institutional Ownership	Independent	Institutional Shareholding is the ratio of equity shares of the firm held by institutional investors to the total shares of the company	Adam and Bala (2015);Zuriegat (2011);
Foreign Ownership	Independent	Measured by the proportion of equity shares of the firm held by foreign investors to the total shares of the company	Otieno (2016)

RESULT AND DISCUSSION

Table 1 Descriptive Statistics

	Mean	Median	Maximum	Minimum	Std. Dev.	Jarque-Bera	Probability	Observations
TAX	-62.57710	0.688900	101.0265	-6438.370	577.5636	71832.78	0.000000	130
BFO	0.409259	0.520380	0.924331	0.000410	0.339847	14.73534	0.000631	130
BIO	0.184203	0.148807	0.768113	0.000112	0.194821	24.55521	0.000005	130
CEO	0.070440	0.007258	0.942497	0.000103	0.183161	1234.638	0.000000	130

Source: Author's Computation using E-views, 2021

Table 4.1 presents the Descriptive statistics which depicts that the average scored of Tax Aggressiveness is -62.57710 while the median is 0.688900. In the same way, the maximum tax aggressiveness of deposit money banks is 101.0265 while the minimum is -6438.370. Foreign investors have a mean ownership in deposit money banks to the extent of 0.409259 while the deviation from the foreign ownership is 0.339847. However, it was gathered that the maximum foreign investment in deposit money banks is 0.924331 while the minimum foreign ownership is 0.000410. The implication of the result from foreign ownership is that they own low ownership however, the high ownership of 0.924331 exerts that foreign investors will monitor the activities of the management. It was also found that other institutions own shares in the deposit money banks to a maximum of 0.768113 with the minimum of 0.000112. This implies that institutional ownership is moderate however, it is lower that the foreign ownership when compared from the minimum ownership. In the same way, the mean of ownership by institutions in deposit money banks is 0.184203 while the deviation from the average is 0.194821. The managerial Ownership (CEO) demonstrate the ownership by the directors of the banks. It was found that management of the banks has various shareholding ranges from 0.000103 to 0.942497. in the same way, the average managerial ownership in the banks for the past 10 years is 0.070440 while the median is0.007258. the implication of high managerial ownership is that the management of the banks will align their interest to that of the other shareholders.

Table 2 Correlation Matrix

	TAX	BFO	BIO	CEO
TAX	1.000000			
BFO	-0.097612	1.000000		
BIO	-0.002506	0.368763	1.000000	
CEO	-0.007803	-0.245411	0.236633	1.000000

Source: Author's Computation using E-views, 2021

The correlation matrix depicts a negative correlation between foreign ownership and tax aggressiveness of quoted DMBs in Nigeria given the correlation value of -0.097612 (9.7%). In the case of institutional

ownership and tax aggressiveness, there exist negative association correlations between the variables to the extent of -0.002506 (0.2%). Managerial ownership and tax aggressiveness revealed a positive correlation to the extent of 0.007803 (0.7%). From the correlation between the independent variables and the dependent variable (tax aggressiveness), the study concludes that there is no correlation problem since all the correlation is below 0.8(80%) as presented by Gujarati (2009).

Table 3 Multicollinearity Test

Variance Inflation Factors
Date: 09/08/21 Time: 18:16
Sample: 1 130
Included observations: 130

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
BFO	30288.67	3.296096	1.339086
BIO	91753.54	2.534050	1.333083
CEO	95439.24	1.408295	1.225618
C	7910.584	3.051578	NA

Source: Author's Computation using E-views, 2021

The Varian Inflation Factor (VIF) of 1.339086, 1.333083 and 1.225618 1 for Foreign Ownership, Institutional Ownership and Managerial Ownership (CEO) respectively depict that there is no problem of multicollinearity. Thus, multicollinearity problem exists only when the VIF value exceed 10.

Table 4 Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.396969	Prob. F(3,126)	0.7554
Obs*R-squared	1.217208	Prob. Chi-Square(3)	0.7489
Scaled explained SS	64.75491	Prob. Chi-Square(3)	0.0000

Source: Author's Computation using E-views, 2021

The heteroskedasticity test indicates that the residual is Homoskedasticity given the observed R-squared of 1.217208 with its corresponding probability value of 0.7489.Thus, the Null hypothesis which states that the residuals are Homoskedasticity is accepted. This therefore, indicates the absent of the problem of heteroskedasticity. Thus, reveals the desirability of the data and the subsequent authenticity of the results.

Table 5 Serial Correlation Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	2.025747	Prob. F(2,124)	0.1362
Obs*R-squared	4.113144	Prob. Chi-Square(2)	0.1279

Source: Author's Computation using E-views, 2021

The Breusch Godfrey serial correlation LM Test given the Obs R-squared of 4.113144 with its corresponding P-value of 0.1279 indicates that there is no problem of autocorrelation. Thus, serial correlation problem only exists when the p-value is less than or equal to the critical value of 0.05.

Table 6: Hausman Specification 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	17.944065	9	0.0358

Source: Author's Computation using E-views, 2021

The Hausman specification test depicts that fixed effect model is most appropriate to random effect model given the p-value of less than 0.05 (5%). This makes the study to reject the null hypothesis which states that, the random effect model is most appropriate to fixed effect model. Thus,random effect model can only be most appropriate when the p-value is greater than or equal to 0.05 (5%).

Table 7: Regression Analysis and Test of Hypotheses

Variables	Coefficient	T-Statistics	Prob
Constant	79.62883	0.024166	0.9808
BFO	193.8744	0.561492	0.5756
BIO	95.95191	2.823213	0.0057
CEO	-8.643518	-0.267123	0.7899
R-squared	0.236691		
Adjusted R-squared	0.183492		
F-statistic	2.559603		
Prob(F-statistic)	0.043241		

Source: Author's Computation using E-views, 2021

The fixed effect model regression line shows that foreign ownership has positive but insignificant effect on tax aggressiveness of deposit money banks with p-value of 0.5756. This indicates that any unit increase in foreign ownership will has an insignificant effect on tax aggressiveness. Institutional ownership has positive significant effect on tax aggressiveness of quoted DMBs in Nigeria with p-value less than 5% level of confidence. This signifies that1unit increases in institutional ownership it will increase tax aggressiveness by 95.95191 coefficient. This shows that institutional investors used to monitor management activities by maximising their wealth at the detriment of other shareholders in engaging in tax avoidance. Conversely, tax aggressiveness decreasesby 8.64units for every 1unit increase in managerial ownership of quoted DMBs in Nigeria. This is because managerial ownership has a negative but insignificant effect on tax aggressiveness. The R squared (R^2) of 0.236 depicts that about 24% of variation in tax aggressiveness of quoted DMBs in Nigeria can be explained by Foreign Ownership, Institutional Ownership, Managerial Ownership (CEO). However, the remaining variations is explained by other variables that are not captured in the regression line (error term). The F-statistics of

2.55with its corresponding p-value of 0.043 indicate that the model is fit. In the absence of Foreign Ownership, Institutional Ownership, Managerial Ownership (CEO), tax aggressiveness will remain 79.62.

CONCLUSION AND RECOMMENDATIONS

The study concluded that, the ability of the quoted DMBs to take advantage of the tax loopholes to avoid tax insignificantly increase when most of the shares of the quoted DMBs is owned by Institutional investor in Nigeria. Similarly, the study concludes that, increase in number of shares owned by foreigners, insignificantly affects the ability of the quoted DMBs to take advantage of the tax loopholes to avoid tax. Furthermore, the study concludes that, increase in the number of shares owned by CEO of the quoted DMBs in Nigeria, insignificantly decreases tax aggressiveness of the banks. In the light of the above findings and conclusions, the following recommendations are made:

i. It is also recommended that, the CBN should make efforts to encourage the growth of foreign ownership in quoted DMBs in Nigeria. This is to say that, when foreigners are encouraged to owned shares effectively, the tendency of taking advantage of tax loopholes to avoid tax will be reduced.
ii. The CBN should discourage increase in institutional ownership by quoted DMBs in Nigeria. This is to say that, only when number of shares owned by the banks is decreased, the ability of the banks to take advantage of the tax loopholes would always be in the increase.
iii. The CBN should also make efforts in increasing the number of shares owned by directors of the banks. This is to say that, when the shares of the directors of the banks increase, the directors are more likely to desist from taking advantage of the defects in tax laws to avoid tax in order not to rubbish their reputations and integrity.

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Effect of Ownership Structure on Accounting Conservatism of Listed Conglomerate Firms in Nigeria

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Abstract

The conflicts of interests arise between managers and shareholders as a result of separation of ownership from the management of the organization. Shareholders are interested in maximizing the value of their company while managers seek to increase the consumption of both financial and non-financial advantages. Ownership structure contributes to reduce the incentive to manage earnings. In addition, it is believed that managers of corporate have opportunities to manipulate accounting information base on their own interest. Hence the study determined the effect of ownership structure on accounting conservatism of listed conglomerate firms in Nigeria from 2011 to 2020. Ownership structure was measured by managerial ownership, foreign ownership and ownership concentration while accounting conservatism is measured by accrual-based conservatism. Ex-post facto research design is adopted in the study while generalized method of moments(GMM) is used for the analysis. From the finding, it was discovered that managerial ownership has negative significant effect on accounting conservatism, foreign ownership has negative insignificant effect on accounting conservatism while ownership concentration has negative significant on accounting conservatism hence, the study recommends that the management of conglomerate firms in Nigeria should be allowed to hold a reasonably number of shares in the company to the extent of 13% since there is inverse relationship between managerial ownership and accounting conservatism. This is attributable to the mean value and managers are opportunistic in nature. Hence, they will act in accordance to the goal congruence of the company.

Keywords: Ownership structure, Accounting conservatism, Managerial ownership, Foreign ownership, Ownership concentration

INTRODUCTION

Separation between ownership and control of a company creates conflicts of interests between managers and shareholders. Shareholders are interested in maximizing the value of their company while managers seek to increase the consumption of both financial and non-financial advantages. Ownership structure contributes to reduce the incentive to manage earnings. In addition, it is believed that managers of corporate have opportunities to manipulate accounting information base on their own interest. The structure of ownership is defined by the distribution of company's equity with regard to capital and votes but also by the identity of the owners of equity. Watts (2003) stated that the ability of conservatism to limit manager's opportunistic behaviours could increase firms value, and thus protect the interests of minority shareholders**.** DargenidouMcLeay and Raonic (2007) argued that when agency conflict is

controlled through close monitoring by large shareholders, these shareholders put less reliance on financial reporting, and thus adopt less conservative accounting. Alternatively, major shareholders would not employ more conservatism as they might want to conceal their expropriation activities from outsiders. LaFond and Watts (2008) reported that conservatism constrains managers from hiding unfavourable information because accounting conservatism provides hard information on verifiable gains and possible losses.

In an organization, different parties can exert influence on the company depending on the percentage of shares they hold and the relative power of the other parties. For instance, if there is a shareholder who owns a large percentage of the company's shares, this shareholder may heavily influence the functioning of the company organization, and the company's financial reporting quality. If a single large shareholder has sufficient influence, this shareholder can determine the composition of the board, which has the ability to appoint or dismiss managers. Under a more dispersed ownership structure, the board could more easily be controlled by management in the absence of a single large shareholder with the incentives and opportunities to more closely monitor management. A large and influential shareholder would have the ability and incentive to influence the board of directors' composition, and thus have a direct effect on the appointment and dismissal of managers. Management would thus be likely to follow the instructions of the largest shareholder in order to retain its position and gain additional compensation. If there is a conflict between the interests of the largest shareholders and other smaller shareholders, management would pay more attention to the largest shareholder's wishes. Therefore, when ownership concentration increases, the largest shareholder may be able to encourage management to pursue actions favorable to the largest shareholder potentially at the expense of the non-controlling shareholders. If the largest shareholder's behavior results in wealth transfers from minority shareholders, this behavior would decrease the firm's operating efficiency and do harm to firm value (Classens& Fan, 2002).

In addition to reducing managers' opportunistic behaviour, conservatism ultimately improves the quality of the financial information. For instance, conservatism increased ability of current earnings to forecast future cash flows and conservatism increased value relevance of the earnings since it prevented opportunistic managers from using accounting choices that favoured their personal interest (Brown, He &Teitel, 2006). Many explanations are put forward in favor of the existence of conservatism and all highlight that conservatism aids the financial information available to the users. Firstly, contracting explanation, like incentives and debt contracts, are important contracts operated by management (Abu Alkhair, 2008). In addition, the contracts are the primary source of accounting conservatism used by shareholders and debt-holders to increase the conservative financial reporting and decrease agency costs in order to coordinate managerial expectations with those of the shareholders (Watts, 2003). However, as a main ingredient in the contracting process, management tries always to abandon conservatism policies in order to influence the figures in the accounting of these contracts by hiding unfavorable information; using private information to violate debt contracts; to receive extra compensation; and to overstate the financial figures (LaFond & Watts, 2008).

Agency theory addresses the contractual relationships, for example, among the agent (director of the firm) and the principal (shareholders of the firm) whereby shareholders delegate responsibilities of the directors to manage their business. This theory shows that when both of the parties are expected to optimize their utility, there is a good reason to believe that the agent (directors) may engage in opportunistic behavior at the expense of the interest of shareholders (Jensen &Meckling, 1976). In other words, the relationship among shareholders and firm managers is replete with conflicting interests due to the separation of management and ownership. Al-Fayoumia and Abuzayed (2010) argued that this separation leads the managers to control the most of vital information that regarding to the corporate management and its operations. On the other hand, shareholders, who do not responsible for daily issues of the corporate, they do not have to get the similar information as corporate managers. In addition, agency theory assumes that information asymmetry and agency costs arise due to such separation also (Jensen &Meckling, 1976). Several studies have been conducted in the area of ownership structure and accounting conservatism

using panel data of developed countries of the world such as Omar, Faudziah and Ismail (2014), Ellili (2013), Alkurdi, Al-nimer and Dabaghia (2017), Bach (2018), An (2015), Cullinan, Wang, Wang and Zhang (2012), Christianto and Feliana (2015), Amos, Ibrahim, Nasidi and Ibrahim (2016), Yunos, Smith and Ismail (2010) but in developing countries, little efforts have been made to analyze this effect most especially in conglomerate firms in Nigeria.

Also, most of the studies employed multiple regression model without controlling for endogeneity in their studies which also this study considered as important by employing GMM estimator which helps in controlling for autocorrelation and endogeneity concerns and hence produces a more efficient estimate than most of the estimation techniques previously employed in other discourse. This research work therefore filled these research gaps. Hu and Izumida (2008) state that, the ownership-performance relationship varies across countries and over time. For this reason, this research work is theoretically relevant. The practical relevance of the study is associated with accounting conservatism because under the conditions of uncertainty and economic forces, this makes conservatism a desirable feature of accounting measurement and a valuation concept which might change the ownership structure of listed companies thereby affecting the accounting conservatism either positively or negatively which this study considered. The study spanned from 2011-2020. The study addressed the following questions;

i. To what extent does managerial ownership affect accounting conservatism of listed conglomerate firms in Nigeria?
ii. What is the effect of foreign ownership on accounting conservatism of listed conglomerate firms in Nigeria?
iii. To what extent does ownership concentration affect accounting conservatism of listed conglomerate firm in Nigeria?

The study determined the effect of ownership structure on accounting conservatism of listed conglomerate firms in Nigeria with specific objectives as:

i. Evaluate the extent to which managerial ownership affect accounting conservatism of listed conglomerate firms in Nigeria.
ii. Determine the effect of foreign ownership on accounting conservatism of listed conglomerate firms in Nigeria.
iii. Assess the effect of ownership concentration on accounting conservatism of listed conglomerate firm in Nigeria.

The following hypotheses were tested;

Ho1: Managerial ownership has no significant effect on accounting conservatism of listed conglomerate firms in Nigeria.

Ho2: Foreign ownership has no significant effect on accounting conservatism of listed conglomerate firms in Nigeria.

Ho3: Ownership concentration has no significant effect on accounting conservatism of listed conglomerate firm in Nigeria.

LITERATURE REVIEW

Ownership Structure

The structure of ownership is defined by the distribution of company's equity with regard to capital and votes but also by the identity of the owners of equity (Holderness, Clifford, Randall, Kroszner& Sheehan, 1999). Ownership structure contributes to reduce the incentive to manage earnings. In addition, it is believed that managers of corporate have opportunities to manipulate corporate reported earnings base on their own interest. According to Maury and Pajuste (2005), firm value increases when voting power is distributed more equally. An equal distribution of voting power indicates the presence of several major shareholders, who could monitor and constrain the largest shareholder, and thereby increase firm value. If

the voting rights are not distributed equally, the possibility arises that the largest shareholder's influence might exceed cash flow rights, resulting in a decrease in firm value. Xiu (2008) points out that an ownership structure with many block shareholders is an equilibrium state. The existence of many block shareholders can effectively limit the ability of one shareholder to achieve too much influence, avoiding one party's ability to control the organization and transfer resources from the firm to itself. Multiple large shareholders thus can play a vital role in the protection of the minority shareholders. Financial statements produced as a result of balancing these multiple block shareholders could reflect increasing accounting conservatism, coinciding with increases in other shareholder constraints. The measures of ownership structure in this study are managerial ownership, foreign ownership and ownership concentration.

Managerial Ownership

Akinobu and Tomomi (2010) opined that based on the incentive alignment effect, managers with larger shareholdings have stronger incentives to act in line with outside shareholders' interests. That is, as managerial ownership increases, corporate performance increases and opportunistic managerial behavior decreases monotonically. On the contrary when managerial ownership is at the lower level, the effect is expected to result in higher agency costs. Managerial entrenchment effect on the other hand suggests larger shareholding by managers gives them greater control over firms. This results in management having greater scope to act on their own interest. According to agency theory greater managerial ownership generates greater alignment of the interests of shareholders and managers, and mitigates the agency problems between the two parties (Jensen &Meckling, 1976 cited in LaFond &Rowchowdury, 2007).

Foreign Ownership

According to Fan and Wong (2002), foreign ownership occurs when multinational corporations, which do business in more than one country, inject long-term investments in a foreign country, usually in the form of foreign direct investment or acquisition. Foreign ownership can occur when a domestic property is acquired by a foreign individual. Foreign investors are attracted by high investments in the company and with rich information that they may have linked with the low level of asymmetry information. Sachs and Warner (1995) argue that foreign investors assume important roles in monitoring management, similar to the roles played by large outside shareholders in emerging countries because foreign investors have positive incentive to protect their wealth.

Ownership Concentration

Ownership concentration refers to the ownership concentrated in the limited number of shareholders. Usually, they possess a large percentage of shares that allows them to participate in the company's management and to direct its financial and operational policies. When ownership is concentrated, shareholders owning the major part of the firm's shares get to control the voting privileges as well, and, therefore, this puts them in a powerful position. They continue to dominate even when there is conflict over the control with the minority shareholders (Kiatapiwat, 2010). Also, these dominant shareholders end up usually take care of their own interests through the manipulation of earnings information (Song, 2015). In addition, the high concentration of ownership imposes high costs on small investors wishing to exercise their control and cash flow rights (Klein, 2002). Kwon, Yin and Han (2006) argue that either the concentration of ownership or the dispersion of most of the shareholders gives managers an opportunity to achieve their own interests over the shareholders' interests. According to Apadore and Mohd-Noor (2013) concentration of ownership is likely to increase the annual report processing time.

Accounting Conservatism

According to Kothari (2012), conservatism is defined as a concept that delays the recognition of future cash inflows and as a conservative accounting which states accountants report the lowest accounting information of several possible values for assets and revenues, and the highest for liability and burden.

Conservatism is a fundamental feature of quality financial statements because it enhances the reliability of financial statements by facilitating effective monitoring of managers and contracts as part of corporate governance mechanisms (Watts, 2003; Basu, 2005). Conservatism entails timely recognition of losses than earnings and avoids over estimation of firms value, it therefore reduces bankruptcy risk in firms (Wang, 2009).

According to Feltham and Ohlson (1995), conservatism defined choice and use of consistently accounting policies that are resulting in underestimate report net assets of the company. Feltham and Ohlson (1995) definition of conservatism is based on the balance sheet, so that have try in assessment underestimate the assets or overestimate report liabilities. The accounting literature addresses two types of accounting conservatism. The first type is unconditional conservatism that is known also, as ex ante or news-independent. The other type is conditional conservatism) that is known as subsequent conservatism and as ex post or news-dependent conservatism (Pope &Wailker, 2003). It has also been argued that due to conservative accounting methods uncertain future benefits are not taken into account in the financial statements. Management can only include those future benefits when the benefits are verifiable. The opportunistic behavior of management is constrained by these conservative accounting methods. As a result, management's reward cannot be maximized beyond the amount which is rational from the owner's perspective. Also, conservative accounting will prevent management from attracting excessive debt and paying excessive dividends. Therefore, applying some conservative accounting methods might be beneficial to all stakeholders of the firm.

Empirical Discussion

Ownership structure and accounting conservatism

Omar, Faudziah and Ismail (2014) examined the effect of ownership structure and board members' skills in the practice of accounting conservatism of 116 Jordanian listed firms for the year 2011. Ownership structure and board members' skills was measured by institutional ownership, board financial expertise, family ownership, board tenure and board multiple directorships by using multiple regression analysis, the results show that all the variables have a positive effect on conservatism with the exception of the board multiple directorship which has negative relationship with conservatism. Ellili (2013) studied the impact of ownership structure and of the make-up of the board of directors on the quality of accounting information, using annual data from 29 companies listed on the Abu Dhabi Securities Exchange in 2008 and 2009. Ownership structure was measured by managerial ownership, blockholders ownership, Institutional ownership and Herfindahl index while accounting information is measured by the discretionary accruals according to the two Jones models (1991). Managerial ownership has a negative and significant impact on discretionary accruals. Institutional ownership has a negative but non-significant impact on earning management. Herfindahl Index has no significant association between the ownership concentration and earning management. Also, board's size is non-significant and debt level of a company has a positive and significant relationship with discretionary accruals.

Alkurdi, Al-nimer and Dabaghia (2017) investigate the impact of ownership structure on accounting conservatism of 99 manufacturing and financial companies listed on the Amman stock exchange in Jordan from 2005-2013. Ownership structure was measured by Foreign, governmental, institutional and concentration of ownership while accounting conservatism was measured by accrual-based measures. This study used multiple regression analysis and it was discovered that there is an inverse effect of governmental ownership on accounting conservatism. In contrast, the study indicates a significant and positive relationship between foreign and institutional ownership with accounting conservatism but the concentration of ownership doesn't affect conservatism. Bach (2018) focuses on exploring the effects of state and foreign ownership on accounting conservatism adoption separately and also concurrently of Vietnamese firms from 2005 to 2015. The study employs pooled-WLS cross-sectional regression to investigate the relationship between concentration ownership and accounting conservatism. The study shows that there is statistically significant relationship between the financial reporting disclosure and the

accounting conservatism adoption. Furthermore, foreign ownership has positive effect on accounting conservatism.

An (2015) determined the effect of foreign ownership on accounting conservatism and the study depicts how foreign ownership affects the quality of companies' financial reporting by using accounting conservatism as a proxy for financial reporting quality. The study shows that there is a positive association between accounting conservatism and foreign ownership and that accounting conservatism mitigates the managerial opportunism resulting in an improved quality of financial reporting. Cullinan, Wang, Wang and Zhang (2012) determined the relationships between ownership structure and conservatism in China. Ownership structure was measured by the influence of the largest shareholder, whether the largest shareholder is the government, and the power and governmental status of minority shareholders. Also, for companies with a large shareholder, management may serve the interests of this largest shareholder to the exclusion of the interests of minority shareholders, who generally prefer more conservative reporting. The study found that conservatism is negatively associated with the percentage of shares held by the largest shareholder, and that this effect is particularly significant when the ownership percentage exceeds 30%. The study does not find that state ownership influences the relationship between the largest shareholder's ownership and accounting conservatism. However, the study does find that privately controlled companies in which the state owns a minority interest are more conservative than those without material state minority ownership. Christianto and Feliana (2015) assessed the relationship between ownership structure and accounting conservatism in listed manufacturing companies of Indonesia Stock Exchange (BEI) from 2011 - 2013. The study used panel regression model and the results of the study show that there is a positive relationship between the largest shareholder or controlling shareholder and accounting conservatism; Also, there is a positive relationship between the family as the largest shareholder as well as the controlling shareholder and accounting conservatism; Furthermore, there was no correlation between non-family as the largest shareholder and accounting conservatism, but there is a negative relationship when nonfamily become the controlling shareholder and accounting conservatism; In addition, other blockholder presence was not related significantly to reduce the largest shareholder preferences regarding accounting conservatism on the whole sample or sub-sample of non-family, but there is a negative relationship in the sub-sample when the family became the largest shareholder.

Amos, Ibrahim, Nasidi and Ibrahim (2016) focused on the impact of institutional ownership on earnings quality of listed Food/Beverages and Tobacco firms in Nigeria over the period 2005-2013. A panel data regression technique was employed to estimate the models since the data has both time series and cross-sectional attributes. The result reveals that institutional ownership showed a negative significant result on earnings quality while firm size used as control variable fail to show a significant result. Yunos, Smith and Ismail (2010) examined the effect of ownership concentration on accounting conservatism of 300 non-financial Malaysian listed firms over the period 2001 – 2007. Accrual-based conservatism and asymmetric timeliness was used as a proxy for accounting conservatism while Ownership concentration was measure by Percentage of substantial shareholding held by executive and non-executive directors over outstanding shares and Percentage of substantial shareholding held by outsiders over outstanding shares. Board composition (BID), board tenure (BT), board size (BS), audit committee composition and financial expertise in audit committee, auditor, sales growth, firm size, profitability and leverage and market to book ratio are used as control variables. The study finds that both inside and outside substantial shareholders encourage lower degrees of conservatism. Control variables that significantly influenced asymmetric timeliness measure of conservatism are board independence, board tenure, board size, auditor and market to book ratio. As for accrual-based measure of conservatism, only profitability is found significant.

Theoretical Discussion

Agency theory

Agency theory explains that conflict between the agent and the principal will always appear in a contradicting relationship. As the parties who submit funds to be managed by the management, investors should ensure that the decisions made by the management are free from opportunistic behavior that only benefits the latter and is

detrimental to shareholders. The managers have the responsibility to act in the benefit of the outside shareholders. However, if there are two individuals (or parties) who enter in a relationship they can have misaligned incentives partly due to asymmetric information, which can lead to agency problems resulting in inefficient management and misconduct (Jensen &Meckling, 1976). Agency theories revealed that when ownership of a firm is concentrated in the hand of institutional shareholders, they should have incentive to monitor the managers' action through direct intervention to reduce agency problem (Edmans &Manso, 2010). In order to solve agency problem between the shareholders (principal) and management (agent), institutional shareholders were suggested as a strong monitoring mechanism in improving performance of the firms (La Porta, 2002). Agency theory is used as an underpinning theory of this study because it explained the relationship between ownership structure of conglomerate firms and the behavior of managers in handling the accounting information of the firms.

METHODOLOGY

This study adopts Ex post facto research design. Ex-post facto design is an 'after the fact' design which explained the event of the problem after it has occurred. Therefore, in this study, the design is used to explained the effect of ownership structure on accounting conservatism of conglomerates firms in Nigeria. The population comprised of the five listed conglomerates firm in Nigeria as at 2020. The data for the study were collected from the individual firm annual report for the period of the study while Generalised Methods of Moment (GMM) panel model was used for the analysis. The study carried out the test of descriptive statistics, diagnostics test of Arellano-Bond Serial Correlation Test, Normality test, Panel Generalized Method of Moments, Panel GMM EGLS (Cross-section fixed effects), Panel GMM EGLS (Cross-section random effects).

The model for the study is
$ACCR_{it} = \alpha + \beta_1 MGO_{it} + \beta_2 FO_{it} + \beta_3 OC_{it} + \mu_{it}$

Where:

$ACCR_{it}$= Accrual based for firm I at time t
MGO_{it} = Managerial ownership of firm I at time t
FO_{it}= Foreign ownership of firm I at time t
OC_{it}= Ownership concentration for firm I at time t
β_1- β_3 = Coefficient of estimate parameters
α = Constant
μ = error term

Variable Measurement

ACCR	Accrual-Based measure of accounting conservatism = [(income + depreciation expenses – operating cash flows)] ÷ Total assets. ACCR = (Accruals / 3 years) X (-1).
Managerial ownership (MGO)	Percentage of Number of shares held by managers as a proportion of the number of shares outstanding (average across firms
Foreign ownership (FO)	Number of shares in firm *i*by institutions domiciled in a country different from country *i*where the firm is incorporated as a percentage of the market capitalization of country *i*
Ownership concentration (OC)	Number of stock owned by individual investors and large-block shareholders at least 5 per cent of equity ownership within the firm

RESULT AND DISCUSSION

Table 1: Descriptive Statistics

	ACCR	MGO	FO	OC
Mean	0.063588	13.04742	6.428571	26.28571
Median	0.088672	11.18762	6.000000	25.00000
Maximum	0.175690	20.25302	15.00000	35.00000
Minimum	-0.054753	7.769080	0.000000	17.00000
Std. Dev.	0.075550	4.787813	4.150480	6.137791
Skewness	-0.164756	0.403722	0.748058	0.301824
Kurtosis	1.832997	1.509043	3.591779	2.019355
Jarque-Bera	2.573331	5.031108	4.529989	2.320598
Probability	0.276190	0.080818	0.103831	0.313392
Observations	50	50	50	50

Source: Eview Output, 2021

The result above indicates that accrual-based accounting conservatism is normally distributed because it has a probability greater than 5% and a mean value of 0.063588 and a median of 0.088672. In like manner, the maximum accrual based by conglomerates firm in Nigeria is 0.175690 with minimum of -0.054753. This can be said that they firms did not engaged more on accounting conservatism. Also, the managerial ownership in conglomerates firms in Nigeria is normally distributed because it has a probability of 0.080818 which is greater than 5% and it was also evident that the maximum ownership in conglomerates firms in Nigeria by management of the firm is 20.25302 and the minimum ownership attributable to the management is 7.769080. The managerial ownership has a mean and median of 7.769080 and 11.18762 accordingly. Furthermore, foreign ownership is normally distributed with a probability of 0.103831 and a mean of 6.428571. In like manner, the maximum ownership by foreigners in conglomerates firm is 15.00000 and minimum of 0.000000. This implies that there are conglomerates that there is no foreign ownership and it also have a median of 6.000000. Ownership concentration is normally distributed across the firms with a probability of 0.313392 and a maximum ownership of 35.00000and 17.00000 as minimum ownership. In conglomerates firms in Nigeria, it is evident that ownership concentration is high compared to other ownership structure indicators considered in this study. It has a mean and median of 26.28571 and 25.00000 respectively.

Table 2: Arellano-Bond Serial Correlation Test

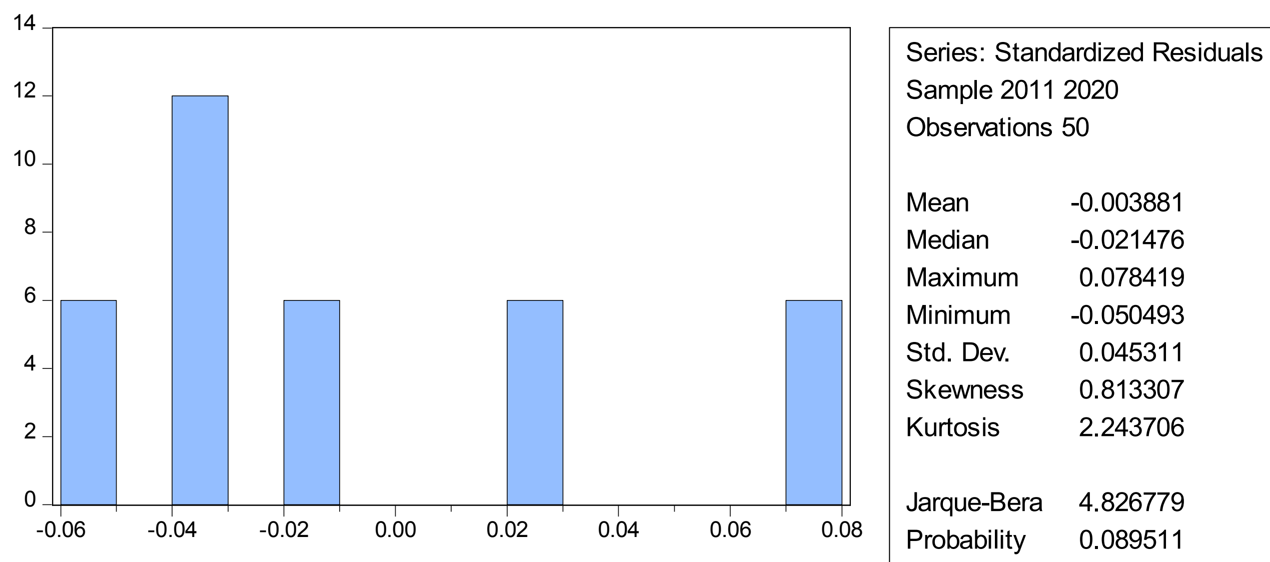
Arellano-Bond Serial Correlation Test
Equation: Untitled
Date: 11/27/21 Time: 21:42
Sample: 2011 2020
Included observations: 50

Test order	m-Statistic	rho	SE(rho)	Prob.
AR(1)	-0.009464	-0.000053	0.005554	0.9924
AR(2)	-3.070710	-0.009520	0.003100	0.0021

Source: Eview Output, 2021

The Arellano-Bond test for Serial Correlation indicates that there is no serial correlation because prob of AR(1) is not equal to zero and that of AR(1) is more than 5%

Table 3: Histogram Normality Test



Source: Eview Output, 2021

The normality test indicates that the variables used in the study were normally distributed because it has a probability of 0.089511 which is more than 5% hence, the data were normally distributed.

Table 4: Panel GMM (Cross-section random effects)

Dependent Variable: ACCR
Method: Panel GMM EGLS (Cross-section random effects)
Date: 11/27/21 Time: 21:32
Sample: 2011 2020
Periods included: 10
Cross-sections included: 5
Total panel (balanced) observations: 50
2SLS instrument weighting matrix
Swamy and Arora estimator of component variances
Instrument specification: C ACCR MGO FO OC
Constant added to instrument list

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MGO	-0.012085	0.002242	-5.389789	0.0000
FO	-0.000154	0.002029	-0.076142	0.9397
OC	-0.016142	0.002053	-7.864695	0.0000
C	0.646571	0.073486	8.798545	0.0000
		Effects Specification		
			S.D.	Rho
Cross-section random			0.000000	0.0000
Idiosyncratic random			0.041852	1.0000
		Weighted Statistics		
R-squared	0.752998	Mean dependent var		0.063588
Adjusted R-squared	0.733497	S.D. dependent var		0.075550

S.E. of regression	0.039002	Sum squared resid	0.057803
Durbin-Watson stat	1.793155	J-statistic	38.00000
Instrument rank	5	Prob(J-statistic)	0.000000
	Unweighted Statistics		
R-squared	0.752998	Mean dependent var	0.063588
Sum squared resid	0.057803	Durbin-Watson stat	1.793155

Source: Eview Output, 2021

The test of hypotheses was done using cross section random effect model of generalized method of moments because the Hausman specification probability is more than 5%. Managerial ownership has negative significant effect on accrual-based accounting conservatism. This indicates that increase in managerial ownership of conglomerates firms in Nigeria will reduce accrual conservatism by -0.012085. Also, the foreign ownership has negative insignificant effect on accrual-based conservatism with p-value greater than 5%. Furthermore, ownership concentration has negative significant effect on accounting conservatism with p-value less than 5%. This implies that increase in ownership concentration in conglomerates firms in Nigeria will reduce the accounting conservatism by -0.016142. The model explained variation on accounting conservatism by 75% while the remaining variation on accounting conservatism is explained by other variables not captured in the model. The model is fit with prob. (J-statistics) of 0.000000.

CONCLUSION AND RECOMMENDATIONS

The study examined the effect of ownership structure on accounting conservatism of conglomerates firms in Nigeria. From the result, the study concludes that increase in managerial ownership will reduce accounting conservatism of conglomerates firms while changes in foreign ownership have no influence on conglomerates firms. This means that foreign ownership is not strong enough to influence accounting conservatism in Nigeria conglomerate firms. Furthermore, increase in ownership concentration of conglomerates firms in Nigeria will reduce accounting conservatism. The study concludes thatownership concentration decreases conservatism and profit quality of the firm under consideration. The following recommendations were made:

i. The management of conglomerate firms in Nigeria should be allowed to hold a reasonably number of shares in the company to the extent of 13% since there is inverse relationship between managerial ownership and accounting conservatism. This is attributable to the mean value and managers are opportunistic in nature. Hence, they will act in accordance to the goal congruence of the company.

ii. Foreign ownership in the company should not be encouraged because it has no significant effect on accounting conservatism of conglomerates firms in Nigeria. Also, there should be diffuse ownership concentration in order to better the accounting information of the organization.

iii. The Professional organizations should set clear instructions and rules on the applications of accounting conservatism in the accounting practices to be followed by the companies to limit fraud in accounting most especially in Nigeria.

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Effect of Board Attributes on Earnings Management of Listed Health Firms in Nigeria

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Abstract

Board attribute has become an important agenda for listed companies in any stock exchange market globally. This study examined effect of board attribute on earning management of listed health firm in Nigeria covering the period of ten (10) year 2011-2020. The study adopted ex-post facto research design and secondary data was used for analysis which was obtained from Nigerian Exchange Group. Panel regression analysis technique was used to analyse research data. The result showed that when taken individually and collectively, board size (BS), board frequency meeting (BFM) used as proxies for board attribute has a positive and significant effect on discretionary accrual also taken as a measure of earning management. The study therefore concludes that board size and board frequency meetinghas a significantly positive effect on earnings management and does substantially reduces the earnings of listed health firms in Nigeria. The study recommend thatboard size of listed health firms in Nigeria should be increased and also add more non-executive directors so that they can pay more attention in monitoring management to avoid earning manipulation.

Keywords: Board size, Board frequency meeting, Earning Management, Discretionary Accrual, Firm

INTRODUCTION

High-quality reporting information is critical because it had a beneficial effect on the procuring, financing and related distribution decisions that enhance overall market success of resource producers and other stakeholders. The business's success, which was seen by company profits, produces a firm valuation in the short and long term. Corporate income is very directly connected to corporate valuation (Edi & Vera, 2020). Adegbie, Salawu and Shiyanbola (2019) have stated that the firm earning was the cornerstone, as they are essential areas of concern for growth and sustainability enabling management to make profits more significant and has increased earnings. Earning is one of the most important items in financial statements. 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 earning 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 investors‟ confidence (Roodposhti&Chasmi, 2011).

The users of accounting information, such as investors, government agencies, auditors and financial analysts, have focused on monitoring corporate governance systems. This has led to increased disclosures about corporate governance, demands for the regulation of systems of corporate governance, and

consequentially, enhanced internal controls system. Regulators, academics and practitioners around the world now evaluate corporate governance compliance from inception to the implementation of suitable and sustainable system that takes account of the socio-economic environment relevant to any particular company. The integrity of financial disclosure has been an issue of constant concern among regulators, financial analyst and accounting practitioners; especially after the series of high-profile accounting scandals and frauds involving well-known firms such as Worldcom and Enron (US) and One Tel (Australia), Nortel (Canada), Parmalat (Italy) and Transmile Group Berhad (Malaysia), Oceanic bank, Intercontinental bank, Afribank and Cadbury (Nigeria). For firms in Nigeria, poor corporate governance practice have been cited as one of the causes of the corporate collapses noticed among firms in the financial sector (Adeyemi&Fagbemi; 2010). This phenomenon have waned the public confidence, most especially those in the accounting circle. It has consistently raised severe concerns about corporate governance practices in a broad-spectrum. More so, it has also brought to spotlight issues relating to quality of financial reporting and the weak internal control systems among firms, (Bello, 2011; Ebrahim, 2007), (Uwuigbe 2014); the corporate failures of such large organizations in the past have highlighted the intentional misconduct of managers in a wider-spectrum. In addition, there are apprehensions about the weaknesses of corporate governance in the past, as it was not effective enough to protect Investor's from expropriation.

The profits of organizations differ when their governance is influenced, as effective management leads to a good financial performance (Nkanbia-Davies, Gberegbe, Ofurum& Egbe, 2016). Effective business management leads to a good financial performance (Nkanbia-Davies, Gberegbe, Ofurum&Egbe, 2016). Effective corporate governance was a general notion that boosts the economic health of listed companies and increases customer trust and confidence (Rahman & Mohammed, 2016; Basha, 2018). This thought affected regulators and attracted much attention from both scholars and practitioners. The results of Yusoff, Ahman and Darus (2019) indicate that reinforced corporate governance system, which also affected the performance of businesses and organizations, were also improved. This was similarly applicable with both corporate and public companies. Although the Board still had a responsibility to monitor the leadership closely because of the ever-present danger of opportunistic activity. This was one of the key roles of corporate governance (Elyasiani, Wen, & Zhang 2017).Several corporate crises in the past have been blamed on company managers taking undue advantage of their position to influence or manipulate earnings to their personal interests. Even where such actions are taken in the interest of the organization, the benefits are most likely to be short lived. Thus, in the long run, investors in the company are the once who suffer the consequences of managers influencing earnings to suit their interest. However, earnings management can only occur where there are loopholes in accounting laws and regulations that manager can take advantage. A typical example is a situation where management is allowed to change accounting rules or given a 'choice' whether to and when to adopt a certain standard. Thus, this study examine effect of board attribute on earning management of listed health firms in Nigeria and the basic hypothesis underlying this study are stated below;

H_O1: Board size has no significant effect on earnings management of listed health firms in Nigeria
H_O2: There is no significant relationship between Board frequency meeting and earnings Management of listed healthfirms in Nigeria

LITERATURE REVIEW

Conceptual Framework

Board Attribute

Research on board composition and board leadership structure has been dominated by a focus on company performance (Dally & Dalton, 1999), which is consistent with the institutional investment community's demands for more independent board structures. The general notion is that boards with higher proportion of nonexecutive/independence directors are generally objective and independent in their monitoring function (Bello, 2011). The Nigerian Code of Corporate Governance (Code of Corporate

Governance for Public Companies in Nigeria 2011 issued by the Securities and Exchange Commission (replaced 2003 SEC Code); stipulates some requirements for the composition of board members in companies. The Code stipulates that the board should be composed in such a way as to ensure diversity of experience without compromising compatibility, integrity, availability, and independence. It states that the board should comprise of a mix of executive and nonexecutive directors, to be headed by a chairman of the board, and the composition of the board should not exceed 15 persons or be less than five persons in total. Members of the board should be individuals with upright personal characteristics and relevant core competences, preferably with a record of tangible achievement, knowledge on board matters, a sense of accountability, integrity, and commitment to the task of corporate governance and institution building, while also having an entrepreneurial bias.

Board size

Board size is viewed as another important element in board characteristics that may have an effect on earnings management. The optimum number of board members should be appropriately determined by the whole board to ensure that there are enough members to discharge responsibilities and perform various functions.Heninger (2001) argued that smaller boards, between four to six members might be more effective since they are able to make timely strategic decisions, while larger boards are capable of monitoring the actions of top management. Large board members with varied expertise could increase the synergetic monitoring of the board in reducing the incidence of earnings management. A reasonable size of the board is expected to be effective in monitoring the activities of firm's management (Sanda, Mikailu&Garba 2008). A large size of board of directors can improve monitoring mechanism effectively and prevent managers to engage in earnings restatements (Feng&Shiao 2009). Larger boards with competent directors having diverse educational and technical knowhow, have multiple perspectives to improve the quality of firm's value and more likely to represent the interests of shareholders thereby preventing managers from earnings management according to Jian and Ken (2004).

Board frequency meeting

The Nigerian Code of Corporate Governance (Code of Corporate Governance for Public Companies in Nigeria 2011 issued by the Securities and Exchange Commission (replaced 2003 SEC Code); stipulates the required number of times members of the audit committee are expected to meet in a year. It states that the members of the board must meet at least once in a quarter, which means they are expected to meet at least 4 times in a year for the board to be effective in the discharge of its duties. Past research shows that the frequency of board meetings has an effect on earnings management trend in companies (Xie, Davidson, &DaDalt, 2003). Gulzar (2011) found that if the frequency of board meetings is more, then the value of discretionary accruals is lower; they stated that higher frequency of board meetings will improve the board monitoring. Sarkar, Sarkar, and Sen (2006) argued that it is not board independence, but board quality that is important for earnings management; they further identified that diligent boards are associated with lower earnings manipulation, whereas boards that have large number of multiple directors exhibit higher earnings management. This, therefore, connotes that board that meets often and discharges its duty diligently and effectively may help in the reduction of earnings management.

Board Frequency Meetings is presumed to be a good proxy for the corporate governance to control managers' behaviour. Board that meets frequently are expected to solve the problem effectively. Effective board is expected to meet regularly to stay on top of accounting and control related matter to make sure financial reporting process is functioning properly (Zhou & Chen, 2004). On the contrary, Jensen (1993) argues that most of the Board Meetings are not very effective, since the board is often forced to engage in high frequency activities to resolve corporate matters. Nigerian SEC code provided that board of directors should at least meet four times every financial year. But looking at the meetings held by these companies within the period under review, one can attest that there is a lack of consistency in the number meetings held. Some of them held meetings below the minimum requirement while some above (up to eight times).

Earnings Management

Earnings management occurs when managers intentionally make operating decisions that have actual cash flow consequences with the goal of altering reported earnings. For example, a firm may offer price discounts and offer more flexible credit terms to customers to boost sales revenues temporarily. In addition, managers may opportunistically reduce research and development expenditures in order to reduce expenses in the income statement (Dechow & Skinner; 2000). Further, managers can delay maintenance expenditures to increase reported earnings. Zang (2009) explains this type of earnings management behaviour as purposeful action taken in order to alter reported earnings in a certain direction by means of changing the timing or structuring of an investment, operation, or financing transaction, which is consistent with the definition of earnings management presented by Healy and Wahlen (1999).

Discretionary Accrual

Actually, accounting conservatism can be divided into two types which are conditional conservatism and unconditional conservatism. However, discretionary accruals and unconditional conservatism accounting have a very close relationship. Accounting conservatism is accounting policy based on conservatism principle, which allows managers to employ their judgment to estimate some financial information, affecting on accounting record. Thus, it is an opportunity for managers to distort financial information by accrual basis or discretionary accruals. Unconditional accounting conservatism term used as a representative of earning quality in term of the difference between accounting profits and operating cash flow as a component of the accrual profits. Thus, the zero accrual profits implied the high earning quality because accounting profits and operating cash flows profits are the same. In the other word, the accrual profits represents low earning quality. Thus, accounting accrual basis is a tools impacting on business earning quality. Schipper and Vincent, (2003) defined conservatism accounting as the use of discretion under uncertainty in order to make the financial statements reliable so that the figures of the assets or income should not report too high, while the liabilities or expenses should not report too low called the principle of conservatism.

Empirical Review

Umar and Sani (2020), examined the effect of corporate governance on the performance of quoted deposit money banks in Nigeria. The study employed panel data analysis using regression model to investigate the connection between corporate governance proxy (Board size, Board composition and Firm size) and Return on Asset (ROA) of quoted deposit money banks in Nigeria for a period of 5 years (2015-2019). Data for the study was obtained from audited annual reports of fifteen (15) listed banks on floor of the Nigeria Stock Exchange (NSE, 2017). Findings revealed that there is significant relationship between board composition, board size and firm size and the ROA of deposit money banks in Nigeria. They concluded that board composition has a positive impact on performance suggesting an increase in the number of NEDs would result in increased performance of quoted deposit money bank, while board size has a negative impact on the performance signifying that an increase in board size decreases performance of quoted deposit money banks. The study recommends efforts at improving corporate governance should emphasize more on the board composition, as it is positively associated to return on asset of Deposit Money Banks. Also, more measures should be put in place to ensure mandatory compliance with the code of corporate governance, particularly the one issued by the Central Bank of Nigeria. Finally, the National Bureau of Statistics (NBS) should be empowered or a unified independent establishment should be created to be responsible for collecting and analyzing corporate governance related data and constructing the pertinent indices to ease corporate governance research in Nigeria.

Akinleye, Olarewaju and Fajuyagbe (2019) examined corporate governance and financial performance of selected Nigerianmultinational firms from 2012 to 2016. Specifically, the study focused on the effect of board size, activism and committee activism on return on asset and firm growth rate. The data were analyzed using static panel estimation techniques. While board size and board activism exerted significant negative impact on return on asset, committee activism exerted insignificant impact. The results of the

study further showed that board size and board activism exert insignificant negative impact on firm's growth rate, while committee activism insignificantly spurs firm's growth rate. Decisively, discoveries from this study reflect that corporate governance has significant negative impact on return on asset but has insignificant influence on the growth rate of Nigerian multinational firms. Based on these findings, the authors recommended that corporate governance dynamics in firm's world over should be reconsidered, such that it gives credence to more than just numbers of persons or meetings held, but the main reasons and deliberations in such meetings. They also recommended that excessive increase in magnitude or frequency of meetings held by board of directors cum committee should be avoided.

Manukaji and Ijeoma (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.

Orjinta, Onuora, and Agubata, (2018), examined Audit Committee and Classification Shifting of Earnings Management: Evidence from Sub-Sahara African Firms.This study investigated whether managers use classification shifting to reclassify recurring expenses into non-recurring ones, placing more emphasis on the effect of audit committee in curbing such opaque manipulations. A sample of 75 quoted non-financial firms from three Sub-Sahara African countries (Nigeria, Kenya and South Africa) was used for the period of ten years spanning 2008 to 2017. The study employed ex-post facto and cross-sectional research design in analyzing secondary data collected. Using a multiple regression and a sample of 750 Sub-Sahara African firm-year observations, our result revealed that classification shifting is less prevalent in firms whose audit committee is characterized by more meetings, more financial expert members and more independent directors as this leads to lower levels of recurring items misclassification. Specifically, our result discovered that audit committee independence has negative and significant effect on classification shifting which was statistically significant at 10% level of significance while audit financial expertise and audit committee diligence have negative and significant effect on classification shifting at 1% and 5% levels of significance respectively. The findings showed that about 68.4% of changes in total variation in the classification shifting of earnings management can be attributed to the joint effect of all the explanatory variables while about 31.6% was unaccounted for thereby captured by stochastic error term.

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 Nigeriancompanies. This study sampled the data of 137 quoted companies for a period of 8 years (2003-2010). Earningsmanagement was measured using the magnitude of the discretionary accruals as estimated by the performance matchedmodified Jones model. The ordinary least squares (OLS) regression

technique was used to measure the research model aswell as the Pearson moment correlation coefficient. The study shows that there is a significant relationship between boardstructure and earnings management practices in Nigeria. The study shows that there is a negative significant relationshipbetween board size, gender, and board composition with earnings management; also, there is a positive significant relationshipbetween board meeting and earnings management practices in Nigeria. There is a positive nonsignificant relationship betweenthe presence of a remuneration committee and the dualization of CEO and chairman positions with earnings managementpractices in Nigeria.

Atu, Favour, Enegbe and Efosa (2016) also examined the determinants of earnings management using selected quoted companies in Nigeria. The study adopts a cross-sectional research design with an extensive reliance on secondary data from the financial statement of quoted company's annual report. The simple random sampling technique was employed in selecting the 30 companies for 2007-2014 financial years. Secondary data sourced from financial statements of quoted companies retrieved from the Nigeria Stock Exchange and websites of the sampled companies will be utilized for the study. The study will make use of ordinary least squares (OLS) regression analysis as the data analysis method. In this study we adopted OLS regression techniques to examine how the explanatory variables (Corporate governance, firm size, audit firm type and financial performance) impact on earnings management using discretionary accruals measure. The study finding indicates the existence of negative significant relationship between board size, audit firm type and earnings management In addition, they study also found the existence of a non-significant relationship between firm size, ROA and earnings management. The recommendation is that there is the need for companies to consider the need to increase their board independence. Again companies must ensure that the auditors' they engage are credible and have a track record of delivering reports that show the actual state of affairs of a company. Finally, Financial Reporting Council should have stiffer penalty for companies caught engaging in the act of earnings management.

Huy and Nguyen (2016) assessed he impact of board of directors and ownership characteristics on earnings management of publicly listed firms in VietnamThis study investigates the extent whether board of directors and ownership characteristics are related to earnings management in Vietnamese context. Based on sample of 570 non-financial listed firms from 2010 to 2014, the study found a non-linear association between state ownership and earnings management. Furthermore, firms with higher proportion of foreign ownership are more likely to constrain the manipulative practices exercised by managers. Additional test on interaction between corporate governance and leverage indicate CEO holding the position of chairman is more likely to distort financial reports in a highly geared firm. Higher managerial ownership marginally reduces earnings manipulation in firms subject to considerate debt level. On the other hand, board with higher percentage of non-executive directors and concentrated ownership might not have any effect on earnings management. The association between board size and earnings management is inconclusive due to the fact that the constraining effect of board size on earnings management is only evident in the model with discretionary accruals rather than accruals quality. Awaisu and Rabi'u (2015) examined effect of Board the Size and Audit Committee the Size on Earnings Management in Nigerian Consumer Industries CompaniesBoard and audit committee the size are important governance mechanisms that affect companies' reported earnings due to the managers' effort to manipulate the earnings in order to meet their predetermined target. The objective of this study is to examine the relationship between board the size, the audit committee the size and earnings management in Nigerian consumer industries companies. A total of 29 companies in the consumer sector of the Nigerian stock exchange were analyzed using multiple linear regressions. Data was obtained from secondary sources alone using annual report and account of the companies for the periods of 2010 to 2013. The results show that audit committee the size is negatively and significantly affects earnings management, the result further suggests that larger board is not efficient to minimize the tendency of managing earnings, therefore it is recommended that the audit committee should be increased to minimize the likelihood of earnings management.

Hussaini and Gugong (2015) examined effect of board characteristics and earnings management of listed and beverages firms in Nigeria. There are different opinions in literature on the relationship between board characteristics and earnings management. The study examines the influence of board characteristics and earnings management of listed food and beverages firms in Nigeria. The study covers the period of six years 2009 to 2014. Data for the study were extracted from the firms' annual reports and accounts. After running the OLS regression, a robustness test was conducted for validity of statistical inferences, the data was empirically tested, and first the dependent variable was generated using two steps regression in order to determine the discretionary accrual of listed food and beverages firms in Nigeria through modified Jones model of Dechow& Sloan (1995). A multiple regression was employed to test the model of the study using Random Model. The results from the analysis revealed an inverse relationship between board size, board meetings and board financial expertise, and earnings management of listed food and beverages firms in Nigeria, while and board composition and women directorship are positively significantly related to earnings management of listed food and beverages firms in Nigeria. Ibrahim (2015), examinedboard characteristics and earnings management of listed foods and beverages firms in Nigeria. As a response to some financial scandals and corporate failures in Nigeria and around the globe which are linked to earnings management, certain characteristics of Board of Directors that can improve their monitoring function are suggested in the literature as corporate governance mechanisms. Thus, the study concentrated on three board characteristics' proxies, namely: Board Competency, frequency of Board Meetings and Gender Mix and their relationships with earnings management (because, they have not yet been studied extensively in Nigeria). Therefore, the study investigated the impacts of Board Competency, frequency of Board Meetings and Gender Mix on Earnings Management (in the context of agency relation) of listed foods and beverages firms in Nigeria from 2007 to 2013. The estimation of discretionary accruals (proxy for Earnings Management) is by using modified Jones (1991) model. The sample size of the population is nine (9) firms. Both correlational and ex-post factors research design were used. A multiple regression technique was employed to determine the impact of Board Characteristics on Earnings Management. The result was interpreted using fixed effect- least square dummy variables. The results reveal that Board Competency has no significant impact on Earnings Management. The impact of frequency of Board Meetings and Gender Mix on Earnings Management were however found to be negative and statistically significant. The study concluded that increase in number of board meetings and the proportion of women directors in the board constrain the level of discretionary accruals; while directors' knowledge of accounting and/or finance (board competency) does not guarantee quality of earnings.

Theoretical Framework

Stakeholder's theory

Freeman (1998) as cited in (Branco and Rodrigues, 2007) defined stakeholders as groups and individuals who benefit from, or are harmed by, and whose right are violated or respected by corporate actions. Clarkson (1995) distinguishes primary and secondary stakeholders. Primary stakeholders are those "without whose continuing participation the corporation cannot survive as a going concern" (Shareholders and investors, employees, customers and suppliers, and also government and community that "provides infrastructures and markets, whose laws and regulations must be obey, and to whom taxes and other obligations may be due") Whereas secondary stakeholders are " those who influence or affect, or are influenced or affected by, the corporation, but are not engage in transactions with the corporation and are not essential for its survival.

Institutional Theory

Institutional theory posits that organizations should align their practices and characteristics with social and cultural values so as to get legitimacy. Dimaggio and Powell (1983) believes that organization are subject to rules and regulations and these must be complied with so that the organization can obtain legitimacy upon which they can survive. It is argued that organization change their institutional practices

out of pressure from stakeholders to make them legitimate and not necessarily to monitor management. According to institutional theory, corporate governance is viewed as structure put in place by the organization to confirm that the corporation is bond to an environment (Alghamdi, 2012). Stedham and Beekun (2000) posit that under institutional theory the role of board of directors of the company is twofold; serves as a linkage between the corporation and the environment, administrative role of overseeing the performance of top management especially the chief executive officer (CEO). They assert that institutional theory and agency theory can be used to explain role of directors in corporate governance. In a similar argument, Kury (2007) suggests that institutional theory can be used to explain earning management because incentives for earnings management may come as a result of formal or informal pressure from the environment. Essentially institutional theory concerns itself with organizations conforming to set rules and regulations to obtain legitimacy and consequently have access to resources and survive (Dimaggio& Powell 1983).

Agency theory

The agency Theory is a common practice in research that explains the relationship between the principal (shareholders) and the agent (managers). The origins of the agency theory can be traced back to Jensen and Meckling (1976) and the discussion of the problem of the separation of ownership and control. They suggested that managers of other people's money cannot be expected to watch over it with the same anxious vigilance one would expect from owners and that negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company. They defined the relationship between the principals, such as shareholders and agents such as the managers and held that managers will not on their own act to maximize the returns to shareholders unless appropriate governance structures are implemented to safeguard the interests of shareholders. Separation of ownership and control leads to potential conflicts of interest between both parties. This may be because the parties may have different goals, and the managers may not act on behalf of the best interests of the shareholders (Bukit &Iskandar, 2009; Jensen &Meckling, 1976). Gerayli, Yanesari and Ma'atoofi (2011) confirmed that this agency problem leads to the demand for external auditing.

METHODOLOGY

This study adopted the ex post facto research design since the study is a secondary data research. The population of the study consists of ten (10) listed health firms operating on the Nigeria Exchange Group (NGX) as at 31st December 2020. The sample size is 8 and purposive sampling techniques were adopted. Data required for this study were obtained from audited financial statements and annual reports of the listed health firmsin Nigeria 10 years (2011-2020) under consideration and from the Nigerian Exchange Group fact book. The inferential analyses will also involve the application of the appropriate statistical technique of Panel Regression Analysis; this is due to the nature of the data. The Panel regression model is stated as;

$DACC = \beta_0 + \beta_1 BS + \beta_2 BFM + \epsilon_{it}$..…………………(1)

Where:

DACC = Discretionary Accrual
BS = Board Size
BFM= Board Frequency Meeting
ϵ_{it} = Stochastic Error term

Table 1: Study Variables and their Measurement

Variable Acronym	Variable Name	Variable types	Measurement	Source

DACC	Discretionary Accrual	Dependent	Discretionary Accrual: Residual from Modified Jones' Model by Dechow, (1995)	Hassaini&Gugong , (2015)
BS	Board Size	Independent	Number of directors on the board	Manukayi&Ijeoma (2018)
BFM	Board Frequency Meeting	Independent	Number of meetings held by the board of directors	Huy& Nguyen (2016)

Source: Researcher Compilation 2022

The Modified Jones Model

This model uses a modification of the original Jones (1991) model as proposed by Francis, Huang, Rajgopal & Zang (2008). They included the change in accounts receivable in the estimation model for normal or non-discretionary accruals (i.e., equation (1) above). This was done based on the reasoning that, not doing so, would produce values for abnormal (discretionary) accruals that are not centre on zero when the mean ΔREV is not zero (Francis; 2008). The equation (1) above became;

$TAit / Ait\text{-}1 = ai \{1/Ait\text{-}1\} + \beta 1i \{\Delta REV\ 1/Ait\text{-}1\} + \beta 2i \{PPEit/Ait\text{-}1\} + \varepsilon\ i,t$ Where: TAit = Total accruals in year t for firm i; (measured by operating profit after tax-cash flow operations).
Ait-1 = Total assets in year t-1 for firm i;
ΔREVit = Revenues in year t less revenues in year t-1 form firm i;
PPEit = Gross property, plant and equipment in year t for firm I; ε i,t = Error term in year t for firm

RESULT AND DISCUSSION

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 2: Descriptive Statistics Result

	DACC	BS	BFM
Mean	4.407250	4.287500	3.900000
Median	4.235000	4.000000	4.000000
Maximum	42.85000	6.000000	5.000000
Minimum	-44.16000	3.000000	2.000000
Std. Dev.	11.96224	0.829728	0.408765
Skewness	-0.556741	0.361023	-2.976576
Kurtosis	6.967148	2.673766	14.14876
Jarque-Bera	56.59368	2.092597	532.4496
Probability	0.000000	0.351235	0.000000
Sum	352.5800	343.0000	312.0000
Sum Sq. Dev.	11304.53	54.38750	13.20000
Observations	80	80	80

Source: E-View 10 Output (2022)

Table 2 presents the descriptive statistics for the dependent and independent variables Discretionary accruals (DACC), board size (BS) and board frequency meeting (BFM). The standard deviation of the variables ranges from 0.40876 to 11.9622. Board frequency meeting have the lowest standard deviation of

0.40876 followed by board size 0.82972 and Discretionary accruals 11.9622. The Table also indicated an average value of 4.40725 for discretionary accruals. Since earnings management is measured by absolute value of discretionary accruals in this study, the value of 4.40725 is an indication that sampled companies were involved in earnings manipulations during the study period. The minimum and maximum values of discretionary accruals during the study period are -44.16 and 42.85 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 period stood at 42.85. This further corroborates the inference of manipulation of earnings earlier revealed by the mean of DACC.

More also board size and board frequency meeting has an average value of 4.2870 and 3.90000 respectively. The minimum and maximum values of board size and board frequency meetingduring the study period are 3.0000 and 2.0000 for minimum while maximum is 6.0000and 5.0000 respectively. The implied that the minimum and maximum board size and board frequency meeting on the sampled companies during the study period

Table 3: Correlation Matrix

	DACC	BS	BFM
DACC	1.000000		
BS	-0.55006	1.000000	
BFM	0.167434	-0.02613	1.000000

Source: E-View 10 Output (2022)

In table 3 correlation analysis, which is used to quantify the association between two continuous variables (e.g., between an independent and a dependent variable or between two independent variables). In correlation analysis, we estimate a sample correlation coefficient, more specifically the Pearson Product Moment correlation coefficient. The sample correlation coefficient, denoted r, ranges between -1 and +1 and quantifies the direction and strength of the linear association between the two variables. The correlation between two variables can be positive (i.e., higher levels of one variable are associated with higher levels of the other) or negative (i.e., higher levels of one variable are associated with lower levels of the other). The sign of the correlation coefficient indicates the direction of the association. The magnitude of the correlation coefficient indicates the strength of the association. The analysis continues in this section in determining the degree of linear association between the boards attributes variables in pairs employing E-views 10 Statistical package. The result presented above confirms that board size -0.5500 and board frequency meeting 0.1674 have a strong positive and negative

Table 4: Hausman Test (Test between Fixed and Random)

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	18.828894	2	0.0001

Source: E-View 10 Output (2022)

The Result of Hausman test shows that chi-square statistics value is 18.828 while the probability values of 0.0001. This implies that there is enough evidence to reject the null hypothesis which states that random

effect is most appropriate for the Panel Regression analysis. It thus stands that error component model (fixed effect) estimator is the most appropriate because the fixed effects are well correlated with the regressors. Thus, the most consistent and efficient estimation for the study is the fixed effect cross-sectional model. Consequently, the result suggests that the fixed effect regression model is most appropriate for the sampled data because the Hausman test statistics as represented by corresponding probability value is less than 5%.

Decision Rule: The decision rule for accepting or rejecting the null hypothesis for any of these tests will be based on the Probability Value (PV) and the Probability (F-statistic). If the PV is less than 5% or 0.05 (that is, if PV < 0.05), it implies that the regressor in question is statistically significant at 5% level; and if the PV is more than 5% or 0.05 (that is, if PV > 0.05), it is categorized as not significant at that level.

Table 5: Panel Regression Result (Fixed Effect)

Dependent Variable: DACC
Method: Panel Least Squares
Date: 03/16/22 Time: 05:20
Sample: 2011 2020
Periods included: 10
Cross-sections included: 8
Total panel (balanced) observations: 80

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-25.03380	15.41125	-1.624384	0.1088
BS	-0.970654	2.457460	-0.394983	0.6941
BFM	8.616085	2.945028	2.925638	0.0046

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.495520	Mean dependent var	4.407250
Adjusted R-squared	0.430658	S.D. dependent var	11.96224
S.E. of regression	9.026081	Akaike info criterion	7.354582
Sum squared resid	5702.910	Schwarz criterion	7.652336
Log likelihood	-284.1833	Hannan-Quinn criter.	7.473960
F-statistic	7.639631	Durbin-Watson stat	1.430305
Prob(F-statistic)	0.000000		

Source: E-View 10 Output (2022)

The panel regression result (PRR)result for the sampled health firm as presented in table 5 above showed that there is a negative relationship between board size and discretionary accruals as explained by a coefficient value of -0.9706 and a t-Statistic of -0.390 with a corresponding P value of 0.6941. This revealed that a one unit increase in board size lead to 0.9706 units decrease in discretionary accruals, more also board frequency meeting (BFM) of the sampled health firms during the study period has a positive relationship with discretionary accruals as explained by the coefficient of 8.6160 and a t-Statistic of 2.925 with a corresponding P-Value of 0.0046. The result implies that board frequency meeting is not able to constrain but rather increase earnings management practices of the firms.However, respective probability values, the parameter estimate for BZ is not statistically significant, given that the individual probability is 0.6941which is greater than 5%, while that of BFM is statistically significant, given that the individual probability is 0.0046 which is less than 5%. However, when taken collectively, the regressors

(BZ and BFM) against the regressed (DACC), the value of F-statistic is 7.6396and the value of the probability of F-statistic is 0.0000. This result implies that the overall regression is both positive and statistically significant at 5%.

Discussion of Findings

This study examined effect of board attribute on earnings management of listed health firms (HFs) in Nigeria. Specifically, this study sought to determine the effect of board size and board frequency meeting on earnings management of listed HFs in Nigeria. Therefore, the findings of this study is on the basis of formulated hypotheses, models and analysis carried out. This study found that generally, board attribute measured as board size and board frequency meeting significantly affect earnings management of listed HFs in Nigeria. However, the findings from this study are compared with that of previous studies in subsequent paragraphs.

Firstly, assessment of effect of board attribute (proxy with board size) on earnings management (proxy with discretionary accruals) of listed HFs in Nigeria revealed that a negative significant effect of board size on discretionary accruals of listed HFs in Nigeria, The findings are in agreement with the findings of Akinleye, Olarewaju&Fajuyagbe (2019) who documented evidence of a negative association between board size and earnings management of firms. The result however, disagrees with those of Umar & Sani (2020) who documented a positive relationship between board size and earnings management of firms. Secondly, investigation on effect of board frequency meeting on discretionary accruals of listed HFs in Nigeria revealed that board frequency meeting has positive and significantly effect on discretionary accruals of listed HFs in Nigeria. The result agrees to the findings of Imoleayo, Eddy &Olamide (2016) who found a positive association between board frequency meeting and earnings management of firms. The result however, contradicts the findings of Hussaini&Gugong(2015) who documented a negative relationship between board frequency meeting and earnings management of firms.

CONCLUSION AND RECOMMENDATIONS

The study was basically undertaken to examine the effect of board attribute on earnings management of listed health firms in Nigeria from 2011-2020 in Nigeria. The board attribute and variables have a significant effect on the earning management in Nigeria which has caused a reduction in the earning management. Board of directors characteristics particularly inside directors were found to be important monitoring and control device for deterring managers' opportunistic behaviour of list health firm in Nigeria. The study confirms the importance of corporate board meetings in enhancing the monitoring function of Board of Directors. The significant positive effect of Board Frequency Meetings on Earnings Management was an indication that more frequency of Board Meetings reduces Earnings Management of selected quoted financial firms in Nigeria. This is possible when board members meet frequently to discharge their duties in accordance with shareholders' interest. Therefore, the study conclude that firms with board of directors' meetings that are more frequent are associated with low earnings management.
Based on the findings of this study and the conclusion made, the following recommendations are made to reduce earnings management in health firm in Nigeria:

i. The study recommend that the board size of listed health firms in Nigeria should be increased and also add more non-executive directors so that they can pay more attention in monitoring management to avoid earning manipulation.
ii. The study recommends that SEC should encourage adherence to at least the minimum requirement (four times in a financial year) by making it mandatory to hold meetings at least four times in a year. The SEC should encourage more frequent meetings by Board of Directors

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Effect of Risk Management on the Financial Performance of Listed Consumer Goods Firms in Nigeria

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Abstract

The inability of the consumer goods industry to manage their risk and capital on all valuable investment opportunities make it impossible for them to meet up with their obligation to shareholders. Thus, the study examined the effect of risk management on the performance of listed consumer goods firms in Nigeria.Longitudinal panel research design was adopted in this study. The population of the study consists of all the twenty-seven (27) listed consumer goods firms on the Nigeria Stock Exchange as at 31st December 2021. In order to arrive at the sample size, the purposeful sampling technique was employed. As a result of the criterion ten (10) firms meet the requirement to form the sample size of the study. The study ranges from 2012 to 2021 a period of ten years. The secondary data adopted in this study were gathered from financial statements published on the Nigeria Exchange Group Plc and the individual company's financial statements. The study employed descriptive statistics and panel regression with the help of STATA version 13. The study found that operational risk (OR) and liquidity risk (LR) has no significant effect on financial performance of listed consumer goods firm in Nigeria. The researcher concludes that risk management indicators used doesn't have significant effect on financial performance indicator of listed consumer goods firms in Nigeria. The study recommends that the CBN and other regulatory bodies should encourage risk identification, assessment, measurement and control strategies to avoid financial crisis and also improve on consumer goods firm's performance in Nigeria.

Keywords: Risk Management, Operational Risk, Liquidity Risk, Return on Assets, Financial Performance and Consumer Goods.

INTRODUCTION

Risks are uncertainties which affect a company's ability to achieve its objectives and may result in many interdependent outcomes either negatively or positively (Yinka, Taibat& Bamidele, 2018). Some risks are necessarily encountered in order to take advantage of strategic opportunities and also, risks that impede success must be mitigated. Antonius (2015) posits that increased attention is being placed on the subject of risk management. Therefore, uncertainties have inevitably shifted organizations' attention towards a new paradigm from a "silo-based perspective" to a more "holistically risk management": hence, the evolution of Enterprise Risk Management (Connair, 2013). The Nigeria business environment is examined to be unfriendly with reference to uncertainties in political regimes, cyber security risks, the demographic structure, the economic situation, falling oil and gas prices and geopolitical conflicts. In view of this, management of companies cannot afford to manage risks casually, especially in this era of constantly changing innovation and technological developments. Consequently, Enterprise Risk Management (ERM) is adopted as a strategic tool structured to help management to respond to impending risks and management uncertainties using an integrated and all-inclusive approach. According to George and Anthony (2013), enterprise risk management is linked to corporate governance so that it can assist organizations to better understand, improve and assess risk in an appropriate manner. In the year 2017, there has been an appreciable attention on enterprise risk management as a strategic tool for effective corporate governance. Nigerian government, through its capital market regulators introduced code of corporate governance where risk management was clearly stated and viewed as one of the principal responsibilities of management. Management is required to recognise principal risks of all aspects of the business, define their company's risk policy, risk appetite, risk limits and form an opinion on the efficacy of the entire risk management process.

Risk management links to conformity which leads to performance. Performance leads to sustainable profitability and growth. Hence, there is a direct linkage between Risk Management and performance

(Ugwuanyi & Imo, 2012). Profit is a major way to measure financial performance of a company. Profit is the difference between revenues and expenses over some time usually one year, and it is regarded as the final output of a company's operation. Profit maximization is one of the objectives of any business venture is to maximize profit, which determines the short-term survival (Mbu-Ogar, Effiong & Abang, 2017). Profit is vital, but management decisions should not only be profit-oriented at the detriment of wealth maximization. A company without sufficient profit would have no future. In this study, financial performance is in terms of return on assets, return on equity and return on sales (Effiong, Akpan & Oti. 2012). The inability of the consumer goods industry to manage their risk and capital on all valuable investment opportunities make it impossible for them to meet up with their obligation to shareholders. Given the controversy on whether general or specialized knowledge is required for improved performance, this study examined the effect of risk management using return on assets, return of equity and return on sales as proxy of performance. The methodology adopted by this study distinguishes it from earlier studies as it was able to test for panel effect in the data series and whether the existence of it is fixed or random. Without testing for this and selecting the appropriate regression analysis, the result of the findings could be misleading or porous. Besides, the study is an extension of earlier ones as it covers the period up to 2020. No study on the consumer goods firms has covered up to this period. Therefore, it is against this background that this study seeks to determine the extent to which risk management affects firm performance in the consumer goods industries in Nigeria. The major hypothesis underling this study is stated thus:

Ho_1: Operational risk has no significant effect on return on assets (ROA) of consumer goods sector in Nigeria

Ho_2: Liquidity riskhas no significant relationship with return on assets (ROA) of consumer goods sector in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Risk Management

Risk can be described as the potential result of an organization's dangerous acts that have not been removed (Mwangi, 2014). As an effect of unregulated risks, it can even be used more frequently as future uncertainties. If the hazards require management skill sets, a different kind of risk can result in the same situation (Mwangi, 2014). The loss can be taken into account in many respects. This could be the firm's direct loss, or it can be the firm tragedy and a company loss of assets. Risk management consist of a set of well-developed measures with a key purpose to recognize, resolve and remove risk item before they are lethal to the organizational profitability.

Operational Risk

Operational risk is the risk of loss resulting from ineffective or failed internal processes, people, systems, or external events that can disrupt the flow of business operations. The losses can be directly or indirectly financial (Luy 2010). For example, a poorly trained employee may lose a sales opportunity, or indirectly a company's reputation can suffer from poor customer service. Operational risk can refer to both the risk in operating an organization and the processes management uses when implementing, training, and enforcing policies (Luy 2010). Operational risk can be viewed as part of a chain reaction: overlooked issues and control failures, whether small or big lead to greater risk materialization, which may result in an organizational failure that can harm a company's bottom line and reputation. While operational risk management is considered a subset of enterprise risk management, it excludes strategic, reputational, and financial risk. Operational risk as one of the explanatory variables in this study is proxied by the cost to income ratio which is operating expenses as a proportion of gross earnings (Luy 2010)

Liquidity Risk

This is referred to as investment marketability and if it can be sold or bought quickly is enough to meet debt obligations. Liquidity risk is equally defined as the risk of a finance crisis, according to Adeusi (2013), such as an unexpected occurrence in form of a major charge off, lack of confidence or may be crisis in the nation such as a crisis of life. Risk management here focuses on liquidity services and the composition of portfolios. This study used total deposit to loans as a proxy for liquidity (Adeusi, 2013). The liquidity and survival of companies in the consumer goods industry are very critical, since their products are for direct consumption, and are required across all stakeholders' groups. Consequent upon this, there could be high interest from participating stakeholders, especially shareholders whose capital constitutes a major source of funding, and as such expect a high return from their investment. Considering the demand for dividends and interest from equity and debt holders, and the intense competition in the industry, companies strive more to ensure that adequate liquidity is maintained so as to facilitate the discharge of obligations. The problem now is more on how to select the best alternative or position at which the company can manage its assets for the realization of corporate objectives of wealth creation for stakeholders' satisfaction because the capital acquired from different sources has a diverse influence on the level of profitability.

Financial Performance

Financial performance is a measure of how efficient a firm uses its assets to generate revenue from its operating activities. It can be said to be a term that is used to measure the financial health and growth of a firm over a period of time (Dsunday&Ejabu (2020). It can also be used to compare different firms in the same industry. There are different measures of financial performance and since there are many stakeholders in a company, each group has its own interest in tracking the financial performance of that company. The trade creditors will be interested in the liquidity of the company, the bond holders will be interested in the solvency of the company, the shareholders will be interested knowing how well their investment will yield return and the management will be interested in knowing how well the firm perform in the market (Aamir & Sajid 2012). Financial performance is commonly used as an indicator of a firm's financial health over a given period of time. The financial performance of a firm can be defined or measured in various different ways including profitability, gauge return, market share growth, return on investment, return on equity and liquidity. Financial performance was measured by the development of revenues and profits (Magara, Aming& Momanyi, 2015). In order to assess the financial performance of consumer goods in Nigeria, this analysis employed return on assets (ROA)

Return on Assets (ROA)

In the management literature for accounting-based metrics, return on asset is also a metric of performance frequently used (Weir & Laing 2001). It is a metric that assesses the efficacy of the assets used (Bonn, Yoshikawa & Phan 2004) and demonstrates to investors the earnings produced by the company from its capital asset expenditure (Epps &Cereola 2008). Effective utilization of the funds of a corporation is better expressed by the return rate on its funds. Since managers are responsible for the business activity and utilization of the assets of the organization, return on assets is a metric that helps users to determine how well the corporate governance structure of a company performs in protecting and encouraging the management performance of the company (Epps &Cereola 2008). Oki (2015), Matanda, Oyuji and Lisiolo (2015), Tukur and Abubakar (2014) and Bilal, Muhammad, Muhammad, Hafiz and Arshad (2013) have successfully used asset returns.

Empirical Review

Banjo and Oloyede (2021) examined risk management strategies and the financial performance of Nigerian manufacturing firms. The objective of this study is to directly connect risk management strategies used by Nigerian manufacturing companies to financial performance. The cross-sectional

research design was used in the study, along with a quantitative research strategy. In order to analyze the data gathered, the study used descriptive and inferential tools. To test the hypotheses, the regression analysis was used at the 0.05 or 5% level of significance. This study found that risk awareness has a significant impact on manufacturing company performance, and risk management practices improve manufacturing company performance substantially. Arising from the findings of this study, the study concludes that risk management has a significant effect on the Performance of manufacturing companies. The study recommended that management of manufacturing industry should ensure that their risk awareness is efficient and effective because risk awareness affect performance of manufacturing companies. In order to ensure increase in performance of Manufacturing industry, management of manufacturing companies should ensure that effective risk management practice such as prompt risk identification, risk assessment, and efficient risk Control/Reduction system in order to enhance the performance of manufacturing companies. Ishaq, Abir and Khadra (2021) analyze the impact of liquidity risk management on the financial performance of selected conventional banks in Saudi Arabia for the period of 2002-2019. Liquidity risk is measured with the loan to deposit ratio (LTD) and cash to deposit ratio (CTD). Financial performance is measured by the Return on Equity (ROE). Equity to total asset ratio (ETA) is used as the control variable. The study uses the panel data method (Pool, Fixed-effects and Random-effects) for testing the study hypothesis. This research presents several findings. The loan to deposit ratio has a negative effect on the financial performance of Saudi Arabian banks. The results also revealed that the cash to deposit ratio negatively affects the banks' financial performance. The study concludes that liquidity risk has a significant negative impact on the financial performance measured by Saudi Arabian banks. The study recommended that bank should take advantage of the excess liquidity available during granting loans and increase its investment. Saudi Arabian banks must invest the excess liquidity to increase the banks' profitability. Saudi Arabian banks also need to adopt creative policies to manage their liquidity efficiently for avoiding risks.

Nurudeen, Enebi and Kanwai (2020) the study examined the impact of board characteristics and risk management on financial performance of listed insurance firms in Nigeria for the period of 2012-2017. The study adopted correlational research design. The study used data extracted from annual reports of listed insurance firms in Nigeria. The study was anchored on the risk management theory and resources dependence theory to establish conceptual relationship between the variable. The population of the study comprised of the 30 listed insurance firms in Nigeria and 26 adjusted populations was gotten based on availability of data. The data collected were analyzed with the aid of paneled regression. The findings revealed that solvency risk and underwriting risk have negative and significant relationship with financial performance of listed insurance firms. Based on the findings, the study concludes that there is negative and significant relationship between solvency risk and underwriting risk. However, positive relationship between board size, board independence and financial performance is not significant. The study recommends that Insurance firms should offer adequate diversification of insurance policy portfolio to have better premium earning that can compensate other loss when it occurred. Hence, insurance companies should give due attention on these areas to reduce the effect of underwriting risk for their performance and should also strive to attract more customers and boost their income through provision of enhanced estimation technique on insurance policy premium price to maximize their net premium earning and net asset. Since the country is growing and transforming into the age of industry with the existing paid-up capital, it will be likely for insurance companies to face solvency risk.

Akporien and Nsima (2020) examines the effect of credit policy management on financial performance of listed consumer goods companies in Nigeria. The study adopted the ex post facto research design and used content analysis of corporate financial statements to extract relevant data from sampled firms for the period 2016 to 2019. The population of the study consisted of all listed consumer goods companies in Nigeria. Findings of the study indicate that cash conversion cycle has a negative but not significant association with financial performance. The study further revealed that average collection period has a positive and significant association with financial performance while debt equity ratio has a positive but

insignificant relationship with financial performance. The study concludes that good credit management policy enhances financial performance of listed consumer goods companies in Nigeria and recommends that companies particularly the consumer goods companies should establish credit management policies that clearly outline the management's view of organization priorities on profitability. In line with the findings of this study, it recommended that companies particularly the consumer goods companies should establish credit management policies that clearly outline the management's view of organization priorities on profitability. The credit policies should be continuously updated to reflect changes in the economic outlook of the customers to ascertain their adherence to payment. Augustin, Wilson and Meshack (2020) examined the effect of market risks on the financial performance of oil and gas firms in Nigeria.This study has chosen to investigate one of the components of the risks (market risk) and to ascertain how the risks affect the activities of firms in Nigeria. Four hypotheses were formulated in line with the objectives of the study. The study employed causal research design and used secondary data. The research covers the twelve (12) firms listed under Oil and Gas sector on the Nigerian Stock Exchange. Secondary data were collected from Central Bank of Nigeria Statistical Bulletin and the financial statements of the firms which spanned from 2014 to 2018. The data were analysed with descriptive statistics, correlation and multiple regression analysis. The results therefore indicate that exchange rate has significant effect on both ROA and ROE of Oil and Gas firms. Additionally, interest rate has significant effect on ROE and insignificant effect on ROA. More results show that commodity price change has no significant effect on both ROA and ROE, also equity price change has no significant effect on ROA and ROE of firms in Oil and Gas sector in Nigeria. The study concludes that market risks really have a dominant role in determining the financial performance of Oil and Gas sector in Nigeria. The study recommends among other things that the firms should adopt the use of hedging to control exchange rate changes and government should maintain a low interest rate that will aid firms increase their profitability.

In the works of Chukwunulu, Ezeabasili and Igbodika (2019), the contingent variables were two bank performance metrics (ROE and ROA), the independent variables on the other hand were unsystematic risk control mechanisms, including credit risk, operating risk, liquidity risk and capital adequacy risk. NDIC annual statement was collected from the data for the analysis covering 23yrs from 1994 to 2016. The SPSS was used to do regression analysis of OLS. VIF and Durbin Watson statistical results for multicolinearity and autocorrelation demonstrated the suitability of the models and the reliability of the results, respectively. The coefficient of determination found that 41% and 23% of improvements in ROE and ROA were clarified by RM variables. In addition, credit risk has a significant negative impact on ROE and a negative influence on ROA; management of liquidity does not have a significant impact on bank performance; operational risk does not have a significant impact on bank performance in Nigeria; while capital adequacy has a significant positive effect on ROE but a negative impact on return on ROE. The study concluded that the practice of RM in Nigerian banks is weak. The researcher suggested, among other items, that the CBN should strive to implement risk recognition, estimation, evaluation and control mechanisms in accordance with other global best practices to deter financial crises and also enhance the efficiency of commercial banks.

Theoretical Review

Modern Portfolio Theory (MPT)

The hypothesis of Modern Portfolio Theory (MPT) is a speculation set forth by Harry Markowitz in his paper. The hypothesis was distributed in 1952 by the Journal of Finance. The venture hypothesis depended on the possibility that risks disinclined financial specialists in the business can build portfolios to expand expected stock returns based on the level of market risks in a speculation, understanding that risks is an inborn and huge piece of higher reward in venture. The hypothesis came to be among the most critical and noteworthy financial speculations in the realm of fund and venture. The hypothesis is additionally alluded to as portfolio hypothesis and proposes that it is workable for financial specialists to build a proficient bleeding edge of ideal portfolios, which offers the most extreme and conceivable expected returns for a particular given level of risk. It encourages and recommends that, for speculators it

is not sufficiently just to center at the normal risks and stock return of one particular stock. By putting resources into numerous stocks, a financial specialist can win in case of broadening, by diminishing the risks in the portfolio given. 'This hypothesis consequently tries to measure the advantages of enhancement.

For most investors, the risk part is that any return from an investment might be lower than the expected returns or put in other words, the variations from the expected stock returns. According to the theory, each stock has its own deviation from the stock mean. This standard deviation from the mean is called risk, (Markowitz, 1952); cited in the work of Charles Matuku (2016). The hypothesis likewise clarifies on capital assets pricing model (CAPM). As per CAPM, every single sane financial specialist ought to put the market portfolio, utilized or deleveraged with positions in the risk-free resource. Notwithstanding this, CAPM likewise thought of beta which relates an advantage's normal return. Portfolio hypothesis in this way gives a plain setting for comprehension the connections results of orderly risks and rewards. It has extensively formed how monetary institutional portfolios are overseen and persuaded the utilization of dishonorable and aloof speculation methods in the commercial banks. The comprehension of portfolio hypothesis and CAPM is utilized as a part of money related risks administration systems. In connection to this hypothesis, Commercial banks have a commitment to investigate all venture exercises by figuring the normal returns.

Moral Hazard Theory

This theory has been widely used in Economics world. The theory argues that one party takes more risks because other parties elsewhere bear the costs for those risks. This may occur where the actions of someone may change to the detriment of another party participating in an active role in economic or financial transactions (Krugman, 2009). The theory explains that, moral hazard occurs under a situation of information asymmetry where party taking the risk in a financial transaction knows more about the transactions, its intentions than the other party paying for the problems as a result of the risk incurred in the transaction Economist Krugman (2009) described moral hazard as a situation where one party comes up with decisions about how and when to take the risks because another party will bear the costs in the risks. The theory can be seen/perceived in a standard case where an agency setting in a bank or Insurance companies. The company has less information about the principal and the insured person can serve as the agent. In the Automobile insurance companies, the theory applies to for drivers; the theory creates an additional incentive for risky and careless driving since other parties will cater a part of the costs of the agent's careless driving and the accidents caused. In addition, a similar case is in the presence of unemployment insurance cover, an unemployed people have an additional incentive reluctantly look for employment because other parties will cater for his expenses. This study will be underpinning on this theory.

METHODOLOGY

Longitudinal panel research design was adopted in this study as it provides the support needed for collection of information on the existing nature of the phenomenon under study so as to provide and describe the nature of the relationship between the study variables. The population of the study consists of all the twenty-seven (27) listed consumer goods firms on the Nigeria Stock Exchange as at 31st December 2021. In order to arrive at the sample size, the purposeful sampling technique was employed. As a result of the above criterion ten (10) firms meet the requirement to form the sample size of the study. The secondary data adopted in this study will be gathered from financial statements published on the Exchange Group Plc and the individual company's financial statements. The data for this research will consist of annual observations between 2012 and 2021 of ten years (10) Nigerian consumer goods firms. Longitudinal panel data estimation methodology is implemented as the data provides cross sectional data over a period of time. The secondary data which will be collected for the dependent and independent variables will be analyzed using descriptive statisticsand panel regression using statistical package STATA version 13. The descriptive statistics will detect whether there are errors in the data set by

determining mean, maximum and minimum values for each of the variable measures. Pearson correlation analysis will test the association among the variables, while panel regression will examine the effect of the independent variables on the dependent variable. Panel regression analysis for fixed effect model and random effect model will also be conducted. Thereafter, Hausman specification test to determine whether the fixed effect or random effect is most appropriate for the study. This research adopted approach of Naïmy (2011) to determine performance indicators. The model takes the form:

Model One

$$ROA = \beta_0 + \beta_1 OR + \beta_2 LR + \beta_3 FS + e_{it} \quad \text{.........} \quad (i)$$

Where;
ROA = Return on Assets
OR = Operational Risk
LR = Liquidity Risk
FS = Firm Size

Definition of Variables

S/N	PROXY	TYPE	MEASUREMENT
	Variable of Interest		
1.	Return on Assets (ROA)	Dependent	Measured by dividing profit after tax over total assets
	Explanatory Variables		
2.	Operational risk	Independent	Measured by the cost to income ratio which is operating expenses as a proportion of gross earnings
3.	Liquidity risk	Independent	Measured by dividing current assets by current liability.
4.	Firm Size	Control	Measure by natural log of total assets

Source: *Author's compilation (2021)*

RESULT AND DISCUSSION

Descriptive Statistics

The descriptive statistics of the dataset from the sampled consumer goods companies are presented in Table 4.1 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

```
. summarize ROA OR LR FS
```

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	100	4.314183	11.71664	-44.16	42.85
OR	100	1.153353	.1736321	.6853027	1.724448
LR	100	.595772	.3529793	.2564	3.5545
FS	100	7.5011	.8183463	5.25	8.68

Sources: STATA 13 Output

The Table above shows the detail account of the descriptive statistics for the explained and explanatory variables. Return on assets (ROA) which is the dependent variable of the study has a minimum value of -

44.16 and a maximum value of 42.85. The average value of the ROA is 4.314183which represent 4%, with standard deviation of 11.71664, signifying that the data deviate from the mean value by 12%. This implies that there is ano variation across the sample firms because the standard deviation is not close to the mean.

The result also indicates that operating risk (OR) has minimum and maximum value of 0.68 and 1.72 respectively. The average value of the liquidity risk (LR) is 0.595772 and a standard deviation of 0.3529793. The high average is an indication that more than 59% of the firm are liable to liquidity risk. Firm size as a control variable has an average of 7.5011 and a standard deviation of 0.8183463showing large variations across the sample firms.

Table 1: Correlation Matrix of the Study Variables

```
. spearman ROA OR LR FS, star(0.05)
(obs=100)
```

	ROA	OR	LR	FS
ROA	1.0000			
OR	0.0849	1.0000		
LR	0.1623	0.2863*	1.0000	
FS	0.1695	0.3328*	0.1144	1.0000

Sources: STATA 13 Output

Table 2 shows the correlation of the variables under study which are return on assets (ROA) and risk management variables (operating risk and liquidity risk) in the listed consumer goods firms in Nigeria. The result shows that there is a significant positive relationship between return on assets (ROA) and liquidity risk (LR) as shown by the correlation coefficient of 0.1623, significant at 0.01 level of significance. The result implies that return on assets increases with an increase in the services of liquidity risk. Considering the control variables, the result shows a positive relationship between return on assets and firm size (FS)as shown by the correlation coefficient of 0.1695.

Test of Research Hypothesis

H_{01}. Audit tenure have no significant effects on earnings quality of listed consumer goods firm in Nigeria. In this section, the regression results of audit firm attribute variables and earnings quality are presented and analyzed. 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.

Hausman Specification Test

Ho_1: Operational risk has no significant effect on return on assets (ROA) of consumer goods sector in Nigeria

Ho_2: Liquidity riskhas no significant relationship with return on assets (ROA) of consumer goods sector in Nigeria.

In this section, the regression results of risk management variables and financial perfromance are presented and analyzed. 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.

Table 3: Hausman Specification Test

```
. hausman fe re
```

	Coefficients (b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
OR	-4.734318	-3.643512	-1.090806	1.922029
LR	-.7650137	-.105183	-.6598307	.4402806
FS	4.37482	4.134495	.2403252	1.177234

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

    Test:  Ho:  difference in coefficients not systematic

                  chi2(3) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =        3.18
                Prob>chi2 =      0.3643
```

Sources: STATA 13 Output

Hausman specification test was conducted to choose the most appropriate model for the study, the test suggests that randomeffects regression Model is the most appropriate model for the study as evidenced by the chi2 of 3.18 and p-value (0.3643) greater than 0.05 which isinsignificant. Following the robustness of the results, the random effect regression estimators were used for the test of hypotheses formulated in this study.

Table 4: Random Effect Regression Result

```
. xtreg ROA OR LR FS, re

Random-effects GLS regression                   Number of obs      =       100
Group variable: FIRMS                           Number of groups   =        10

R-sq:  within  = 0.0527                         Obs per group: min =        10
       between = 0.0687                                        avg =      10.0
       overall = 0.0558                                        max =        10

                                                Wald chi2(3)       =      5.35
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.1482
```

ROA	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
OR	-3.643512	6.681154	-0.55	0.586	-16.73833	9.451309
LR	-.105183	2.986228	-0.04	0.972	-5.958082	5.747716
FS	4.134495	1.835553	2.25	0.024	.5368776	7.732112
_cons	-22.43416	15.53405	-1.44	0.149	-52.88033	8.012021
sigma_u	6.4940672					
sigma_e	9.7159806					
rho	.30879347	(fraction of variance due to u_i)				

Sources: STATA 13 Output

From table 4 above, using the random effect model, the coefficient of multiple determinations (R^2) is 0.0527. This indicates that about 5% of the total variations in return on assets (ROA) is explained by the variations in the independent variables (OR and LR), while the remaining 95% of the variation in the model is captured by the error term. This indicates that the line of best fit is not 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. Having carried out a standard error test on the parameters estimated and as also indicated by their respective probability

values, the parameter estimate for operating risk (OR)and liquidity risk (LR) are statistically insignificant, given that the individual probabilities are0.586 and 0.972 respectively. When taken collectively the value of F-statistics is 5.35. The value of the probability is 0.1482. This result implies that the overall regression is both positive and statistically insignificant at 5%. The coefficient of operating risk (OR) is -3.64, while that of liquidity risk(LR) is -0.11. This shows that ROA isnegatively related to operating risk and liquidity risk such that a unit increase in operating risk (OR) and liquidity risk (LR) will have a substantial negative effect on ROA respectively.But looking at the individual probabilities of the control variable firm size (FS) it was found to be statistically significant (0.024) with a positive coefficient of (4.13). Consequently, when taken collectively and based on the F-statistics value of 5.35 and the probability value of 0.1482, which is greater than 0.05, the two null hypotheses of the study are hereby accepted.

Discussion of Findings

The study found that operational risk (OR) has no significant effect on financial performance of listed consumer goods firm in Nigeria. operational risk threatens firm's financial viability and long-term sustainability. However, the result support the finding ofChukwunulu, Ezeabasili and Igbodika (2019) who found out that operational risk does not have a significant impact on bank performance in Nigeria. The study found that liquidity risk (LR) has negative and insignificant effect on financial performance of listed consumer goods firms in Nigeria. This could be due to CBN policy, the statutory liquidity requirement in Nigeria stood at thirty percent which all consumer goods firms were to strictly adhere to. However, this research contradicts the study of Ishaq, Abir and Khadra (2021) who found that liquidity risk has a significant negative impact on the financial performance measured by Saudi Arabian banks. On the other hand, the study is in line with the study of Ugwuanyi and Imo (2012). From the table also firm size (FS) has positive but significant effect on financial performance of listed consumer goods firms in Nigeria.This contradicts with the a priori expectation that larger firms have a lot of pressure by regulators to ensure credibility in their financial report and that makes it difficult for them to manage risk. However, it concurs the postulate of Jensen and Meckling (1976) which says that when the firm's size increases, the agency costs are expected to increase and this allows for greater managerial discretion and opportunism.

CONCLUSION AND RECOMMENDATIONS

In line with the research hypothesis of this study, the following conclusion were made;the null hypothesis of hypothesis one to the study is accepted. The study concluded that liquidity risk has no significant effect on financial performance of listed consumer goods firms in Nigeria. In line with the research question, objective and research hypothesis of this study, the following conclusion were made;the null hypothesis of hypothesis one to the study is rejected. The study also found out that liquidity risk management has no significant relationship with return on assets of listed consumer goods. This confirms that the lower the ability of consumer firms to withstand liquidity risk in the short term and the risk from the presence of large non-liquid assets, the lower the performance. At the end, the researcher concludes that listed consumer goods firms in Nigeria can raise the level of performance by improving their ability to face risk from liquidity shocks, risk from high demand for short-term liquidity and the risk from the presence of the large non-liquid assets. In line with the findings and the conclusions of this study, the following recommendations are made:

i. Firms managers should apply more of a quick snapshot of a firm's operational risk, rather than a figure that can be worked over for a long period of time.
ii. The study recommends that consumer goods firms should establish the required cash in each product segment and maintain the optional level which will help in reducing the cash balance level and increase their customer deposit base through making the product accessible to more customers especially the low-income earners
iii. The study recommends that the CBN and other regulatory bodies should encourage risk identification, assessment, measurement and control strategies to avoid financial crisis and also improve on consumer goods firm's performance in Nigeria.

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Effect of Electronic Transactions on Public Sector Performance in Nigeria

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Abstract

Reinvigorating the Public service with emphasis on critical institutional changes, restoring professionalism and client focus, and delivering effective basic services by 2017 coupled with transforming the public service into a value based, strong, well-performing institution by 2020, attaining a world -class levels of service delivery in the public service by 2025, the need for electronic payment system to meet up global challenges cannot be overemphasized. In addition, the various challenges or problems encountered in effective managementofpublic funds in the public sector, led tothe introduction of electronic payment system or e -payment. This new wave therefore has created anew financial need which cannot be effectively handled by the traditional paymentsystem.It is incumbent to posit here that, the introduction of the e- system is not without some challenges and prospects, such as frequentconnectivity failure and power interruption. The study therefore recommends that the governmentshould systematically and gradually expand the necessary infrastructure by promoting thedevelopment of necessary technologies, recruiting IT experts and embarking onexpansion of high-speed information network and continuous sensitization of the users and the citizenry in general. This will foster a strong foundation for efficient and effective e-governance in the new trend in the global economy.

Keywords: Electronic Transactions, Information Technology, Public Sector, Performance

INTRODUCTION

The advent of multiple computer applications and technology has changed the nature of financial services. The tremendous advances in technology and adoption of information technology had brought in a paradigm shift in the public sector operations all over the world. For the public sector, technology has emerged as a strategic innovation for achieving higher efficiency, control of operations, productivity and effectiveness. Given the importance of electronic payment system in an economy, Nigeria, in 1996, introduced the scheme with the approval of the central bank of Nigeria (CBN) under the auspices of African Development Bank consulting group (ADBCG). As significantparticipants in the market place, financial institutions are becoming more aggressive in adopting electronic banking capabilities. This makes the advent of the electronic banking to have a significant effect on publicservices with the help of which, the public can make transactions anytime and anywhere as long as Internet access is available. The world is witnessing information and technological revolution, which has affected every aspect of people's life including the public sector. Such changes and developments have affected on service quality and public activities. Electronic banking, popularly referred to as e-banking represents a variety of different services, ranging from the common Automated Teller Machine (ATM) services and direct deposit(dp) to Automatic Bill Payment (ABP), Electronic Transfer of Funds (EFT) (Kolodinsky, Jim, Hogarth and Hilgert, 2004). Right from the Military era in the Nigerian political history, it is inherent that, all successive administration has admitted that corruption has eaten deep into the fabric ofNigeria economy to the point that there is decay in various government ministries andparastatals.

In view of the above assertion, therefore to finding a lasting solution to this menace, government has come up with various measures andreforms to curb the trend and to ensure that the available resources to her disposal is notsquandered or misused in without proper account. The determination of previous administration todeliver good governance through a reformed public sector brought about the birth of E-payment system which was aimed at executing and effectively managing all financialtransaction being made by the government electronically. It is imperative to state here that, the financial systems all over

the world is changing rapidly, and the need for governmentpayment system to move closer towards electronic payment that is convenient, fast andpromote easy business transaction could not have come at much better time. The electronic payment system introduced by the government could make an impacttowards the reduction of graft in public service, since it has the potential to checkcorruption and waste in Ministries, parastatals and agencies of government. It becomes imperativeto migrate from existing manual payment system to automation of government fiscaloperatives. The system if efficiently implemented would reduce the amount of currencyoutside the banking system for the advent of effective monetary policy managementthat would bring about stability in prices and interest rate in the country.It is also a known fact that for any economy to achieve sustainable growth in its economythere is need to invest heavily on basic infrastructure such as roads, hospital, schools, railways, industries and electricity. Effective performance of this infrastructural base will catalyze the rapid development and transformation of the nation from a developingto a middle-income economy. When goods and services are procured and paid for via asystem or procedure, that do not add value to existing economic infrastructure there isthe certainty of witnessing economic stagnation or even retardation. Where financialresources that should be used to update existing social and economic infrastructure arebeing wasted amidst a growing population, the economic wellbeing of the population ofthat nation will suffer setbacks. Efficient financial management cannot be achieved inthe public sector without the optimization of all resources including material, humanand financial for the attainment of budgetary goals. This study will therefore assess the impact of e-transactionin reducing corruption,which has been a major setback to the growth and development of the Nigeria economy. It willalso look at the increasing operational cost, decreased operational efficiency, increasingcost of cash transaction in the economy holistically.

LITERATURE REVIEW

In a simple form, it is important to state that, the concept of electronic governance (e-governance) connotes the use of internettechnology as a platform for exchanging information, providing services andtransaction for its citizens. Okereke (2006) defines e-government as a "diffusedneologism used to refer to the use of information and communication technology toprovide and improve government services, transaction and interaction with citizens.businesses and other arms of government". Electronic payment has been described as a subset of e-governance which involves theapplication of electronic means to the interaction between government and citizens, andgovernment and businesses. It is a form of direct payment and banking without physicalappearance at the bank or the use of physical cash. Ahmed (2009) defines e-payment asan electronic method of transferring funds rather than the usual way of carrying largesums of money that may lead to misappropriation. It is also a system that sought to eliminate problems associated with physical cash distribution. Electronic or e-paymentsystem is permanent if properly managed by the operators and relevant governmentinstitutions. E-payment according to Obaro (2009) explained that it entails anautomated end-to-end electronic payment, which could be initiated from an office, thereby reducing workload and not increase it. Meanwhile, the Central Bank of Nigeria opined that, the electronic mode of transaction adopted by the Federal governmentwill reduce the volume of currency circulating outside the banking system adding thatthis was necessary for the advent of a more effective monetary policy management.(CBN,2009) According to the report, the introduction of the e-payment systems would drasticallyreduce money laundering and other financial crimes, like diversion andmisappropriation of public funds. In the last few years, a number of electronic payment system has been identified, Murthy(2002) is of the opinion that at least a dozen electronic payment systems are in already inuse today. Such as online credit card payment system, electronic cheque system, electronic cash system, and smart card based electronic system.

METHODOLOGY

The methodology adopted in this study is a combination of desktop study, information gathered from official documents, media commentaries and from scholarly writings on electronic payments or E-transactions and e-governance in Nigeria, and good practices drawn from other countries, Thus the approach is an exploratory research design

RESULTS AND DISCUSSION

Being an exploratory research exercise, the fundamental discussions on the issue in question are discussed along kwy sub-headings as enumerated below.

Electronic Payment/Transaction System in the Nigerian Public Sector

The challenge of transformation and the need to modernize administrative practices has become a major goal to government worldwide. For effective implementation of e-transaction, information and communication technology has to be a pre-requisite.Information and communication technology (ICTs) is an important ingredient fordevelopment and this requires government initiative to fully harness its potential. The inherent advantages in the introduction of e-transaction system in public sector cannot be overemphasized. Olekake (2009) stressed that, the new payment system will reduce thecost of minting, circulating, processing and replacement of large amount of currencynotes as well as the risk associated with movement of large amount of cash from oneplace to another. Central Bank of Nigeria (CBN) report (2009) noted that, the mode of payment adopted by thegovernment will reduce the volume of currency in circulation outside the bankingsystem. The CBN further averred that, the introduction of the e-payment or transaction systems woulddrastically reduce money laundering and other financial crimes, like diversion andmisappropriation of public funds. The strategy for -payment management in the economy will consist of sometime-bound initiatives which will focus on payment of salaries, pensions, bills, governmentcontractors, suppliers and all forms of government revenue. In addition, thebeneficiaries (contractors, suppliers, civil servant and pensioners) are expected tosupply adequate account details in order to drastically reduce reject rate in the operationof the electronic system.

Effect of Electronic Transactions on public sector performance in Nigeria

Effect can generally be seen as a condition or situation and or occurrence that happens because of a cause or combination causes or consequences of an action. In other words, it can be referred to, as any behaviour or event that can reasonably be said to have been influenced by some aspect of the project or the introduction of a policy or programme within an economy. Considerably, it is imperative to infer that, since the introduction of e-payment or transactions in the public sector of the Nigeria economy, its effect has manifested in various ways;

(i) Effects on the Central Banks and Monetary Policies

The bitcoin transaction is an unexplored zone for global central banks. From a money supplier's perspective, internationaltransaction decreased money supply from one country and increase the money supply in another country. These transactions actualized without the use of global central banks and intermediaries. The only records of the transactions are in the block chain, but the block chain does not show whether the transaction crossed national borders or not. (Kelly, 2014)

(ii) Uncontrolled or illicit movement of money;

By the use of bitcoin and other transactions, money changes its position. It becomes ''money without government'' and ''money without borders''. Users can send their money to anywhere in the world just like sending and email. In case of crises and money control, electronic payment system is becoming much more popular. It is common practice of recent to state that, the use of e-transactions by individuals, groups and organizationsglobally has come to stay than the conventional money.

(iii) Velocity of money:

Furthermore, anotherclaimis velocity of money which is supported by Quantity Theory of Money. The theory's equation is; MONEY * VELOCITY = PRICE *TRANSACTION. This theory claims that, if both the velocity of money and the real out put of an economy is constant, ceteris paribus, an increase in the money supply produces an increase in the price level, invariably indicating inflation, without any effect on the real economy (franco, 2015)

Challenges of e -payment implementation in public sector

In more advanced economies of the world, like Japan, China, Europe and America, thesystem has been operationalized several years ago and the people are savoring theadvantages inherent in the use of such technology. However, with all its enormous advantages in the economy, the e-payment is faced with challenges like public acceptability, lack of uniform platform being operated by all agencies of government. In another development, other profound challenges of e-payment is the human factor. Months after the introduction of the system, mostindividuals are still not at home with e-payment system. According to Omouigo (2010), the sharp practices among banks, as well as problem from inter-switches in effecting transferfrom one bank to another are major reasons why government is yet to reap the benefitof the e-payment system. The diversion of some of the e-payment account as well thebanks inability to quickly reconcile the accounts when the need arises was a challenge. Another possible challenge is the diversion of e-payment of taxes to accounts other thanthose designated at the bank. As noted by Osibote (2010) some of these challenges havebeen traced to problem of interconnectivity, non-uniformity of account numbers, asresult of differences in number of digits as well as lack of regulatory framework on e-payment, were other factors affecting the success of the scheme? Technology has itsown risk, such as system crash, lack of connectivity, delay due to queuing up oftransaction, internet-based attack, file corruption, system compromise due to virusattacks. Lack of technological infrastructure and issues of security, with the proper use of e-payment system, corruption which has also become a norm in government arena has been another hinge in the appropriate implementation of the e-payments or transactions in the Nigeria public service which has impede the fullimplementation of the e-payment system. Most rural areas where government Agencies are located with no access to internetfacilities might stall the smooth running of these operations.

Prospects of e-transaction system

The central Bank of Nigeria has not recorded a decrease in currency in circulation followed by an increase in the use of e-payment products, instead, it is recorded that, between 2009 and 2019, the value of currency in circulation grew by about 97.18%. As part of the on-going government reform effort to begin the implementation of anintegrated financial management information system for the public sector, which wouldfacilitate the end-to-end processing of -payment initiatives. The end-to-end paymentinitiative implies that all departments, parastatal and agencies of the government will bemaking-payment directly to the beneficiaries from the infrastructure installed in theiroffices.

The e -payment system and the financial reporting system will serve as a tool forachieving transparency in government. The system will aid in the computerization ofpubic financialmanagement processes from budget preparation and execution toaccounting and reporting, with the help of an integrated system for financialmanagement of line ministries and other public sector operations. Despite the bottleneck associated with the mode of payment, the scheme has recordedhuge success. Achinuvu (2010) maintained that, the e-payment system has helped tominimize the interaction between contractors and government officials thus eliminatingcorrupt tendencies. To ensure an uninterrupted connectivity of the system, CBN hastaken the responsibility of running the national switch in order to provide seamlessinterconnectivity for all banks. This system has also fast tracked the process of implementation of government activitiesand removal of unnecessary bottleneck and ensured that audit trails of all payment caneasily be traced to relevant accounts of individuals or companies that operate them. Byso doing, it will bring about elimination of use of cash to facilitate speedy payments forall transaction, fast tracking the implementation of government policies throughelimination of delays in government payment system. Enhance transparency andefficiency in government financial transaction among others.

Benefits of Using E-Transaction in The Nigeria Public Sector Performance

The following are possible benefits of the appropriate usage and application of the e-transaction in the Nigeria Public service performance/activities.

Better Decision- making Capabilities
Sound financial management packages can provide both short term report as well as detailed reports necessary for a long - term strategic planning.

Improved Cash Flow
Cash management is essential for all businesses including that of the government. Integrated billing, Inventory, Accounts receivable, and accounts payable whichallows for efficient and effective public service performance and to manage the valuable cash more easily. It is also imperative to incline that, better cash management provides an organization with more options for revenue-generating campaigns and long-term growth

More accurate information
It is important to opine here that, fully integrated financial or e transaction software, the users and activities of the performance in the civil service would have more information at their fingertips, would also access to more accurate information.

More Control
Integrated financial management software or e-transaction provides real time access to an establishment's critical financial information.it provides the establishment with wit greater control and the ability to more efficiently manage he various components of the entire activities.

A foundation for Growth
The right financial management or e-transaction package can create room for more expansion. This allows the establishment for additional users, increase in diverse ideas and ideologies, create more vacancies for more employees, and offering the kinds of reports and other business intelligence data.

In addition to the above benefits of e-transaction on public sector performance in Nigeria, we can confidently infer that, the following benefits also accrue to appropriate usage and application of the e-transaction system.

a) Getting quicker information on financial position of the government establishment by just pressing /touching a button
b) Ascertain with accuracy the revenue of government generated by any establishment on daily, monthly, quarterly or annual basis with ease
c) Provide detailed expenditure information to aid the management in cost control and facilitate in quick decision- making.
d) Aids in appropriate budgeting and forecasting
e) Reduce clerical and administrative overheads or bottleneck
f) It allows for critical project monitoring and variance analysis
g) Proper implementation of e-transaction in the performance of activities leads to prevention of fraud
h) Eliminate drudgery in financial planning
i) Getting timely report and financial statement after every transaction
j) Audit trail and alarm for use as security proof to deter an unauthorized user

Generally, there are various reasons which most organizations seek to indulge in information technology; amongst these are; Increased efficiency, Costs Reduction – time costs can cut into half or may be less even, Elimination of human error – can reduce the risk of error to almost nil; Reports Generation- implies that, you no longer have to wait for a whole day to get reports or results; and to know your position – that is, you are constantly aware of all the transactions being processed in the system.

Financial accountability is critical to development, not only transparency and management of public performance, but also for discipline and democratic growth of all the Developed nations that have at one time or another imbibe the concepts of accountability as a framework that guides the behaviour of people in public life. It is equally important in public and private sector organizations as these intertwined in the national economic systems.

Hence the emergence of e – transaction becomes very sacrosanct to nation building. It is indeed a shame that, many countries, particularly African countries have not embraced the essence of electronic payment to foster a more robust, disciplined, effective and efficient manner.

CONCLUSION AND RECOMMENDATION

A developing country such as Nigeria needs information technology to reduceadministrative difficulties, so as to obtain better value for internally generated revenueThe public service is complex with bureaucratic delays and corruption resulting in slowand ineffective output. The e-payment has been suggested to play a key role inenhancing government business. Over the past few years as a result of the development of IT sector, the life habits have4 changed. These changes also include methods and techniques of commercial activity. Since the introduction of trade, face to trade and forms of payments have been applied, however, the development of the electronic forms of payment, it is replaced by free agent pickup, no commission and remote shopping. It is recommended that infrastructure funding will be crucial to the smooth operation of e-payment system in the country. The government should systematically expand thenecessary infrastructure by promoting and developing technologies, recruiting ITexperts, and expanding high speed information interconnectivity network. This will foster a strong foundation for e-payment system in the public sector.

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Effect of Risk Management on the Financial Performance of Food and Beverage Industries in Nigeria

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Abstract

This paper aims to examine the effect of risk management on the performance of food and beverages company in Nigeria, in apply this, proxies were introduced (operational and liquidity risk) to examine their effect on the financial performance of food and beverages company in Nigeria. The study adopts ex-post facto and time series research design by employing the Augmented Dickey- Fuller Test (ADF) method of data analysis and co-integrated regression analysis methods were used. The study covers (10) Ten listed of food and beverages company quoted in the Nigeria Stock Exchange for the period of 2010-2021.The research findings reveal that operational risk and liquidity risk have negative relationships with the return on asset, but insignificant impacts on return on asset and also the regression also showed that operational risk and liquidity risk have no significant effect on the return on asset (ROA) within the periods under study. However, the management of the study company should ensure that the operational risk and liquidity risk are properly managed having seen that the variables have negative impact on the return on asset, also considering the negative relationship but insignificant impact of operational risk and liquidity risk on the performance of food and beverages, it is pertinent that the financial regulatory authorities concerned in the company should review the prevailing state of the company, in order to ease the financial irregularities in the company.

Keywords: Liquidity risk, Operational risk and Return on Asset (ROA)

INTRODUCTION

Food and Beverage firms in Nigerian are surrounded by uncertainties (risk), and some of those risks are operational risk, market risk, financial risk, liquidity risk, and credit risk, and so on which affected the growth and operation of such firms. Kanchu and Kumar, (2013) opined that risk as anything limiting the achievement of a certain pre-defined objectives. Some of those risks as stated above. Risk management activities operate within the overall trend of the governance structure Kurt (2009). Risk is used when referring to the possibility of an event occurring and negatively affecting the achievement of objectives, such as, employee fraud, loss of skilled manpower, breakdown of computer system. Introducing control is an integral part of risk management, risk management is the process undertaken by strategic administration to reduce risks to acceptable levels in a firm. A successful risk management program helps an organization to consider all forms of risks it might face. Risk management is a system faced by the organization for risk control. Companies often deliberately take certain risks, seeing the potential returns behind those risks Thus, all these process focus on achieving the goals of the organization in terms of portfolio management and stock market analysis.

Hanafi (2006) explained that risk can be grouped into two types of risk, pure risk and speculative risk.Pure risk is the risk that the possibility of loss exists, while speculative the possibility of a gain is absent. This paper is interested on the analysis of pure risk, using operational and liquidity risks to measures the effects on financial performance. Hanafi, (2006), Kanchu and Kumar, (2013) affirmed that pure risk is a certainty. Oyerogba and Ogunlade (2016), Ekinci (2016), and Augustine Odubuasi et.al (2020), in their studies also supported that risk management affected firm financial performance negatively. Moreover, a lot of researchers in Nigeria and beyond had actually examined and studied on the various risks that affected the smooth operations of the financial sector of the economy. The likes of Oyerogba and Ogunlade (2016) examined links between risks and financial sector in Nigeria, Ekinci (2016) the same studied in Turkey, and Muriithi, Muturi. In addition, Waweru, (2016) carried out a study

of risks and bank performance in Kenya, George Kaliti(2014) studied on effect of risk management practices on the financial performance of firms in the hospitality industry in Nairobi Kenya, where primary data were used, which were criticized based on the fact that primary data collection is subjective to individual opinion. However, nearly all the researchers in Nigeria and beyond who had worked on the risk management focused on financial sector of the economy as what they believed as the driving agent of the economy, and also, its believed to be prone to risk than any other business in the whole world. Augustine Odubuasi et.al (2020), examined effect of market risks on the financial performance of firms in Nigeria, but it only focuses on Oil and Gas sector. This study tries to fill the gap of risk management as its affect the financial performance of Food and Beverage Companies in Nigeria, and to help in adding value to the study.

In Nigeria, Food and Beverage Company is among the industries that contributing to the growth and development of Nigeria economy as it plays an important role in development of industrial sector, especially in their contribution to non- oil and gas sector. In order words, in the last five (5) years, not less than ten (10) Food and Beverage companies have shut their operations in Nigeria, due to the harsh working environment and government policies, which stifling the nation's economy and severe impact of the "COVID 19" pandemic as well as other risks. As a result of this, it's become imperative therefore to conduct a study on how risk management has influenced or affected the financial performance of food and beverages companies in Nigeria. The study covers 10 (Ten) listed of food and beverage company quoted in the Nigeria stock exchange, for a period of twelve (12) years from 2010- 2021 were selected so as to have a clearer picture of the study under review. Given the foregoing, the underlisted hypothesis are those which are germane to this study;

i. **$H0_1$:** There is no significant relationship between operational risk and the financial performance of Food and Beverage Company in Nigeria.
ii. **$H0_2$**: There is no significant relationship between liquidity risk and the financial performance of Food and Beverage Company in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Risk management

Risk management can be examined in this study, as a means or technique or process by which the management of an organization mitigates against any risk that may affect the smooth operation of an organization. It can also be expressed as a system that works proactively by examining the various risks that may happen and explaining the procedures and measures that improve the firm's ability to avoid or reduce the impact of risk processes and procedures. Risk management can also be seen as the process of identifying, assessing and controlling threat to an organization's capital and earnings. These risks stem from a variety ofsources including financial uncertainties, legal liabilities, technology issues, strategic management errors, accident and natural disasters. Also, Risk management is defined as the process of identifying, monitoring and managing potential risks in order to minimize the negative impact they may have in an organization. Examples of potential risks include security breaches, data loss, cyber attacks, system failures and natural disasters. However, several researchers and scholars have expressed their varying definitions on the Risk Management. Wenk (2005), opined that Risk Management model or ideas consists of risk valuation, and risk identification, and ranking of risks, followed by harmonized and reasonable application of resources to, observe, minimize, and control risk.(Ranong and Phuenngam, 2009), defined risk management as something that can bring benefits to all organizations, whether large or small, public or private sector.

Operational Risk

This study tries to explain operational risk as it relates to Food and Beverages Company as a situation whereby an institution suffered losses in a business as a result of possible failure in the operation of the firm, which are not associated with market or liquidity risk. Such failure in the operations are; fraud by employee, breakdown of computer, virus in computer software, litigations, loss of key staffs, product failure, error, and loss of suppliers, etc. Operational risk has been defined by many scholars and authors as: 'The risk that arise as a result of failed or ineffective internal processes, people and systems, or from external events' - Basel Committee on Banking Supervision, (2004). CIMA Official Terminology (2005), defined operational risk as the risk relates to activities carried out within an entity, arising from structure, systems, people, products or processes. However, operational risks are generally within the control and management of the organization through some risks measures that are put in place by the organization. such as internal control system, risk assessment, and management practice etc.

Liquidity Risk

Liquidity risk is the risk that a firm will not be able to meet efficiently both expected and unexpected present and future cash flow, without affecting either daily operations or the financial condition of the firm or organization. Aladdin (2020), define Liquidity Risk as risk that a firm has inadequate financial resources to meet its obligation as they fall due, or can only secure the resources at excessive cost. In that sense, the likelihood of not being liquid would suggest that there is liquidity risk. This study defines liquidity risk as a type of risk in an organization or firm whereby an organization or firm is unable to meet its financial obligation as at when due.

Financial Performance

Firm's financial performance can be measured in so many ways to determine whether the firm is making profit or loss. It's an indicator on the efficiency and effectiveness of the business. The categories of such measurements or indicators are Return on Investment (ROI), Return on Equity (ROE), Earning before interest and tax (EBIT), and the popular one is Return on Asset (ROA). ROA had been the one adopted by previous researchers on their studies, as a proxy for either dependent or independent variables such as Augustine Odubuasi, et.al (2020), Erlane (2016), Yvonne (2013), Maria and Cross (2021), Mardiana (2018), Oehmen, Josef, Olechowski, Alison; Kenley, C. Robert, and Ben-Daya, Mohamed (2014). For the purpose of this study, Return on Asset (ROA) would be used as proxy to measure the dependent variable of financial performance of Food and Beverage Company in Nigeria. Return on Asset (ROA) can be expressed in this context as the indicator to measure the profitability of the food and beverage company in relation to their financial performance.

Empirical Framework

A study carried out by Maria Omiagbo, and Cross Ogohi Daniel (2021) conducted a study on the effect of risk management on the financial performance of commercial banks in Nigeria, the study establishes the degree to which banks risk management have impacted profitability in the Nigerian banks. The study makes used of panel data regression analysis. It helps to understand the magnitude of the independent variable on dependent variables. Data collection was done using ordinary least squares regression. The findings of the study show that there is a significant and positive relationship between risk management and banks return on assets, and conclude that the efficient risk management strategy plays a key role in commercial banks financial performance in Nigeria. To this end, the study recommended that banks need to develop and design a credit strategy that ensures that in the event of defaults or bad debts they can still remain solvent. Aladdin, Saadi and Jaber, (2020) investigates the impact of risk management practices on the organizational performance in insurance companies in the Hashemite Kingdom of Jordan. In order to implement this study, data were collected from 120 managers who work in Jordanian insurance companies through questionnaire. Descriptive analysis was performed and the correlation between the variables was investigated. Data were analyzed using regression analysis and SPSS 19. The study finds that risk management practices have an impact on firm's performance; also, risk management practices

have a positive impact on organizational performance. It therefore, recommended that insurance companies should take cost-effective measures to identify risks in a timely manner and effectively mitigate risks, it also recommend that Insurance companies in Jordan should educate their employees about the importance of risk management and their practices and they must continuously evaluate risk management practices to ensure that they are still able to remain in a changing work environment. It however, concludes that in the future, collection of more data over a longer period of time to verify the validity of the current model and measuring instrument is still practicable.

Mardiana, Endah and Dinata, (2018), studied the effect of risk management on financial performance with good corporate governance as a moderation variable. Proxies by the Capital Adequacy Ratio (CAR), Operating Efficiency (BOPO), and Non Performing Loan (NPL), to the financial performance projected with Return on Assets (ROA) in Islamic Banking Companies listed on the Indonesia Stock Exchange (BEI) in the period 2011 to 2016. The data is obtained from the Financial Statements of Sharia Banking Companies Listed on Indonesia Stock Exchange in the period 2011 to 2016. The studyfinding showed that the variable of Capital Adequacy Ratio (CAR), and Non Performing Loan (NPL) had negative and insignificant effect on Return on Asset (ROA), and Operating Efficiency (BOPO) had negative and significant effect on Return on Assets (ROA). Thus, he concluded that the bank is expected to pay more attention to the level of operating efficiency to improve the profitability of the firm'sfinancial performance, then concludes thatthe Capital Adequacy Ratio (CAR) and Non Performing Loan (NPL) did not significantly affect the Return on Asset (ROA) of the company during the study under review, because the bank intermediation function was not as expected. Anthony Wood and ShaniseMcConney, (2015) in their paper sought to examine the impact of risk management on the financial performance of the commercial banking sector in Barbados using quarterly data for the period 2000 to 2015. The empirical results indicate that Capital Risk, Operational risk, Liquidity Risk, Interest Rate Risk and Credit Risk have statistically significant impacts on financial performance. The only risk variable which does not derive this result is Country Risk. In addition, of those variables which proxy external factors, only GDP Growth has a statistically insignificant influence on financial performance. Operational risk exerted a negative impact on the banks' financial performance, thus the banks must ensure they adopt appropriate measures to minimize the impact of this risk. Higher levels of capital impacted positively on the banking sector's profitability. However, banks must pay close attention to their liquidity management and identify alternative measures to manage operational risk. They must also closely monitor theeffects of macroeconomic variables on their profitability.

Erlane (2016) examined the effect of risk management and operational information disclosure on financial performance of public listed firms in Malaysia. It uses 318 annual reports over a three-year period of 106 listed firms in Bursa Malaysia as the study sample, using content analysis as the research instrument. The finding of the study showed that the level of risk management and operational information disclosed affects firms' financial performance in terms of return on equity. However, it concluded that the results show that there is no significant effect from the level of operational information disclosure on increasing earnings and efficiency in terms of managing assets as measured by the return on asset and EBITDA. The findings in this study indicate that the amount of risk management and operational information disclosed in the firms' annual reports could influence the firms' performance and provides evidence on the importance of risk management and operational information disclosure on a firm's performance. Oehmen, Josef, Olechowski, Alison; Kenley, C. Robert, and Ben-Daya, Mohamed (2014) investigated the association or relationship of risk management practices with fivetypes of product development program performance; quality decision making; high program stability; open problem solving organization; overall NPD project success and; overall product accomplishment. The results show that six categories of risk management practices are most efficient and effective: The categories are; Developing risk management skills and resources; Tailoring risk management and integrating it with new product developments; Calculating impact of risks on the main objectives; Maintenance of all critical decisions with risk management results; Monitor and review theactions that will mitigation any risk, and it is management process; and finally; and Produce transparency as regarding the new product

development risks. The study's finding shows that the risk management practices are directly associated with outcome measures in the first three categories (improved decision making, program stability and problem solving). It is recommended that evidence in the risk management practices indirectly associate with the remaining two categories of outcome measures (project and product success), and concluded that research is needed to describe the exact mechanisms through which risk management practices influence NPD program success.

Theoretical Framework

Agency Theory

Agency theory originates from the paper of Berle and Means (1932) on the separation between ownership and control in bigfirms. According to Jensen and Meckling (1976), the firm can be viewed as a network of contracts, implicit and explicit, among various parties or stakeholders, such as shareholders, employees, and society at large. In modern firms, the shareholders (principals) are widely dispersed and they are not normally involved in every-day's activities and managements of the organizations, rather they hire mangers (agents) to manage the organizations on behalf of the principals (Habbash, 2010). The separation of ownership from management provides the context for the functioning of the agency theory. In the agency theory, the interests of stakeholders are not always aligned. Problems occur when the interests of agents (managers) are not in line with those of principals. Depending on the parties involved in conflicts, agency problems can be categorized as: managerial agency, share-holders orstockholders'management, (Debentures), agency (between stockholders and bond-holders); social agency (between private and public sectors); and political agency (between agents of the public sector and the rest of society or taxpayers). The agency theory is about management risk and is therefore beneficial to this study.

Stakeholder Theory

The theory originated by Freeman (1984) as a managerial instrument, it focuses explicitly on equilibrium of stakeholder interests as the main determinant of corporate policy. The greatest likely contributions to risk management is the extension of implied contracts theory from employment to other contracts, including sales and financing, Cornell and Shapiro, (1987). In some firms or industries, particularly computerized industries andservices, for a consumer trust to continue in the company, it mustbe offering its services which can substantially contribute to company value. Nevertheless, the value of these implicit claims is highly sensitive to expect costs of financial distress and bankruptcy. Since Corporate risk management practices lead to a decrease in these expected costs, Klimczak, (2005) provides that stakeholder theory provides a new insight into possible justification to risk management. Though, this has not yet been tested directly.

Financial Economy Theory

This approach builds upon classic Modigliani-Miller paradigm Miller and Modigliani, (1958) which states conditions for irrelevance of financial structure for corporate value. This model was later stretched to the field of risk management. This theoryspecifies that hedging leads to lesser volatility of cash flow and consequently,lesser volatility of firm value. Bases for corporate risk management were gathered from the irrelevance conditions and higher debt capacity. Miller and Modigliani, (1963), progressive tax rates, lower expected costs of bankruptcy Smith and Stulz, (1985), securing internal financing, Froot et al., (1993), information asymmetries Geczy et al., (1997) and comparative advantage in information Stulz, (1996). The final result of hedging, if it is beneficial to the firm, should be a higher value (a hedging premium). Financial Economy Theory also provides simplification, an opportunity to understand the impact of financial decision in a constrained environment and insight into the real world problem, a framework in which to analyze problem and a foundation upon to build more complex models.

Portfolio Theory

Harry Markowitz, introduced modern portfolio theory on the analysis of the portfolio investments in his article that was published in the Journal of Finance (1952). The new approach presented in this articleincluded in the portfolio formation, by considering the expected return on asset of Food and Beverage Company in Nigeria and operating and liquidity risk of individual stocks and importantly, their interrelationship as measured by correlation. Prior to this, investors would examine investments individually, build up portfolios of attractive stocks, and consider how they related to each other. Markowitz showed how it might be possible to better of these simplistic portfolios by taking into account the correlation between the returns on these stocks The diversification plays a very important role in the modern portfolio theory. Markowitz approach is viewed as a single period approach, at the beginning of the period the investor must make a decision in what particular securities to invest and hold these securities until the end of the period. Because a portfolio is a collection of securities, this decision is equivalent to selecting an optimal portfolio from a set of possible portfolios.

Based on the theoretical approach theories listed above, agency theory is more relevant to the research work, as its more on strategic level of management, where risk associated with management are resolved. Decisions are taking by management level of operation to solve all problems and challenges associated with risk of a firm.

METHODOLOGY

This study adopts both the ex- post factor and the time series research analysis by employing Augmented Dickey-Fuller test (ADF)for unit root data analysis where all the variables are stationery at first 1 (1) which indicates not having a short run relationship among individual time series data. Thus, since all variables are non-stationery, there is need to conduct aco-integratedtestfor the variables so as to examine the long run relationship between them, according to Gujarati (2004). The choice of ex-post facto is becausesecondary sources of data collection were used from the publish annual reports of the individual companies.

Model Specification

The time series regression analysis was used for the study and the analysis incorporated theAugmented Dickey-Fuller test (ADF) and method of data analysis was conducted to evaluatethe unit root test and co-integrated results ofthe linear association between the risk management on financial performance of food and beverage companies in Nigeria. A regression model was built to suit the variables under study and it presented as below;

$ROA = \beta o + \beta_1 opr + \beta_2 liqr + €$……………………………………………

Where:
ROA = Return on Asset.
$\beta 0$= constant term
$\beta_1 opr$= Operational risk
$\beta_2 liqr$ = Liquidity Risk.
€ = Error Term.

RESULT AND DISCUSSION

Raw Data

Year	ROA	OPR	LIQR
2010	0.33	3.65	0.0401
2011	0.79	4.001	0.0113
2012	1.33	2.342	0.0223
2013	1.22	3.1	0.0411
2014	1.99	3.332	0.0322

2015	1.001	1.006	0.1004
2016	0.91	2.022	0.1321
2017	0.62	2.732	0.0555
2018	0.33	3.567	0.0422
2019	0.82	2.034	0.0465
2020	0.91	3.461	0.0456
2021	0.44	0.01	0.0499

Source: CBN Statistical Bulletin (2021)

Unit Root Test Results

The Augmented Dickey-Fuller (ADF) was used to test for the unit root in the individual variable. The test was done based on the following hypotheses;
H_0: variable is non-stationary
H_1: variable is stationary

The results from the Augmented Dickey-Fuller test for unit root are summarized below:

Table 1: ADF Test for Unit Root

VARIABLES	ADF test Statistics	5% critical Value	Order of Integration
ROA	-2.158009	-1.950117	Stationary at first difference, I(1)
OPR	-4.661998	-3.536601	Stationary at first difference, I(1)
LIQR	-5.956844	-3.540328	Stationary at first difference, I(1)

From the tabular illustration, all the variables under study: return on asset (ROA), Operational risk (OPR) and Liquidity risk (LIQR) are stationary at first difference, thus they are integrated at first difference; I (1). Not having a stationary time series data indicates not having a short run relationship among the individual time series data, this result is expected since most financial indicators are known to exhibit such behavior. Since all the variables are non-stationary at level form, there is need to conduct a co-integration test. The essence is to show that although all the variables are non-stationary at level form, the variables may have a long term relationship that is, and the variables may be co-integrated and will not produce a spurious result.

Co-integration Test Result

According to Gujarati (2004), a regression involving non-stationary time series variables will produce a spurious (non-meaningful) result. But if such variables are co-integrated, having long run relationship, the result will therefore be acceptable. Econometrically speaking, two variables will be co-integrated if they have a long run equilibrium relationship between them, (Gujarati, 2004). To test for co-integration among the variables, the researcher will carry out ADF test on the regression residuals as proposed by Gujarati (2004). The ADF unit root test on the residuals work with the same decision rule as unit root test. The co-integration test result is summarized as follows:

Table 2: Co-integration Test Result

Null Hypothesis: ECT has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.592285	0.0443
Test critical values:	1% level	-4.226815	
	5% level	-3.536601	
	10% level	-3.200320	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(ECT)
Method: Least Squares
Date: 03/10/21 Time: 16:15
Sample (adjusted): 2010 2021
Included observations: 11 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ECT(-1)	-0.540806	0.150547	-3.592285	0.0010
C	-0.003976	0.013138	-0.302605	0.7640
@TREND("1981")	0.000273	0.000585	0.466145	0.6441

R-squared	0.279735	Mean dependent var	0.001340
Adjusted R-squared	0.237367	S.D. dependent var	0.041802
S.E. of regression	0.036505	Akaike info criterion	-3.705130
Sum squared resid	0.045309	Schwarz criterion	-3.574515
Log likelihood	71.54490	Hannan-Quinn criter.	-3.659082
F-statistic	6.602438	Durbin-Watson stat	1.983630
Prob(F-statistic)	0.003779		

From the result above, the ADF test statistics (-3.592285) is greater than the 5% critical value (-3.536601) in absolute terms. This implies that the residuals are stationary (i.e. the variables are co-integrated or that the linear influence of the independent variables cancels out).

Error Correction Mechanism Result

Table 3: ECM Test Result

VARIABLE	COEFFICIENT	STD ERROR	T-STATISTICS	PROBABILITY
ECM(-1)	-0.501322	0.151176	3.316144	0.0023

From table 3 above, the magnitude of the short run disparity is -0.501322, that is to say the degree of the short run dynamics is 50.1322. This shows a very low speed of adjustment to equilibrium after a shock.

Regression Result

Dependent Variable: D(ROA)

Method: Least Squares
Date: 03/10/21 Time: 16:17
Sample (adjusted): 2010 2021
Included observations: 11 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.039566	0.010662	3.710986	0.0008
D(OPR)	-2.10E-07	6.57E-06	-0.031936	0.9747
D(LIQR)	-0.001641	0.001660	-0.988747	0.3302
ECT(-1)	-0.501322	0.151176	3.316144	0.0023

R-squared	0.270845	Mean dependent var	0.042191
Adjusted R-squared	0.179701	S.D. dependent var	0.041292
S.E. of regression	0.037398	Akaike info criterion	-3.609296
Sum squared resid	0.044756	Schwarz criterion	-3.391605
Log likelihood	71.77198	Hannan-Quinn criter.	-3.532550
F-statistic	2.971611	Durbin-Watson stat	1.996381
Prob(F-statistic)	0.034051		

Evaluation of Regression Results

From the result, operational risk and liquidity risk have negative relationship on the return on asset such that an increase in operational risk and liquidity risk will lead to decrease in the return on asset on the average. The constant term is 0.039566, which means that the model passes through the point 0.039566 mechanically. If the independent variables are zero, return on asset would be 0.039566, (Gujarati, 2007). The estimated coefficient for Operational risk is -0.00000021. This implies that if we hold all other variables affecting return on asset constant, a unit increase in operational risk will lead to a 0.00000021-unit decrease in return on asset on the average. Similarly, the estimated coefficient of liquidity risk (LIQR) is -0.001641. This means that holding every other variable that affect return on asset constant, a unit increase in liquidity ratio will bring about a -0.001641 decrease in return on asset.

R^2–Result and Interpretation

This subsection applies the R^2, the t-test and the f-test to determine the statistical reliability of the estimated parameters. These tests are performed as follows; The coefficient of determinations, R^2, from the regression result is given as 0.270845. This implies that 27.0845% of the variation in return on asset is being explained by the variations in operational risk and liquidity risk on the average.

t–Test Result and Interpretation

The researcher also employs the 95% confidence interval or 5% level of significance (i.e.α=0.05) and 39 as our degree of freedom.

From the distribution table, $t_{0.025,39}$= 2.042

The result of the t-test of significance is shown in table 4.5 below:
The result of the t-test is presented below and evaluated based on the critical value (2.042) and the value of calculated t-statistics for each variable.

Table 4: Result of t-Test of Significance

VARIABLES	t-computed (t*)	t-tabulated ($t_{a/2}$)	Conclusion
OPR	-0.031936	2.042	Insignificant
LIQR	0.988747	2.042	Insignificant

Significant (Reject H_o; accept H_1),
Insignificant (Accept H_o).

From the t-test result above, for OPR, $t^*<t_{a/2}$, therefore, the null hypothesis is accepted. Hence, operational risk is not statistically significant, thus operational risk has no significant impact on return on asset. For LIQR, $t^*<t_{a/2,}$ therefore, the null hypothesis accepted. Hence, liquidity risk is not statistically significant, thus liquidity risk has no significant impact on return on asset.

Result and Interpretation of F–Test of Significance

The degree of freedom for the numerator (v_1) and for the denominator (V_2) are given as K-1 and N-K
Where
N= sample size
K= number of parameters including the constant term.
V_1=4-1=3, V_2=39-4=35, df = (3,35) at 5% level of significance and df = (3,35), $f_{0.05}$ = 2.92 and F* = 2.971611 Since f*> $f_{0.05}$, the null hypothesis is rejected, hence the conclusion that the variables (OPR and LIQR) have joint influence on return on asset. This implies that the entire regression is significant.

Table 5: Result of f-Test of Significance:

Computed f-ratio value	Critical f-ratio value	Result
2.971611	2.92	Statistically significant

Result and Interpretation of Autocorrelation Test

Using the Durbin-Watson statistic, the region of no autocorrelation (positive or negative) is given as follows:
du< d*< (4-du)
du= 1.72
d*= 1.996381
(4-du)= 4 – 1.72 = 2.28
By substitution, the region becomes:
1.72<1.996381< 2.28

Du	d*	4-du	Result
1.72	1.996381	2.28	Autocorrelation absent

The result shows that there is absence of autocorrelation problem in the model as the computed Durbin-Watson statistic falls within the zero autocorrelation regions.

Normality Test Result and Interpretation

The Normality test will be done using the Jarque-Bera test of normality.Jarque-Bera test of normality is hinged on the hypothesis that K is close to or exactly 3 and S is close to or exactly 0, thus making the JB value close to or equal to 0, which is the condition for normal distribution.

Table 6: Result of Normality Test

Skewness	Kurtosis	Jarque-berra	Probability	Test
-0.295858	3.636626	1.164608	0.558610	NND

From the normality table, the Jarque-Bera does not draw close to zero (0) as stated; in order words the residuals are not normally distributed.

Evaluation of Research Hypotheses

Hypothesis one: The null hypothesis is accepted for the variable, operational risk because the t-computed value (-0.031936) is less than t-tabulated value (2.042). Hence, operational risk has no significant impact on the return on asset.

Hypothesis two: The null hypothesis is accepted for the variable, liquidity ratio because the t-computed value (0.988747) is less than t-tabulated value (2.042). Hence, liquidity ratio has no significant impact on the return on asset in Nigeria.

Discussion of Findings

Despite the varying findings of various authors on the effect of risk management on financial performance of food and beverage companies in Nigeria, this study reveals that operational risk and liquidity risk have negative relationships with the return on asset. This implies that an increase in the units of operational risk and liquidity risk will lead to an increase in the return on asset. However, the regression also showed that operational risk and liquidity risk have no significant effect on the return on asset within the periods under review.This finding is in line with finding of Mardiana, et.al, (2018), who found that the variable of Capital Adequacy Ratio (CAR) and Non Performing Loan (NPLNon Performing Loan (NPL) had negative and insignificant effect on Return on Asset (ROA), because the bank intermediation function was not as expected.

CONCLUSION AND RECOMMENDATIONS

It is therefore, worthy of conclusion that operational risk and liquidity risk havenegative relationships but insignificant impacts on return on asset. Generally, the study concludes that risk management has negative relationship on the return on asset, but the level of effect is insignificant. The effect of risk management on financial performance of food and Beverages Companies in Nigeria is evident from the findings and calls for deliberate action to make these areas more additive to economic growth. Sequel to the findings of this study, the researcher specifically made the following policy recommendations to encourage the fortunes of food and beverages companies in Nigeria;

i. From the findings of this study, operational risk and liquidity risk have a negative relationship and insignificant with return on asset; hence, the management of the study company should ensure that the operational risk and liquidity risk are properly managed having seen that the variables have negative impact on the return on asset.

ii. Considering the negative relationship but insignificant impact of operational risk and liquidity risk on the performance of food and beverages, it is pertinent that the financial regulatory authorities concerned in the company should review the prevailing state of the company, in order to ease the financial irregularities in the company.

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Effect of Portfolio Management on the Financial Performance of Food and Beverage Companies in Nigeria

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Abstract

Portfolio management is fundamental to the growth and financial dependability of any corporate organization in Nigeria. This study assesses the effect of portfolio management, proxy by market shares, and assets allocationon financial performance also proxy by return on assets of food and Beverage Company in Nigeria. Both the export-factor correlation research design was adopted with reliance on secondary data from Nigerian Food and Marketing Board of quoted companies. The purposive sampling technique was employed in selecting the 10 firms out of 15 food and beverage company in Nigeria from 2010-2021 financial year. To achieve the objective of the study, panel regression analysis, Unit roots test, co-integration test and Error Correction Mechanism using the instrumentality of E-views 10. were utilized. Having estimated the parameters of the model numerically, with the use of multiple linear regression on the application of the ordinary least squares (OLS), the finding reveals that market share and asset allocation have a positive relationship with the return on investment, this implies that an increase in the units of market share and asset allocation will lead to a corresponding increase in the return on investment in the period analyzed. However, the error correction mechanism result also shows that the speed of short run adjustment to long run equilibrium is very low. The study therefore, concludes that market share and asset allocation has a positive relationship and a significant impact on the return on investment over the periods covered. More so, we conclude that portfolio management has significant effect on the financial performance of food and beverages company in Nigeria. The study recommends thatan intensive policies should be put in place to reconcile the hiatus and increase the level of portfolio management as it have many spillover benefits like increased income, employment creation, improved general well-being of Nigerians as well as reduced pressure from debt/loan and serve as panacea for development needed in food and beverage company in Nigeria and that asset allocation and market share should not be neglected; joint effort should be made by both the private bodies and government in promoting these variables. This is because the result of the research has shown that portfolio management has significant impact on the financial performance of food and beverage companies in Nigeria.

Keywords: Portfolio Management, Financial Performance, Assets Allocation, Return on Investment

INTRODUCTION

Portfolio management is pivotal to the growth and financial soundness of any organizations in Nigeria. It is all about doing the SWOT analysis in the choice of investments i.e debt vs equity, domestic vs international, growth vs safety and many other tradeoffs encountered in the attempt to maximized returns and minimize risk. Portfolio management focus on the coordinated management of one or more investments to achieve organizational strategies and objectives (Okechukwu, 2017). In implementing portfolio management (Livatenthaler, 2014) opined that portfolio management focuses on a firm's entire investment stocks. Many organizations today attest to the fact that managing investment portfolio strategically increases the financial performance of organizations (Itegi, 2015). Portfolio management involves managing money of individuals under the expert guidance of portfolio managers. Portfolio Management is a very important strategies in managing a portfolio of business firms to achieve maximum returns. Portfolio Management allows project managers to have a holistic view of their projects against one another in a centralized system (Denjamin & Mutyungi, 2018). Although portfolio management has been widespread in practice for decades with its effect on financial performance, scholars in the field has been surprisingly indifferent towards the topic, as the number of publications in the past decades dealing with the subject is limited and contradictory (Alaaeddin & Mohmmad, 2015). Most current studies have focused on the choice between passive and active portfolio management. Given the theoretical results and empirical results in Malkiel (2003), it seems that passive management is the better choice in the single and multi-period portfolio context. Portfolio management typically center on collection of individuals

securities by a rational investor in such a manner that a risk and return of the items in the portfolio are optimized. Every rational investor seeks to achieve two things simultaneously (Maximizing Returns and Minimizing Risk). This suggest that portfolio management itself is simply the display of expertise in dealings with stock items such that they are carefully choosing and integrated together to achieve a balance between capital invested and returns earned on that investment at the lowest possible cost or risk associated with that investment. This therefore suggests that portfolio management is like a concentric circle, that has interplay between Risk, Return & Relationship in other to order to obtain balance or optimization (Lambe, 2018).

For food and beverage firms in Nigeria to maintain a Comparative Cost advantage or an edge in the present and realistic globalized economy, the knowledge of portfolio management becomes necessary. Food and beverage firm in the present times compete maximally not only with other organizations in their host country or region but with similar organization in the globe. With the recent advancement in information technology, management of organization seem to be searching for new approaches to portfolio management and its effects on the financial performance of such firms. According to World Bank ease of doing business index released in the year 2016, Nigeria is perceived as a difficult place to do business and invest. Nigeria was graded 169 out of a total of 189 countries in 2016 in the ease of doing business,139 out of a total of 169 countries in ease of starting new business,182 out of a total of 189 countries that has access to electricity,59 out of a total of 189countries in getting loan facilities,143 out of 189 in implementing contract agreement. Based on these realities, which affect the growth of investment within the country, there is a need to review all policies of government tailored towards Nigerian Exchange group and investment portfolio to enhance maximization of returns at the lowest possible cost. Kneown (1996) stated that, ‘’one of the reasons why African countries are struggling to developis because of lack of a functional capital market and lack of financial system that has the confidence of investors and those who must use it, particularly the stock market crash of 2008 which affected many firms’ investment. This generated a pessimistic outlook on the Nigerian economy that led to a decline in portfolio of food and beverage firms in Nigeria. Despite the global economic meltdown Nigerian exchange group is potentially viable for investment with adequate returns’’. According to Central Bank of Nigeria (2014) Nigeria ranks high in Africa along with South Africa and Egypt as major country with high return on investment which is in line with the recent federal government ease of doing business policies in the country. Furthermore, the influence of this return on the financial performance of food and beverage firms, as well as efficient portfolio management in the context of Nigeria economy and other economic indicators has remained a subject of intense discourse.

Several studies have analyzed performance of food and beverage companies as it relates to portfolio management but with a conflicting finding, the proper portfolio management ensures the proper mix of investment for achieving the maximum overall returns (Allen, Iftekhar, Iikka & Mingming, 2010). Portfolio management presents the best investment plan to the individuals as per their income, budget, age, and ability to undertake risks (Prachi, 2015). The knowledge of portfolio management helps an investor to have a deeper understanding on how to minimize investment risks and maximize returns thereby increases the chance of making profits. Pracha and Juneja (2015) stated that portfolio management enables the portfolio managers to provide customized investment solutions to clients as per their needs and requirement. Food and beverage firms in Nigeria appear to be facing increasing demand and constant changing taste of consumer’s goods. Customers today are experiencing dynamic changing taste, looking for high quality products at cheaper prices. Often time, organizations are poised to drive towards meeting the changing demand of their customers, by engaging in purposeful investment that will enhance their financial performance there by lead to greater return on investment and increase in profitability. However, due to poor knowledge of the changing environment, many food and beverage organizations end up with production of products that are considered outdated or while in production process, global counterpart, supply such products, hence taking advantage of first entrance (Okchukwu & Egbo 2017). This to a reasonable extent could affect the domestic organization market share thereby resulting to loss of capital invested. Thus, the indispensable role of complex business organizations in the

stabilization of Nigerian economy through business organizations has made it imperative to study the effect of portfolio management on the financial performance of food and beverage companies in Nigeria. To effectively analyse the issue in question, the underlisted hypothesis which will subsequently be analysed are those which are germane to this study.

HO1: Portfolio management has no significant effects on market share in food and beverage companies in Nigeria.
HO1: Portfolio management has no significant effect on assets allocation in food and beverage companies in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Portfolio Management

Association of project management (2018) defined portfolio as a collection of projects or programmed used to structure and manage investment at an organizational or functional level to optimize strategic benefits or operational efficiency. The association further state that portfolio can be managed at an organizational or functional level. Dayana and Alana (2021) describe portfolio as individuals or firms entire collection of financial assets. This may include treasury bills, debenture bond, stocks, mutualfunds, realestate, cryptocurrency etc, and other collectibles. A portfolio refers to a pool of investment which may not necessarily be housed in one single account. Blomquist & Müller, (2004) define a portfolio as an organization (provisional orcontinuous) 'where projects are managed together to manage interfaces, prioritize resources between projects, and thereby reduce uncertainty'. Dye and Pennypacker (2002), in Jonas (2010), sees portfolio as a group of projects that 'compete for scarce resources and are conducted under the sponsorship or management of a particular organization'. Blomquist and Müller (2004) explain that portfolio management center on the groupings of projects along the same line' of their management wants. This is done to maximize a firm overall business result through economic use of resources across a group of investment However; several scholars have submitted various definitions of portfolio management considered it as a dynamic process where several active investments are constantly restructured and review. Martinsuo and Blomquist, 2008, Doloi & Baradari (2013) 'simply describe it as an approach or method that helps company to achieve their business goals and aims'. Furthermore, Hyväri (2014) posit that portfolio management is the coordinated management of one or more investment to achieve company strategies and objectives. Portfolio Management can also be defined as the managementof firm's investment pools using different processes, methods, and technologies used by project managers and project management officesto analyze and collectively manage current or proposed projects based on numerous key features.

Ada and Hayes (2020) see portfolio management as the 'art and science of selecting and overseeing a group of investment that meet the long-term financial objectives and risk tolerance of a client, a firm or an organization'. Portfolio management requires the ability to examine the strength, weaknesses, opportunities, and threat of investment portfolio across the full pool of investment, Portfolio management involves the choice between trade off from debt to equity, from domestic to international investment and growth verses safety investment. The knowledge of portfolio management helps to presents the best investment plan to individuals in relation to their income, budgetconstraint, age, and ability to undertake risk and help portfolio managers to provide the best investment decisions to client as per their needs and budget. Lambe (20018) conceived portfolio management as the art of selecting the right investment policy for individuals with minimum risk and maximumreturns. Portfolio management involves managing an individual's investment in the forms of bonds, shares, cash, mutual funds based on available funds so that the investors can earn maximum returns within a specified time. It's also the process of managing funds of individual or group of individuals or firms under the expert guidance of a portfolio managers.Association of project management defined portfolio management as a combination of

investment policy based on your goals, timeline, and risk tolerance. Portfolio management involves picking investment such as stocks, bonds and funds and monitoring those investment over time.Portfolio management can be done with a professional or through a mechanized service

Active Portfolio Management

Hayes (2015) defined active portfolio management as a process of strategically buying and selling stocks and other security assets to beat the broader market. Active portfolio management involves attempting to beat the performance of an index by buying and selling individual stocks and other marketable assets. Active managers normally make use of a wide range of quantitative and qualitative approach to aid their investment evaluation for possible returns. Sam bourgi (2019) posit that 'Active portfolio management requires a high level of proficiency about the markets. A portfolio managerapplying an active strategy will always aims to generate better market returns toastockholder. Active portfolio management involves continuous assessment of the market to buy assets when they are undervalued and sell them when they exceed the norm. The approach requires quantifiable analysis of the market, broad divergence, and a sound understanding of the business cycle. The biggest benefit of active methods is the potential for making market-beating returns. The approach also offers elasticity in that the trust manager can adjust their policy whenever necessary. On the opposite side of the field, active approaches have disreputably high fees due to continuous asset turnover. The impact of human error is also much greater in active policies. Active approaches are suitable for knowledgeable investors who have a higher risk appetite. These investors are eager to assume larger risk to generate higher returns. Naturally, their distribution reflects their desire for market-beating returns, which means a higher attention of capital allocated to stocks. Dayan (2021) describes active portfolio management as a situation where active portfolio managers take a hands-on policy when making investment decision. They charge an investor a proportion of the assets they manage for you. Their aims are to outperform an investment target.

Passive Portfolio Management

Passive portfolio management isn't troubled with 'thrashing the market' because its proponents contribute to the efficient market hypothesis. In other words, they believe details will always be reflected in the value of the basic asset. Investors who seek to minimize risk often prefer passive approaches. One of the easiest ways to device a passive policy is to invest in acatalogue fund that tracks daily market analysis or some other market index. Inferior cost is the primary advantage of passive investing, as this policy is perhaps the cheapest to implement. Passive approaches have also been proven to generate consistently strong long-term gains. One of the disadvantages of passive investing is security alertness and other disadvantages of passive investment strategies include; foundational cost as an investor is giving up the ability to produce market-beating returns and failure to protect against problem risk since the investor are simply trailing the market instead of hedging against instability. Dayan (2021) explains passive portfolio management as a process of choosing a group of investment that track a broad stock market catalogue. The aims are to monitor the returns of the market over a specified period. It involves managing a fixed portfolio where the performance matches the market catalogue.

Discretionary Portfolio Management

A discretionary method to portfolio management gives the account manager comprehensiveswitch over their client's investment choices. The discretionary manager makes the entire buy and sells choices on behalf of their clients and employs whatever approach they think is best. This type of approach can only be accessible by individuals who have wideinformation and knowledge in investments. Clients who use discretionary managers feel self-assured in passing over their investment choices to aprofessional. Andy (2021) describes discretionary portfolio management as the process where portfolio managers have the expert to make financial decision. He or She makes those decision for the invested funds based on the investor's investment needs. A discretionary portfolio manager also does the entire written and filling too.The primary benefit of discretionary investing is that you're passing over all your investment choices

to aprofessional. This tends to make life a lot simpler, particularly if you agree with your manager's buy and sell proposals. If you enjoy being more pointers on with your investments, discretionary accounts perhaps aren't for you. If cost is also an issue, discretionary accounts might be more excessive since discretionary managers' charge higher cost for their services.

Non-discretionary Portfolio Management

A non-discretionary portfolio manager is basically a financial consultant. They will give you the pros and cons of investing in a precise market or approach but won't implement it without your consent. This is the primary modification between a non-discretionary method and a discretionary method. The primary advantage of non-discretionary investment is that it gives you access to a financial professional without surrendering control of your investment choices. The primary disadvantage comes from the need to rapidlymove a portfolio's attention in the face of new market circumstances. If your manager must get your endorsement before buying or selling a particular asset, it could cost you. Andy (2021) describes non-discretionary portfolio management as a process where a portfolio manager acts jus as a consultant for which investment are good and unprofitable. And the investors take the decision.

Market Share

This refers to the percentage of a market controlled by a particular firm or product. Increasing market share is one of the most significant objectives of business. Relative market share is indicated by the product circle's position on the parallel axis. Relative market share signifies the viable strength of the product equated to the market leader's product (On the Mark, 2005). Market share can be a key pointer of market attractiveness. This means, how well a firm is doing against its competitors. This metric, accompanied by changes in sales revenue, helps managers appraise both primary and selective demand in their market. It helps managers to judge the total market growth or decline as well as trends in customers' selections among competitors. Market share can be disintegrated into three components, viz.: penetration share, share of customer, and usage index. These three fundamental approaches can then be used to help the brand identify market share growth opportunities (Flipp, 2017). Managers can improve their company's new product performance in the market based on creatingskillful innovation management processes (Lichtenthaler, 2014). The activities related with innovation portfolio management, focus on a firm's entire portfolio of continuing new product expansion projects, thus exceeding the single project focus of the idea-to-launch process. As such, innovation portfolio management is an important complement to the typical systematic new product development process associated with firms' attempts to achieve product innovation excellence to achieve greater market share.

Asset Allocation

Asset allocation could be described as the method of allocating portfolio into number of asset classes (Sharpe 1992, pp. 7-19). The overallknowledge is to move the importance from the security level to the portfolio level. It is worth to mention that the technique is not simply based on accidental investment in different asset classes (e.g., stocks, bonds, gold, and real estate) but on discovery a choice of investments that accomplishotherwise in the market. A proper divergence remains an indispensable feature of modern portfolio theory (Wolfinger, 2005). Generally, the investment management process could be understood two-fold as strategic asset allocation or tactical asset allocation with market timing. Strategic asset allocation (known also as policy asset allocation) is understood as an allocation within the portfolio into the major asset classes in agreement with the investor's long-term objectives (Amenc, Le Sourd, 2003). ''The purpose of this procedure is not to beat the market, but to create an asset blend which will establish an optimal balance between expected return and investor's risk tolerance for the long-term horizon (to maximize the probability of achieving long-term goals at an accepted level of risk). The asset classes chosen for strategic asset allocation should satisfy the five criteria namely; assets within an asset class should be relatively homogenous, asset classes should be mutually exclusive, asset classes should be diversifying, asset class as a group should make up a predominance of world wealth and asset class have

the capacity to absorb a significant fraction of the investor's portfolio without seriously affecting the portfolio liquidity (Maginn, Tuttle, McLeavey, Pinto, 2007).

Traditionally the strategic asset allocation tends to be constrained into equities, bonds, real estate, and cash with the long-time horizon ranged between 10 and 50 years. Due to its long-term nature, weights which show the percentage range of asset allocation are called targets. Additionally, the very long-term asset allocation is usually understood as the benchmark allocation tied to broad asset classes that establish the policy risk for the fund, known as the beta or market risk for the fund (Rasmussen, 2003). This process combines capital market expectations (formally represented by the efficient frontier) and the investor's risk & return, and investment constraints (from the investment policy statement). Although it is expected that a strategic asset allocation decision will be effective over the medium to long term, the allocation might be reviewed and re-visited in the light of changing investment opportunities or getting out of wages outside specified range (Idzorek, 2006). Tactical asset allocation attempts to add value to strategic asset allocation through looking for short-term opportunities which let receive an extra return from financial market. The process is based on overweighing those asset classes that are undervalued and under-weighting these ones which are overvalued. The permitted level of tolerance established for the reference portfolio at the beginning should not be significantly changed. While the decision-making process for a strategic asset allocation requires long-term expectations of asset class return, volatilities, and correlations as inputs, for the tactical asset allocation it needs a short to medium-term decision related to business cycles or market sentiment. Typically, tactical asset allocation covers a modification of the asset mix within the portfolio due to the economic news or technical factors coming from financial markets''. The process can be performed either as a part of a regular allocation program that monitors market conditions and sectors, or as irregular reaction onto unexpected changes in asset prices or interest rates.

Financial performance

A company financial performance is very important to institutional investors, stakeholders, and the public. Financial performance shows a company's financial position that is analyzed through a series of financial analysis tools, it helps to know the position and level of soundness of the company's financial position that can also reflect work performance in a certain period. The concept of financial performance according to Shahnia&Endri (2020) is a set of financial activities over a certain period reported in the financial statements and income statement. Meanwhile, according to Doorasamy (2016) financial performance as an analysis conducted to determine the extent to which a company has carried out financial procedures and is good and right. According to Prabowo&Korsakul (2019) convinced that the true parameters of financial performance are the income statement, and net income and expenses. The benefits of this performance appraisal include measure the achievements of the company in a certain period, see the company's overall performance, as a basis for determining future corporate strategy, provide direction in decision making, as well as basis for determining investment policies for investors.

Financial Performance is the Subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. ''This term is also used as a general measure of a firm's overall financial health over a given period and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Fama, 1992). There are three commonly used measures of financial performance thus: Jensen Measure: The Jensen measure is the ratio of your portfolio 's return less the portfolio 's expected return as determined by the capital asset pricing model, or CAPM. The CAPM is an economic theory that describes the relationship between risk and the pricing of assets. The CAPM theory suggests that the only risk that is priced by investors is risk that cannot be diversified away. The CAPM in its simplest form shows that the expected return of a security or a portfolio is equal to the rate on a risk-free security plus the asset 's risk premium multiplied by the asset's beta. The Jensen 's measure incorporates the CAPM into its calculation''.

Empirical review

In a study conducted by Fubara&Agundu (2001) on ‘Strategic Portfolio Management Model: Contemporary Imperatives for Quoted and Unquoted Companies in Nigeria’. The study surveyed 44 quoted and unquoted companies in Nigeria. The following variables were used Investment, portfolio, risk, return, scenario, strategy. 44 quoted and unquoted companies were surveyed. The study revealed that the companies' basis of portfolio selection is traditional. Companies indiscriminately take risk by investing in subjectively determined options. Investment risk is taken for granted. Also, the study found that the homogeneity of portfolio components, though attractive in the short-run, adversely affect investment returns in the long-run. Hyväria (2014) in the study on Project portfolio management in a company strategy implementation; a case study, focused on a medium sized business company. The structure of the company was the Group Company: a parent and subsidiaries in different European countries. The study was carried between March 2011 and December 2012. Interviews, participant-observation, researcher’s own familiarity with the company, and written documents (triangulation) were adopted. The study found that the purpose of project portfolio management is to maximize the return on investment of the portfolio and projects.

Müller, Martinsuo and Blomquist (2008) conducted a study on the ‘nature and relationship of project portfolio control techniques and portfolio management. A questionnaire with 242 responses was used, out of which, 136 responses were filtered out for quantitative analysis. Three portfolio control factors were identified: portfolio selection, portfolio reporting, and decision-making style. Two measures for portfolio management performance were identified: achievement of desired portfolio results and achievement of project and program purpose. The results indicate that different portfolio control mechanisms are associated with different performance measures. In a similar study conducted by Doloi and Baradari (2013) on the ‘Impact of Applying Project Portfolio Management on Project Success’, the project success criteria are defined, and different project portfolio management processes and functions are identified. Based on a clear survey, the impact of applying project portfolio management on project success rate was evaluated in different levels of project portfolio management maturity levels. The findings show that, there is a strong coefficient correlation between project success and project portfolio management maturity levels. In other words, increasing the maturity level of project portfolio management leads in improving project success rate. Catherine, Robert, and Elko (2008) conducted a study on Project portfolio management for product innovation’. A questionnaire was developed to gather data to compare the PPM methods used, PPM performance, PPM challenges, and resulting new product success measures in 60 Australian organizations in a diverse range of service and manufacturing industries. The study found that PPM practices are shown to be very similar for service product development project portfolios and tangible product development project portfolios. New product success rates show strong correlation with measures of PPM performance and the use of some PPM methods is correlated with specific PPM performance outcomes.

Jeroz (2007) in his study of investment companies recommended that portfolios should be reviewed and adjusted from time to time with the market conditions. He pointed out that evaluation of portfolio is to be done in terms of targets set for risk and return. The changes in portfolio are to be affected to meet the changing conditions. According to his studies Portfolio Construction refers to the allocation of surplus funds in hand among a variety of financial assets open for investment. He mostly concerned himself with the principles governing such allocation. The modern view of investment is oriented towards the assembly of proper combinations held together will give beneficial result if they are grouped in a manner to secure higher return after taking into consideration the risk element. The modern theory is the view that by diversification, risk can be reduced. The investor can make diversification either by having many shares of companies in different regions, in different industries or those producing different types of product lines. There are many ways to measure financial performance, but all measures should be taken in aggregation. Line items such as revenue from operations, operating income or cash flow from operations can be used, as well as total unit sales. Furthermore, the analyst or investor may wish to look deeper into

financial statements and seek out margin growth rates or any declining debt. Morgan (2008) believed that investors can enhance the performance of their pure-stock portfolios by incorporating different options strategies. Among them, the most popular strategies are covered-call writing and protective-put buying. In theory, there is no clear evidence on whether a specific option strategy is superior. According to Morgan the efficient market theory, an increase in returns should be accompanied by an increase in risk. Adding options to stock portfolios may also create problems of performance measurement homogeneity. Hedging is a financial transaction in which one asset is held to offset the risk of holding another asset. Typically, a hedge is used to offset price risk due to changes of 20 financial market conditions. In this way, the development of financial derivative instruments (options, futures, forward and swap) make hedgers simple to use it to reduce risk. However, many portfolio managers use these derivative instruments to speculate instead of hedging and, in turn, increase risk.

Miriti (2008) on his study of Precision of Investor Information and Financial Disclosure investigated a situation in which the precision of an inside investor's private signal increases with the size of his shareholding. Intuitively, an insider with a more informative signal regarding the prospects of a project may be expected to involve himself in larger information motivated transactions and enjoy greater profits. We suggest that such an advantage, nevertheless, may be alleviated or even eliminated when the financial statements accompanied by disclosure of either his shareholdings or the distribution of block shareholdings reveal the extent to which the insider is informed. The market may optimize its reaction when the order flows accordingly. Omondi (2009) on his study of Liquidity risk and portfolio management in centum investments investigated the impact of a liquidity shock induced by investor 's behavior on portfolio management during financial crises in a system lacking deposit insurance. It is found that investors reacted to the liquidity shock sensitively through an increase in their cash holdings not by liquidating bank loans but by selling securities in the financial market. Moreover, institutions exposed to local financial contagion adjusted the liquidity of their portfolio mainly by actively selling and buying their securities in the financial market. Finally, there is no evidence to conclude that the existence of the lender of last resort mitigated the liquidity constraints in investor's portfolio adjustments. Muthamia (2010) on his study of challenges faced by centum investments argued that when economic conditions become more challenging, organizations have fewer resources to deploy on new business or change projects and programs, reducing the number of such initiatives they can undertake. However, at such times, the projects, and programs they do invest in are often more critical, since they may be essential to deliver efficiency savings, sustain revenue or improve aspects of performance on which the survival of the organization can depend. The current turbulent economic conditions appear to have caused increasing adoption of project portfolio management by organizations. project portfolio management can be defined as: managing a diverse range of projects and programs to achieve the maximum 21 organizational value within resource and funding constraints, where 'value' does not imply only financial value and includes delivering benefits which are relevant to the organization 's chosen strategic move with time.

Theoretical Review

Theoretically, portfolio management involves, a proper investment decision which connote of what to buy & sell, Proper fund management in terms of investment in a basket of assets to satisfy the asset preferences of investors, reduce the risk and increase returns. Rubinstein (2006) argues that the other ancillary aspects are as per needs of investors, namely: regular income or stable return, appreciation of capital, Marketability and liquidity, Safety of investment and minimizing of tax liability. Portfolio Management is a process encompassing many activities of investment in assets and securities. It is a dynamics and flexible concept and involves regular and systematic analysis, judgment, and actions. For instance, Portfolio Management deals with selection of securities from the number of opportunities available with different expected returns and carrying different levels of risk and the selection of securities is made with a view to provide the investors the maximum yield for a given level of risk or ensure minimum risk for a level of return (Campbell, 2002). Several theories have been compounded to show the effects of portfolio management on financial performance as enumerated below.

Risk Aversion Theory

Risk aversion is an investor's general desire to avoid participation in "risky" behavior or, in this case, risky investments (Fischer, 1972). Investors typically wish to maximize their return with the least amount of risk possible. When faced with two investment opportunities with similar returns, good investor will always choose the investment with the least risk as there is no benefit to choosing a higher level of risk unless there is also an increased level of return. 12 Insurance is a great example of investors' risk aversion. Given the potential for a car accident, an investor would rather pay for insurance and minimize the risk of a huge outlay in the event of an accident.

Markowitz Portfolio Theory

Markowitz (1953) developed the portfolio model. This model includes not only expected return, but also includes the level of risk for a particular return. Markowitz assumed the following about an individual's investment behavior: Given the same level of expected return, an investor will choose the investment with the lowest amount of risk. Investors measure risk in terms of an investment's variance or standard deviation. For each investment, the investor can quantify the investment's expected return and the probability of those returns over a specified time horizon. Investors seek to maximize their utility. Investors make decision based on an investment's risk and return, therefore, an investor's utility curve is based on risk and return. Markowitz' work on an individual's investment behavior is important not only when looking at individual investment, but also in the context of a portfolio. The risk of a portfolio considers each investment's risk and return as well as the investment's correlation with the other investments in the portfolio. Risk of a portfolio is affected by the risk of each investment in the portfolio relative to its return, as well as each investment's correlation with the other investments in the portfolio. A portfolio is considered efficient if it gives the investor a higher expected return with the same or lower level of risk as compared to another investment (Fama,1992). The efficient frontiers simply a plot of those efficient portfolios, as illustrated below. While an efficient frontier illustrates each of the efficient portfolios relative to risk and return levels, each of the efficient portfolios may not be appropriate for every investor. Recall that when creating an investment policy, return and risk were the key objectives. An investor's risk profile is illustrated with indifference curves. The optimal portfolio, then, is the point on the efficient frontier that is tangential to the investor's highest indifference curve. See our article: A Guide to Portfolio Construction, for some essential steps when taking a systematic approach to constructing a portfolio.

Modern Portfolio Theory

Is a theory of finance which attempts to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of various assets? Although MPT is widely used in practice in the financial industry and several of its creators won a Nobel memorial prize for the theory, in recent years the basic assumptions of MPT have been widely challenged by fields such as behavioral economics. MPT is a mathematical formulation of the concept of diversification in investing, with the aim of selecting a collection of investment assets that has collectively lower risk than any individual asset. That this is possible can be seen intuitively because different types of assets often change in value in opposite ways (Merton, 1973). For example, to the extent prices in the stock market move differently from prices in the bond market, a collection of both types of assets can in theory face lower overall risk than individually. But diversification lowers risk even if assets' returns are not negatively correlated—indeed, even if they are positively correlated. More technically, MPT models an asset's return as a normally distributed function (or more generally as an elliptically distributed random variable), defines risk as the standard deviation of return, and models a portfolio as a weighted combination of assets, so that the return of a portfolio is the weighted combination of the assets' returns. By combining different assets whose returns are not perfectly positively correlated, MPT seeks 14 to reduce the total variance of the portfolio return. MPT also assumes that investors are rational, and markets are efficient. Thus, the Modern portfolio theory, otherwise known

as the mean variance analysis, builds upon the Markowitz (1953) are as follows; All investors are Efficient Investors: Investors follow Markowitz idea of the efficient frontier and choose to invest in portfolios along the frontier; Investors Borrow or Lend Money at the Risk-Free Rate: This rate remains static for any amount of money. Similarly, the Time Horizon is equal for All Investors - when choosing Investments, investor have equal time horizons for the chosen investments; All Assets are Infinitely Divisible: This indicates that fractional shares can be purchased, and the stock can be infinitely divisible.
No Taxes and Transaction Cost: IT is assumed that investors' results are not affected by taxes and transaction costs; All Investors Have the Same Probability for Outcomes: When determining the expected return, assume that all investors have the same probability for outcomes and; No Inflation Exists - Returns are usually not affected by the inflation rate in the capital market, since none exist within capital market theory. Also, there is No Mispricing within the Capital Markets: It is assumed that the markets are efficient and that no mispricing within the markets exists.

METHODOLOGY

This study adopts both the ex-post factor and the correlational research design by employing the descriptive and inferential statistics method of data analysis using regression analysis method. The ex-post factor design involves experimental study of examining the effect of portfolio management on the financial performance of food and beverage companies in Nigeria. The study shows the empirical analysis of annual financial reports of 12 listed food and beverage companies quoted on the Nigeria Exchange group and the use of inferential statistics for data analysis as a result for the need to test the formulated hypotheses. Also, a correlational study tries to measure the degree of relationship between one or more variables for making predictions about relationship. The choice of ex-post facto and correlation design is because the study aimed at examining effect of portfolio management on the financial performance of food and beverage companies in Nigeria. The population of the study covers all the ten (15) food and beverage companies in Nigeria listed on the Nigerian Exchange Group as of 31st December, 2021.A twelveyears'period covering a period of 2010-2021 was selected to bring a clearer picture of the study during the period under review. A sample size of Ten (12) was selected using simple random sampling technique as the basis for selection. The data of the Ten (12) listed food and beverage companies for the period of ten years from (2010-2021) used in this study was collected from the secondary sources, basically from the published annual reports of the individual companies.

Technique for Data Analysis and Model Specification

The Time series analysis was used in this study and the analysis incorporated the descriptive statistic, correlation analysis which was conducted to examine the linear association between portfolio management (PM) on financial performance (FP) of listed food and beverage companies in Nigeria. The major choice of using regression and correlation analysis is to be able to model, examine and identify the relationship between the hypotheses. The model developed was to determine the effect of portfolio management using (ROI) as dependent variable of listed food and beverage companies in Nigeria with panel regression model of market shares (MS) and Asset's allocation (AA) as the explanatory variable. Thus, incorporating these variables into equation 3.1, and specify the model in the form in which it can be estimated in line with the research hypotheses stated in chapter one. model used for the study is stated below:

ROI = βo + β1MS + β2AA+ €it……………………………(3.1)

Where:

βo =The autonomous parameter estimate (intercept or constant term)

β1-β2=Parameter coefficient of Portfolio Management

ROI = Return on Investment

MS = Market Shares

AA = Assets Allocation

€it = Stochastic Error term

RESULT AND DISCUSSION

Table 1: Time Series Data on ROI, MS and AA, Data Ranging from 2010-2021

YEAR	ROI	MS	AA
2010	0.17	0.08	12.42
2011	0.19	0.1	18.46
2012	0.16	0.08	4.83
2013	0.2	0.1	13.77
2014	0.26	0.13	13.27
2015	0.26	0.13	5.54
2016	0.23	0.04	11.63
2017	1.46	0.42	67.4
2018	3.01	0.58	22.92
2019	2.4	0.5	45.04
2020	1.26	0.62	9.29
2021	0.29	0.15	17.6

Source: Nigerian Food and Marketing Board

Unit Root Test

The Augmented Dickey-Fuller (ADF) was used to test for the unit root in the individual variable. The test was done based on the following hypothesis;

H_0: variable is non-stationary, that is, the variable has no unit root.

H_1**:** variable is stationary, that is, the variable has a unit root.

The results from the Augmented Dickey-Fuller test for unit root are summarized below.

Table 2: Result of the ADF Test for Unit Root

Variables	ADF Test Statistic	5% Critical Value	Order of Integration
ROI	-2.158009	-1.950117	I(1)
MS	-5.339835	-3.574244	I(0)
AA	-5.020257	-3.552973	I(1)

From the tabular illustration (table 2) above, market share is stationary at level form. That is, they are integrated at order zero; I(0). The return on investment (ROI) and Asset allocation are not stationary at first difference. However, they are stationary at first difference. That is, it is integrated at order one; I(1).
Not having a stationarity time series data at level form, indicates not having a short run relationship among the individual time series data. Since the variables are non-stationary at level form, there is need to conduct a co-integration test. The essence is to show that although all the variables are non-stationary at level form, the variables may have a long-term relationship that is the variables may be co-integrated and will not produce a spurious result.

Co-integration Test Result

According to Gujarati (2004), a regression involving non-stationary time series variables will produce a spurious (non-meaningful) result. But if such variables are co-integrated, having long run relationship, the result will therefore be acceptable. Econometrically speaking, two variables are co-integrated, if they have a long run equilibrium relationship between them, (Gujarati, 2004). To test for co-integration among the variables, this study adopted ADF (Augmented Dickey-Fuller) test on the regression residuals as proposed by Engel and Gujarati (1987). The ADF unit root test on the residuals works with the same decision rule as unit root test. The co-integration test result is summarized as follows:

Table 3: Co-integration Test Result

Null Hypothesis: ECT has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on SIC, maxlag=6)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.080648	0.0017
Test critical values:	1% level	-4.323979	
	5% level	-3.580623	
	10% level	-3.225334	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(ECT)
Method: Least Squares
Date: 03/13/22 Time: 12:18
Sample (adjusted): 2010 2021
Included observations: 28 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ECT(-1)	-1.013978	0.199577	-5.080648	0.0000
C	-24.41189	167.1378	-0.146058	0.8850
@TREND("1981")	0.844064	6.479228	0.130272	0.8974

R-squared	0.508022	Mean dependent var	-6.125021
Adjusted R-squared	0.468664	S.D. dependent var	379.8842
S.E. of regression	276.9082	Akaike info criterion	14.18621
Sum squared resid	1916954.	Schwarz criterion	14.32894
Log likelihood	-195.6069	Hannan-Quinn criter.	14.22984
F-statistic	12.90765	Durbin-Watson stat	2.004190
Prob(F-statistic)	0.000141		

From the result above, the ADF test statistics (-5.080648) is greater than the 5% critical value (-3.580623), in absolute terms. This implies that the residuals are stationary (that is, the variables are co-integrated or that the linear influence of the independent variables cancels out).

Error Correction Mechanism Result and Interpretation

Table 4: ECM Test Result

Dependent Variable: D(LRGDP)
Method: Least Squares
Date: 03/13/21 Time: 12:19
Sample (adjusted): 2010 2021
Included observations: 28 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.051287	0.010561	4.856244	0.0001
D(ROI)	-1.74E-05	1.56E-05	-2.115542	0.0057
AA	8.15E-07	4.29E-06	3.190188	0.0008
ECT(-1)	-1.67E-05	2.64E-05	-0.633204	0.5326

R-squared	0.058863	Mean dependent var	0.046902
Adjusted R-squared	-0.058780	S.D. dependent var	0.034655
S.E. of regression	0.035659	Akaike info criterion	-3.698054
Sum squared resid	0.030518	Schwarz criterion	-3.507739
Log likelihood	55.77275	Hannan-Quinn criter.	-3.639873
F-statistic	4.500353	Durbin-Watson stat	0.532565
Prob(F-statistic)	0.005586		

From table 4.3 above, the magnitude of the short run disparity is -0.0000167, that is to say the degree of the short run dynamics is 0.00167%. This shows a very low speed of adjustment to equilibrium after a shock.

Regression Result

In the regression result, the variables under consideration are return on investment (ROI) (dependent variable) and market share (MS) and asset allocation (AA) (independent variables). From the result the estimated coefficient value of b_o, b_1, and b_2, are 0.051287, 0.0000174, and -0.000000815 respectively. The regression results are presented as follows:

ROI = 0.051287 + 0.0000174MS + 0.000000815AA
S.E = (0.010561) (0.0000156) (0.00000429)
T* = 4.856244 -1.115542 0.190188
R^2 = 0.058863
Adjusted R^2 = -0.058780
F* = 0.500353
Durbin-Watson statistics = 0.532565

Evaluation of Regression Results

Evaluation Based on Economic Criterion

This subsection is concerned with evaluating the error correction mechanism result based on a priori expectations. The signs and magnitude of each variable coefficient is evaluated against theoretical expectations. The sign of the variables coefficients from the estimated model are in line with a priori expectations. Thus, market share and asset allocation have a positive relationship with return on investment; hence it conforms to the a priori expectation. The constant term is 0.051287, which means that the model passes through the point 0.051287 mechanically. If the independent variable is zero, return on investment would be 0.051287, (Gujarati, 2007). The estimated coefficient for market share is

0.0000174, this implies that if other variables affecting return on investment are held constant, a unit increase in market share (MS), will lead to 0.0000174 units increase in return on investment on the average. On the other hand, the estimated coefficient of asset allocation is -0.000000815, this implies that if other variables affecting return on investment are held constant, a unit increase in asset allocation, will lead to 0.000000815 units decrease in return on investment on the average.

Evaluation Based on Statistical Criterion

This subsection applies the R^2, the t-test and the f-test to determine the statistical reliability of the estimated parameters. These tests are performed as follows;

R^2–Result and Interpretation

The coefficient of determinations, R^2,is given as 0.058863; this implies that 5.8863 percent of the variation in return on investment is being explained by the variation in market share and asset allocation. Thus, the R^2 which yielded 5.8863percent means that the explanatory powers of the independent variables: market share and asset allocation over the dependent variable, is very low. Hence, the variable has worse goodness of fit.

t–Test Result and Interpretation

The study also employ the 95% confidence interval or 5% level of significance (that is, 5/100=0.05, 0.05/2=0.025) and 39 as the degree of freedom. From the distribution table, $t_{0.025,39} = 2.042$ and the result of the t-test of significance is shown in the table below: The result of the t-test is presented below and evaluated based on the critical value (2.042) and the value of calculated t-statistic for each variable.

Table 5: Result of t-Test of Significance

Variables	**t-computed (t*)**	**t-tabulated ($t_{a/2}$)**	**Conclusion**
MS	-2.115542	2.042	Significant
AA	3.190188	2.042	Significant

Significant (Reject H_o; accept H_1),
Insignificant (Accept H_o).

From the t- test result above, for MS, $t^*>t_{a/2}$, that is, 2.115542>2.042, therefore the null hypothesis is rejected. Hence, market share is statistically significant, thus market share has significant impact on return on investment. For AA, $t^*>t_{a/2}$, that is, -0.000000815>2.042, therefore the null hypothesis is accepted. Hence, asset allocation is statistically significant, thus asset allocation has significant impact on return on investment.

Result and Interpretation of f–Test of Significance

The degree of freedom for the numerator (V_1) and for the denominator (V_2) are given as K-1 and n-K

Where:

N= sample size= 39
K= number of parameters including the constant term= 3
V_1=3-1=2, V_2=39-2=37, df=(2,37) at 5% level of significance and df=(2,37), $f_{0.05}$= 3.26 and F*= 0.500353. Since $f^*>f_{0.05}$, therefore, the null hypothesis is accepted. This implies that the independent variables (ROI and AA), have joint influence on return on investment. Thus, the entire regression is not significant.

Evaluation Based on Econometric Criterion

In this subsection, the following econometric test is used to evaluate the result obtained from our model: autocorrelation and normality.

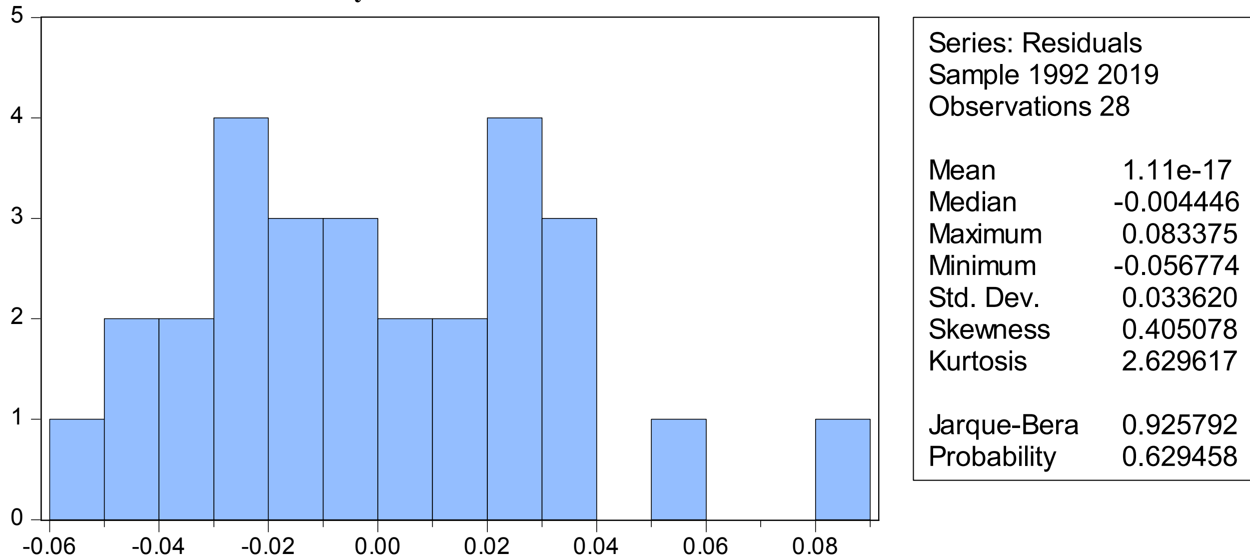
Result and Interpretation of Autocorrelation Test

Using the Durbin-Watson (D-W) statistic, the region of no autocorrelation (positive or negative) is given as follows:
du< d*< (4-du)
du= 1.60
d*= 0.532565
(4-du)= 4 – 1.60= 2.40
By substitution, the region becomes:
1.60>0.532565<2.40
The result shows that there is presence of autocorrelation problem in the model as the computed Durbin-Watson (D-W) statistic does not fall within the zero autocorrelation regions.

Normality Test Result

The Normality test will be done using the Jarque-Bera test of normality. Jarque-Bera test of normality is hinged on the hypothesis that K is close to or exactly 3 and S is close to or exactly 0, thus making the JB value close to or equal to 0, which is the condition for normal distribution.

Table 6: Result of Normality Test



From the normality table, the probability of Jarque-Bera is given as 0.629458. This is greater than 0.05, hence the residuals are normally distributed (ND).

Evaluation of Research Hypotheses

Hypothesis one: The null hypothesis is rejected, which states that market share has no significant impact on the return on investment from the t-Test result, because the computed t-value (t*) is greater than the tabulated t-value ($t_{0.025}$).

Hypothesis Two: The null hypothesis is rejected, which states that asset allocation has no significant impact on the return on investment from the t-Test result, because the computed t-value (t*) is greater than the tabulated t-value ($t_{0.025}$)..

Discussion of findings

Having estimated the parameters of the model numerically, with the use of multiple linear regression on the application of the ordinary least squares (OLS), this study reveals that market share and asset allocation have a positive relationship with the return on investment, this implies that an increase in the units of market share and asset allocation will lead to a corresponding increase in the return on investment in the period analyzed. However, the error correction mechanism result also shows that the speed of short run adjustment to long run equilibrium is very low. This implies that portfolio management is significantly and relevant predictor of financial performance of food and beverages companies in Nigeria. As such portfolio management of food and beverage companies have been able to exert the needed level of influence that is required to enhance and improved the financial performance of food and beverage companies in Nigeria.

The findings of this study are in agreement with the research conducted by Fubara&Agundu (2001) on 'Strategic Portfolio Management Model: Contemporary Imperatives for Quoted and Unquoted Companies in Nigeria'. The study surveyed 44 quoted and unquoted companies in Nigeria. The following variables were used Investment, portfolio, risk, return, scenario, strategy. 44 quoted and unquoted companies were surveyed. The study revealed that the companies' basis of portfolio selection is traditional. Companies indiscriminately take risk by investing in subjectively determined options. Investment risk is taken for granted. Also, the study found that the homogeneity of portfolio components, though attractive in the short-run, adversely affect investment returns in the long-run. Similarly, the findings of the study is also in agreement with the position of Hyväria (2014) who examine 'Project portfolio management in a company strategy implementation. The study focused on a medium sized business company. The structure of the company was the Group Company: a parent and subsidiaries in different European countries. The study was carried between March 2011 and December 2012. Interviews, participant-observation, researcher's own familiarity with the company, and written documents (triangulation) were adopted. The study found that the purpose of project portfolio management is to maximize the return on investment of the portfolio and projects.

CONCLUSION AND RECOMMENDATIONS

It is worthy, therefore, to conclude that market share and asset allocation has a positive relationship and a significant impact on the return on investment over the periods covered. More so, we conclude that portfolio management has significant effect on the financial performance of food and beverage companies in Nigeria. Sequel to the findings of this study, the following policy recommendations are necessary'

i. A major policy implication of this research due to the fact that portfolio management has been significant to determine the financial performance of food and beverages company in Nigeria, is that intensive policies should be put in place to reconcile the hiatus and increase the level of portfolio management as it have many spillover benefits like increased income, employment creation, improved general well-being of Nigerians as well as reduced pressure from debt/loan and serve as panacea for development needed in food and beverage company in Nigeria.

ii. The researcher based on the findings of the research, recommends that asset allocation and market share should not be neglected; joint effort should be made by both the private bodies and government in promoting these variables. This is because the result of the research has shown that portfolio management has significant impact on the financial performance of food and beverage companies in Nigeria.

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Impact of Portfolio Risk on Capital Market Development in Nigeria

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Abstract

This study titled "Impact of Portfolio Risk on Capital Market Development in Nigeria" empirically examined the impact of systematic risk on capital market capitalization in Nigeria from 1986-2020. Time series data and econometric tools were used to test for the stationarity and causality effect. Auto Regressive Distributed Lag Model (ARDL) and Error Correction Model (ECM) techniques were used to examine the short run and long run impact and relationship between Portfolio Risk and Annual Capital Market Capitalization in Nigeria (ACMCN). The study revealed that both in the long run and short run Inflation Rate (INFR)had positive relation with Annual Capital Market Capitalization in Nigeria (ACMCN) and it was statistically significant in explaining changes in Annual Capital Market Capitalization in Nigeria (ACMCN).On the other hand, at long and short run, Interest Rate in Nigeria (INTR)had negative relation with Annual Capital Market Capitalization in Nigeria (ACMCN) and it was statistically insignificant in explaining changes in Annual Capital Market Capitalization in Nigeria (ACMCN).Therefore, the study recommends that government should improve the efficiency and effectiveness of portfolio risk managementin Nigeria since it was statistically significant in determining the improvement of Annual Capital Market Capitalization in Nigeria (ACMCN), it should manage the activities relating to Inflation Rate (INFR) through targeting policies in order (for them to be significant and relevant as monetary policy tools) to encouraging the Annual Capital Market Capitalization in Nigeria. Also, it is recommended thatregulatory bodies such as Central Bank, tax authorities among other to create investment friendly climate such easy access to loan at low interest rate and tax holiday and avoid multiple tax regime as in Nigeria where the Federal, State, and Local government impose tax on nearly the same tax field.

Keywords: Portfolio Risk, Inflation Rate Risk, Interest Rate Risk, Annual Market Capitalization

INTRODUCTION

Risk is described as 'the possibility of loss, or other adverse or unwelcome developments. According to Pandy (2019), portfolio risk is the variability that is likely to occur in the future returns of a project. This has to do with financial risk which is inherent in an investment decision. Farounbi (2020) supported this view by stating that risk occurs where it is not known what the future outcome will be but where the various possible outcomes may be expected with, some degree of confidence from knowledge of past or existing events, in order words probabilities of alternatives could be estimated while he described uncertainty as a situation where future outcome cannot be predicted with any degree of confidence from knowledge of past or existing events thus probability estimates are not available for possible outcomes. This is an indication that risk and uncertainty affects investment decisions and therefore directly or indirectly affect the organizational goals and objectives in focus. This explains why Damodaran (2019) viewed portfolio risk to include Liquidity risk, Default risk, Duration risk, Market risk, Inflation rate risk, Interest rate risk, Exchange rate risk, and Concentration risk. Risks and uncertainties are evident in investment decisions thus the management is paramount to the success of organizations.

The capital market as a subset of the financial market plays a vital role in the economy especially in developing economies that require high long term credit to stimulate the large and untapped real sector for sustainable economic growth. According to Owolabi and Adegbite (2018), capital market is important in the mobilization of various savings in the economy and channeling of such funds to the sectors of needs (i.e. savings to profitable self-liquidating investment; and offers easy access to various forms of financial instruments) that enable economic agents to pool, price, and exchange risk within a given financial period.The capital market as a subset of the monetary marketplace plays a important position within the economy in particular in growing economies that require excessive long term credit score to

stimulate the massive and untapped actual region for sustainable financial increase. in line with Owolabi and Adegbite (2018), capital marketplace is essential within the mobilization of diverse financial savings in the economic system and channelling of such funds to the sectors of desires (i.e. savings to profitable self-liquidating investment; and gives smooth get entry to numerous sorts of monetary contraptions) that permit economic dealers to pool, price, and alternate danger within a given financial period.Capital markets are markets for transacting long term monetary securities, which includes regular stocks, long term debt securities including debentures, unsecured loan stock, and convertible bonds. Government bonds and different public zone securities which includes Treasury payments and gilt-edged stocks also are traded on capital markets (Muktadir-Al-Mukit & Shafiullah, 2016). However, as a marketplace where securities (shares, bonds, stocks) are bought and bought openly with relative ease, the inventory trade may be very essential to the buyers. It is a market for government securities, for corporate bonds, for the mobilization and utilization of lengthy-term budget for improvement - the long time stop of the financial machine. In this market, traders provide long term budget in change for long time monetary property presented through debtors. For that reason, a financial system with an active stock marketplace may additionally have its important stock market index often used as a guide in the size of adjustments within the well known degree of economic activities inside the concerned financial system. Similarly, some other major role of the stock market as an economic organization is that it enhances the performance of capital formation and allocation of sources (Ugochuku & Eleanya, 2018).

The capital market is, generally, regarded as a safe haven for investment. There, your money works for you. The market is a setting for income without stress. Smart and daring speculators can make fortunes there and can also lose a fortune through poor judgment. Despite its attractiveness, the capital market is volatile. In fact, volatility in price of securities is the hallmark of every capital market. Increased risk can emanate from increased volatility. Every day, stock prices go up and down in reaction to any number of issues involving business, the socio-economy and geopolitical events (Dake, 2020). The field of behavioural science has contributed an important element to the risk equation, demonstrating asymmetry between how investors view gains and losses. Investors usually put roughly twice the weight on the pain associated with loss than the good feelings associated with a profit. Every investor wants to play safe with his investments. Often, investors want to know just how much the value of an asset may deviate from its expected outcome, and also how bad things may look way down on the negative side. Value-at-Risk (VaR) on the other hand attempts to uncertainty is the lack of complete certainty. It is a situation where the future outcome cannot be predicted with any confidence from knowledge of past or existing events. Uncertainty presents more than one possibility whereby the true outcome or result is unknown. Uncertainty is immeasurable ie, not possible to calculate whereas, risk is a state of uncertainty where some of the possibilities involve a loss, catastrophe or other undesirable outcome. It is a set of possibilities each with quantified probabilities and quantified losses. One may have uncertainty without risk but not risk without uncertainty. We can be uncertain about the winner of a contest but unless we have some personal stake in it, we have no risk. If we bet money on the outcome of the contest, then we have a risk. Consequently, the measure of uncertainty refers only to the probabilities assigned to outcomes while the measure of risk requires both probabilities for outcomes and losses quantified for outcomes. Uncertainty presents both risk and opportunity, eroding or enhancing value.rovide an answer to this question. The idea behind VaR is to quantify how large a loss in investment could be with a given level of confidence over a defined period (Pandy 2019).

Koontz and Weihrich (2020) opined that due to the high volatility and frequent downturns in the capital market, uncertainties characterize the predictability of returns on investment. As a result of uncertainty, it is extremely difficult to predict the future price of a security and by extension, direction of the capital market. Uncertainty and risk are synonyms but they are not quite the same. Uncertainty must be taken in a sense radically distinct from the familiar notion of risk, from which it has never really been properly separated. The term “Risk” as loosely used in everyday speech and in economic discussion, really covers two things which functionally at least in their causal relations to the phenomenon of investment, are

categorically different. The Port-folio theory such as Capital Asset Pricing Model (CAPM) indicate that 'the greater the potential return being expected, the greater the risk that is being assumed (Pandy 2019). This means for a project with a high expected return, one should expect that the risk involved is equally high. Every investor expects some returns that would cover the organization's financial commitments to services and production as the case may be. However, the problem of inadequacies in risk management has led to various business failures. This was confirmed by Deeson (2021) reporting that 78 businesses failed in the 2019.Bernanke and Gertler (2020)also supported this fact by stating that business mortality was higher than that of birth thus showing the worrisome rate at which investment fail or drop below targeted returns. This confirms the portfolio risk rate at which industries close down and the attendant effects on the Nigerian capital market, national economic growth, and development as workers were disengaged or sent unexpectedly to the labour market due to failed businesses problems occasioned by inadequate management of investment risk and the uncertain investment climate. This scenario further manifested in the sudden drop in the share prices between year 2018 and 2021. The high rate of none performing bank credits granted to various customers further creates a form of stress on liquidity as evidenced as revealed in statistical reports. (nytime.com) reported that in 2019, 78 businesses were reported closed; in 2010 record showed another 8 businesses closure, while in 2021 new closures totalled 11. Also, lack of immediate funds to meet either new investment or running the operations of the existing business on a continuous basis also resulted in the closure of such business.

From the foregoing, risk is a prevalent phenomenon in all aspects of business. The problem that faces investors however is that the future is uncertain and therefore the value of possible risk to the investment or business cannot be determined precisely. This constitutes a problem to decision making for investors and managers too. Given the sudden and continuous drop in share prices since 2008, risk -adverse investors have become apprehensive of which stock is worth the effort whereas for investors in new businesses efforts are still being made. The challenge of such investments are however based on factors such as government policy, inflation rate, interest rate, cash flow available, physical factors such as lighting, good roads etc. Thus the focus of this study is essentially on managing the risk involved in financing projects or new investments with the objectives of examining what constitutes risk, the role of managers in managing risks and the inherent challenges in investment decisions in order to find ways of improving the lot of the investors. Despite the investment policies and reforms, the capital market is yet to live its full potentials and expectations and there have been some argument that the poor performance of capital market in Nigeria, among other things has been due to inconsistency and unfavourable macroeconomic policy especially the monetary policy. The performance of the money targeting, the result or significance of each money target and appropriate mix for optimal macroeconomic policy that will achieve long term growth and market capitalization has not been empirically examined in the previous works.

Besides, most of the recent empirical studies on portfolio risksuch as Kaplan and Mikes (2019), Frank (2020); Gates., Nicholas and Walker (2021) concentrated Business Risks proxied by Strategic Risk, Compliance Risk, Financial Risk, Reputational Risk, and Operational Risk, with little attention on the Portfolio Risks proxied by Interest Risk Rate and Inflation Risk Rate. Furthermore, previous studies have also neglected the issue of causal links or relationships that might exist between investment risk and Nigeian maarket capitalization. This link is necessary to determine whetherportfoliorisk and Nigeian capital maarket. In addition, the results previously obtained may not have provided a robust estimate for effective portfoliopolicy prescriptions. More so, the long run examination methods used in literature are mostly Johansen (1991) and Engle and Granger (1987) co-integration methods, whereas the unrestricted asymmetric autoregressive distributed lag approach developed by Shin and Greenwood-Nimmo (2014) is considered more appropriate particularly in the presence of the disequilibrium nature of the time series data stemming from the presence of possible regime change as happens with most economic policy frameworks. This study, therefore, adopted the autoregressive distributed lagged model and error correction approach to examine empirically the relationship between investment risk and Nigerian capital market.All these provided a robust estimate of the parameters under investigation for effective portfolio

risk on Nigeria capital market. This study closed these identified gaps by adopting a methodological approach that allows for assessing the impact of portfolio risk on capital market development in Nigeria. From the foregoing therefore, the basic hypotheses underlying this study are stated thus;

H_{01}: Inflation risk rate has no significant impact on capital market capitalization in Nigeria.
H_{02}: Interest risk ratehas no significant impact on capital market capitalization in Nigeria.

LITERATURE REVIEW

Conceptual Review

Portfolio Risk

Renn (2019) defined Portfolio Risk as the probability of the assets or units of stock that the company holds to sink, thereby causing a significant loss to the company in terms of their investment being lost. A portfolio is defined as the combination or the collection of stocks or investment channels within the company. Portfolio risk reflects the overall risk for a portfolio of investments. It is the combined risk of each individual investment within a portfolio. The different components of a portfolio and their weightings contribute to the extent to which the portfolio is exposed to various risks.The major risks a portfolio will face are market and other systemic risks. These risks need to be managed to ensure a portfolio meets its objectives. You can only manage this risk if you can first quantify it (Osaze, 2018).
Renn (2019) opined that, there are lots of types of investment risks, both at the portfolio level and the individual security level. Firstly, the following are examples of risks that are specific to individual securities. These risks can easily be managed through diversification - Liquidity risk, Default risk, Regulatory political risk, Duration risk, Style risk, Inflation risk and Interest risk. There are numerous approaches to measuring portfolio risk. All have their advantages and drawbacks. There is no full proof method, so several methods are usually combined. Volatility is the most common proxy for risk – though there are risks that volatility does not capture. Standard deviation is the typical way to measure volatility. This applies to individual securities and to portfolios (Osaze, 2018).

The return of a portfolio can be calculated by simply averaging the weighted returns. Calculating the standard deviation of a portfolio is a little more complicated. A portfolio's historical standard deviation can be calculated as the square root of the variance of returns. But when you want to calculate the expected volatility, you must include the covariance or correlation of each asset.Calculating the correlation and covariance for each stock can become very complicated. The covariance must be calculated between each security and the rest of the portfolio. The weighted standard deviation for each security is then multiplied by the covariance. This will usually result in the portfolio's volatility being lower than most of its components. Renn (2019) opined that there are several ways to limit portfolio risk. In most cases more than one approach is combined. The stock market has historically generated the highest returns but has also experienced the greatest volatility. For this reason, diversifying investments across several asset classes is the first step in managing a portfolio's risk. A substantial percentage of most portfolios should be invested in equities, but this needs to be balanced with other types of assets.A basic diversified portfolio would include stocks, bonds, and cash. Stocks provide the greatest long-term returns, bonds provide predictable income, and cash offers immediate liquidity. While this would be a vast improvement on a single asset portfolio, risk can be further diversified with other asset classes. The objective then is to find assets that have very low correlations with equities and bonds (Frank, 2020).

Inflation Rate Risk

Friedman (2018) referred to inflation as economic phenomenon and may be produced most effective via a more rapid increase in the quantity of cash than output." This becomes described through Brown (2018), as a situation of a rising widespread price degree of vast spectrum of goods and offerings over a protracted time frame. Its miles measured as the rate of increase in the preferred charge degree over a selected period of time. Ngerebo (2017) points out, that the real effect of inflation is as a result of cash phantasm. To the neo-classical and their followers at the University of Chicago, inflation is essentially a monetary phenomenon. Bekaert and Engstrom (2017) see inflation as phantasm which recommend that when anticipated inflation rises, bond yields duly growth, but because equity investors incorrectly discount actual coins flows using nominal costs, the increase in nominal yields results in equity under pricing and vice versa. Svensson (2021) considered that inflation focused on is that form which disregards

absolutely the actual effect of economic coverage each inside the short and medium term and focuses completely on controlling inflation within the shortest viable time horizon. Inflation can also be defined as a continual tendency for charge and money wages to increase. It's far measured via the proportional modifications over time in some suitable fee index, generally a consumer rate index or a GDP deflator (Cengiz & Basarir, 2019).

Interest Rate Risk

Interest rate is described as the price of cash that is the quantity of interest paid per unit of time expressed as a percent of the amount borrowed. The fee of borrowing cash, measured in naira, in keeping with yr in line with naira, borrowed, is the interest rate. Hobby costs range especially in time period/adulthood that is the length of time for repayment and liquidity this is short conversion of assets to budget (Adekunle, Alalade & Okulenu, 2016). Whilst maturity and liquidity collectively with different factors are considered, many specific monetary contraptions and so many one-of-a-kind interest quotes will emerge (Anyanwu, 2018). There are two major sorts of interest fee according to Pandy (2019) that can either be nominal or actual. Nominal interest fee may be measured in naira terms, now not in phrases of goods. The nominal hobby price measures the yield in naira in line with 12 months, according to naira invested while the real hobby fee is corrected for inflation and is calculated because the nominal hobby price minus the charge of inflation. A tremendous actual hobby rate indicates that nominal fees are in extra of inflation at the same time as a poor real rate is an immediate mirrored image of high inflation. Fairly fantastic actual interest costs are perfect as extremely high real charges can motive distress among debtors in addition to constrain investment spending. Interest charges are quite many; therefore, they may be regularly referred to as interest quotes shape.

Capital Market

Capital market is a market for sourcing of medium and long-time period funds by way of both the authorities and personal sectors of the financial system. The strategic roles of the capital market inside the allocation of scarce monetary assets for fast economic growth and development of any country is well documented (Amedu, 2018; Aremu, Suberu and Ladipo, 2017). The study by Ovat (2019) listed the profits of the Nigerian capital marketplace as follows: - It helps the economic system to increase capital formation; presents finances to authorities and agencies at greater attractive terms; affords first-rate supply of investment for SME boom; subjects firms to marketplace discipline hence, enhancing chances of success; provides the essential factors to manipulate financial dangers and guarantees continuity of the employer lengthy after the founder. In line with Aremu, Suberu and Ladipo (2017), the capital market is a marketplace in which each authorities and companies improve long term finances to change securities at the bond and the inventory market. It includes each the primary market in which new issues are allotted amongst investors, and the secondary markets where already current securities are traded. In the capital marketplace, mortgages, bonds, equities and different such funding funds are traded. The capital marketplace additionally facilitates the manner wherein investors with excess budget can channel them to traders in deficit. The capital marketplace provides both in a single day and long term funds and uses financial devices with long adulthood periods. The following economic instruments traded on this marketplace consist of forex instruments, equity coverage, credit marketplace derivatives, and hybrid units (Aremu, et al., 2018).

Market Capitalization

In line with Omotor (2017), marketplace capitalization is the charge of a inventory at any given time increased via the quantity of shares extraordinary. From a market perspective, market capitalization incorporates of the sum of individual extremely good shares with the aid of their charges for all of the companies indexed in a given stock market. Market capitalization may be divided as follows; one, big – cap ranging from \$10 – 100 billion; mid-cap (\$ 1 – 10 billion); Small-cap (\$100 million – 1 billion) and micro-cap (\$10 - \$ 100 million). Olson (2005) notes that there is no clean consensus or roles governing on

the precise reduce of values and whether categorization should be dollar denominated or percentiles. Market capitalization is the overall fee of all equity securities listed on a stock trade. It's far computed on a every day basis. Market capitalization of a particular agency on a particular day may be computed as made from the range of shares brilliant and the last fee of the percentage. Right here the range of fantastic shares refers to the issue size of the stock. Market Capitalization = remaining rate of share quantity of splendid stocks (Omotor, 2017).

Alternatively, the need to be adjusted through the years as result of inflation, populace alternate and typical marketplace valuation is cut by way of categorization. Normally, these expenses occur on a daily basis depending on variation in rates of the respective shares. Consequently, the need to become aware of suitable signs in order to help players in the inventory marketplace to reveal the changes is essential. Through this, the players are able to make knowledgeable funding selections. stock market indices are the commonly used indicators hired to display and report modifications in marketplace capitalization and marketplace performance. Moya-Martinez, and Ferrer-Lapena (2019) defined inventory market overall performance as a degree of returns on stocks over a time period. The duration over which inventory returns are measured is based totally on personal choices though portfolio managers generally measure stock marketplace overall performance on day by day, weekly, monthly and every year basis. market capitalization figures and stock indices computed each day based totally on person inventory fees are used to measure inventory market overall performance. In like manner, Bakare (2020) referred to capitalization charge as the discount rate used to decide the present cost of destiny earnings. It is one of the primary determinants of the marketplace length of any inventory trade. The increase and development of any financial system depend on the dimensions of market capitalization and its increase charge. Also consolidation recreated the Nigerian capital market with the aid of stimulating activities in each number one and secondary marketplace thru boom in mixture market capitalization and new issues of bank stocks. the size of market capitalization and its growth fees are signs of market size and performance. Marketplace length is also measured through the marketplace capitalization ratio, that's described as the value of shares listed divided by means of GDP. The essence of the marketplace capitalization ratio is that the dimensions of the marketplace need to be positively correlated with the ability to mobilize capital and diversify chance in an economic system (Demirguc-Kunt& Levine, 2016).

Empirical Review

There are quite a range of empirical studies regarding portfolio risk, market capitalization and other capital market variables, however the literature evaluation of study cantered more on latest scholarly works at the difficulty depend starting with the works of Ologunde, Elumilade and Asaolu (2021) who examined the relationships between stock market capitalization rate and interest rate risk. They found that winning hobby charge exerts high quality influence on stock market capitalization. They also observed that authority's improvement inventory charge exerts negative have an effect on stock marketplace capitalization fee and winning hobby fee exerts poor influence on authority's improvement stock price. Their findings seem to take interest rate as the lending charge. If deposit fee will increase, theoretically, buyers will transfer their capital from proportion marketplace to banks. This could exert a terrible effect on stock expenses. Consequently, their work used the deposit price to specific hobby prices in Nigeria. Aziza (2020) also accomplished a study on the effects of inflation on stock market overall performance and demonstrated whether or not economic regulations in diverse international locations affect their personal stock market overall performance and improvement in Australia and New Zealand representing Australia; India and Indonesia representing Asia; Nigeria and South Africa representing Africa; Chile and Trinidad and Tobago representing South America and Jamaica and the United States representing North America. The study used time collection facts from 1988 to 2008. The study found that financial coverage variables inclusive of inflation and interest rate proxied by means of lending price as well as intermediate goal of economic policy inflation price measured at purchaser fee index have longer term relationship with stock market overall performance measured with the aid of boom of marketplace capitalization.

Okoro and Anne (2018) analyzed the effect of investment risk on financial boom in Nigeria, time series facts become used and regular Least Squares (OLS) changed into hired. The study determined that stock marketplace has nice and sizeable impact on monetary increase in Nigeria among the period 1970-2015. but, a sharp comparison become the case in the study by using Afolabi (2019) which empirically ascertained the effect of the Nigerian inventory market at the Nigerian economic system from 1992 to 2018. The Nigerian Capital market turned into proxy as market Capitalization against some variables of the economy inclusive of Gross home Product (GDP), foreign direct funding, inflation rate, general new troubles, cost of transaction and general listing. Using the couple of regression analysis, he discovered that inventory market has a trifling impact at the economy within the duration underneath overview. Dabo (2018) investigated the impact of capitalization of the Nigerian capital market and its impact at the growth of the Nigerian financial system. The paper employed annual time series records from 2001 to 2017(17 year duration) gathered from various issues of vital financial institution of Nigeria's Statistical Bulletin and Annual report and statements of money owed of Nigeria stock exchange. A regression analysis was adopted in computing the interplay among the capitalization of the Nigerian capital market and Nigeria's financial growth. The empirical results showed that, there has been unidirectional causality between capitalization of the inventory marketplace and financial increase, which ran from monetary growth (GDP) to capitalization of the inventory market (MCAP) at 5 percent vast degree. The study established that the Nigerian capital marketplace desires to create more self assurance to buyers, mainly in phrases of transparency and responsibility, for sustainable and increasing capitalization important for sustainable economic boom in the United States. It recommended the enlargement of the Nigerian inventory market through the authorities, creating an allowing investable environment, with the intention to growth each the extent of transactions and wide variety of shares traded in the marketplace. This, it believes will enhance their ability to mobilize assets and successfully allocate them to the maximum effective sectors of the economy.

Also in Nigeria, Felix, Amalachukwu and Oyinloye (2017) tested the empirical effect of portfolio policy tools on performance of the Nigerian capital market the use of time series facts (1986 -2016). Explicitly, thestudy evaluated the effect of monetary coverage rate (the rate at which the critical bank of Nigeria increase credit facility to other monetary establishments operating in the country), cash reserve ratio, interestrate and mortgage to deposit ratio at the performance of the Nigerian capital market. Nigerian inventory alternate and important financial institution of Nigeria annual reports of various versions sourced the relevant records for analysis. The Autoregressive Distributive Lag (ARDL) changed into the method carried out in estimating the model and for co-integration evaluation, even as granger causality evaluation aided in ascertaining the effect of monetary coverage tools on capital market performance. The end result of the evaluation illustrated that monetary coverage gear and capital marketplaces are not proportionally correlated. The study observed that Nigeria capital market performance is not notably stricken by monetary policy announcement with the aid of the important financial institution of Nigeria; rather, it's far financial charge that is extensively prompted with the aid of performance of the capital market. The study recommended that the CBN have to be cautious in fixing the liquidity ratio because of its capability in fuelling or affecting inflation which in turn affects charges of shares within the capital market. The research performed by way of Muktadir-Al-Mukit and Shafiullah (2016), investigated the effect of monetary coverage variables on the performance of new submit crashed stock market of Bangladesh the usage of month-to-month records from 2011. As a dependent variable, Dhaka stock trade (DSE) widespread Index (DGEN) was used as a proxy for inventory market performance and three impartial variables namely money deliver, repo price and inflation price were proxies for monetary coverage gear. The research used econometric techniques of measuring the purposeful dating among monetary variables and market index the use of the concept of Unit root test and co-integration technique. Causal relationships had been investigated the usage of Granger causality check. The coefficients of all the explanatory variables have been located statistically big. through employing co-integration technique, it turned into observed that in the volatile stock marketplace of Bangladesh, a one percentage boom in inflation, in money deliver and in repo rate contributes 2.61and 12.98 percent decrease and six.08

percentage growth within the market index respectively. Ultimately, Granger causality evaluation cautioned the lifestyles of unidirectional causality from inflation to DGEN index and money supply to DGEN index.

Theoretical Framework

Capital Asset Pricing Model (CAPM)

The capital asset pricing model (CAPM) was propounded by Sharpe (1964) and Lintner (1965). This theory believed that the expected extra go back of an asset is linearly proportional to the anticipated extra market return, called the market hazard top class. excess returns are returns above the hazard-loose interest rate. The market hazard of an asset is measured through its beta, which displays the systematic threat of the asset. Officially, it can be written in the following manner: E (Ri) = Rf + pi (E (R m) - R f). Where F. (Ri) is the expected return of asset; (E (Rm) Rf) is the marketplace chance premium; is the systematic chance. The capital asset pricing model (CAPM) is based on several assumptions such as: investor preferences which appears at investor conduct as risk averse people in search of to maximize the anticipated utility of their wealth on the end of the length; imply-variance options which holds that traders take into account most effective the first actions of go back distribution whilst deciding on an investment: the predicted go back and the variance; CAPM additionally holds that there are no operational friction like taxes and transaction prices; and that every one assets are infinitely divisible. Moreover, the concept further holds that all assets may be traded which means that each one claims to future coins-flows may be freely exchanged. by using implication, each investor's wealth is absolutely made from tradable belongings; the concept additionally assumes homogeneous ideals wherein the investment period is the equal for all traders and all investors have the equal investment alternatives. CAPM additionally holds that statistics is offered free of charge and is available concurrently to all buyers consequently, there may be nothing like information asymmetry. All buyers therefore have the identical return, variance, and covariance expectations for all property. The CAPM derived by means of Sharpe (1964), Lintner (1965) and Mossin (1966) and in its zero beta model by way of Black (1972) has a history of extra than thirty years over four decades.

Then again, the CAPM acquired early empirical support, it become eventually challenged on the premise of incompleteness. Also, the Fama& French (1988) look at sparked a debate concerning the validity of the CAPM. A number of papers attempted to address the incompleteness trouble, as an instance research with the aid of Merton (1987). The paintings of Markowitz (1959) on portfolio choice and Sharpe (1964), Lintner (1965) and Mossin (1966) at the Capital Asset Pricing model derived the concept of the slope parameter, fi of the security marketplace line, as a measure of systematic chance. Blume (1973) provided a conscious non-rigorous justification of the usage of the beta coefficient as a measure of danger. The portfolio technique and the equilibrium approach have been used for its justification. Blume (1973) also tested the desk bound of beta coefficient over the years using portfolios of n securities with smallest estimates of pj every portfolio is ranked in ascending order and the product motion and rank order coefficient among the threat measure beta for portfolio of n securities in a single duration and corresponding hazard degree for the identical portfolio inside the next length is tabulated. The findings showed that the product movement correlations multiplied with the quantity of securities in the portfolio. With the aid of implication at least for a portfolio with a massive range of securities, the estimated beta coefficients are exceptionally special over time.

Theory of Investment

The theory of investment was developed by Keynes (1936) and Hayek (1941). Who focused on the employment of capital and funding from a firm's point of view? They regarded funding because the alternate in capital stock at some point of a length. One of the earliest funding theories, however, got here from Irving Fisher in his "Nature of Capital and profits" (1906) and his later work "principle of hobby" (1930). In his idea, even though simplistic and open to some of assumptions, he evolved a simple funding

frontier (Krugman, 1994). according to Goetzmann (1997) an investor have to first be answering the query on what price of go back he's going to call for to maintain a risky security in his portfolio due to the fact there may be a change-off among those two motivations. As such, the investor needs to assess the inherent hazard of not losing any money towards the anticipated return of the funding. The rate of go back measures the growth in wealth and is expressed as a percent over a specific term. One of the finest allies for an investor seeking investment returns is time. That is due to the compounding impact which could make someone's cash develop considerably over a enormously quick time frame. It refers back to the increase of an investment from reinvesting any money that is earned till the withdrawal length which means that the investment no longer only earns a go back primarily based on the unique quantity invested, however also on any go back already paid.

According to Goetzmann (1997), over a sixty eight-12 month's length from 1926 to 1995, a dollar invested in the SPS00 grew to$889. Over the identical length, a greenback invested in company bonds grew to $40. Despite the fact that the returns of the company bonds were lots lower, the danger o! Reaching the expected go back over any duration on this time was much lower, because the return curve changed into flatter, though fairly straight. The SP500 yielded miles better go back, but may additionally have yielded a negative return at any time within that period. The go back curve could consequently be a whole lot more erratic. This puts the investor in the front of the classical change-off of risk vs. return. this is in keeping with the investing precept which holds that the higher the hazard the investor is prepared to take, the higher the go back that he can count on from the investment might be. The margin an investor earns as the result of making an investment in a riskier investment is called the hazard premium. This study is anchored by theory of investment; this is because is closely related to this research work, and because it states that each investor has a sure chance appetite or danger tolerance. Both seek advice from the equal conduct, which suggests how lots danger an investor is ready to take for an anticipated return. to give the investor a wide danger - return profile inside one portfolio, the portfolio supervisor desires to make capital allocation choices which might determine how a great deal of the overall portfolio goes to be invested in low- hazard, low-go back investments vs. unstable.

3. METHODOLGY

The research design for this studyis expost facto research design, this meanscause - effect research design and this was chosen because of the research specific objectives.The study adopts secondary method of data collection. Secondary data is research data that has been previously gathered for other uses by researchers or institutions other than the present user. Our secondary data will be gotten from institutions and organizations that handle information and data relating to capital market and macroeconomic policy indicators in Nigeria. Among them are Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS), Security and Exchange Commission (SEC) and World Bank. And the data spanned from 1986 to 2020, they are time series and they are annual data.

The method that was employed to analyze the behaviour of the data is the use of both descriptive and inferential statistics that is ex post facto method as stated under the research design. The variables which will be used to determine the specific objectives are presented as follows:
i. Dependent variable: AMCCMN = annual capital market capitalization in Nigeria
ii. Independent variables: INFR (Inflation Rate) and INTR which is the interest rate in Nigeria.

Auto-regressive Distributed Lag (ARDL) approach was applied to estimate the impact of portfolio risk indicators on capital market in Nigeria in this study. The ARDL ‘‘Bounds test’’ approach that is based on the ordinary least square (OLS) estimation of a conditional unrestricted error correction model (UECM) for co-integration analysis as established earlier was developed by Pesaran et al. (2001). It was used to test for the existence of a long run relationship as well as to make an estimation of long and short run coefficients that can capture both the short run and long run impacts. Also, the data series order of integrations does not impose any restriction to ARDL application (Pesaran and Pesaran, 1997). Pesaran and Shin (1999) noted that ARDL estimators are consistent with small sample sizes. From the ARDL the

study derived a dynamic error correction model (ECM) following a simple linear transformation, where the ECM integrates short run dynamics with long run equilibrium without losing long run information (Bannerjee, Dolado, Galbraith & Hendry, 1993; Shrestha & Chowdhury, 2005).

Model Specification

As stated above under the technique for data analysis, the study adopts and uses the Autoregressive Distributed Lagged (ARDL) model and the Error Correction Model (ECM) for both the long and short run impact among the portfolio risk variables. The foundation of the model was based on the theoretical framework of the study. Also, the initial model was adopted from the work of Oniore and Akatugbe (2019) which was stated as follows:

$$In\text{ACMCN} = \alpha_0 + \beta_1 In\text{INFR} + \beta_2 In\text{INTR} + \text{Ut} \text{ -------------- } \quad (1.1)$$

Where: ACMCN = Annual Capital Market Capitalization in Nigeria
INFR= Inflation Rate in Nigeria
INTR = Official Exchange Rate
In = Natural logarithm, α_0 = the intercept or autonomous parameter estimate, β_1 *and* β_2 = Parameter estimate representing the coefficient of INFR and INTR, and Ut = Error term (or stochastic term).

However, the equation (1.1) was modified and specified to follow the study objectives and hypotheses stated. Therefore, below are the specified Autoregressive Distributed Lagged (ARDL) and the Error Correction Model (ECM) according to the specific objectives of the study which are as follows:
The Autoregressive Distributed Lagged (ARDL) model that was used to examine the portfolio risk indicators on capital market capitalization in Nigeria is specified as follows:

$$ACMCN = \alpha_0 + \sum_{g=1}^{l} \alpha_{1i}\, \Delta ACMCN_{t-1} + \sum_{h=1}^{m} \alpha_{2i}\, \Delta INFR_{t-i} + \sum_{i=1}^{n} \alpha_{3i}\, \Delta INTR_{t-i} ---- (1.2)$$

Therefore, equation (1.2) was used to estimate and analysis short run impact of portfolio risk indicators on annual capital market capitalization in Nigeria. From equation (1.2) $ACMCN$ is the annual capital market capitalization of the capital market in Nigeria which is the dependent variable. The following are the independent variables: INFR is the inflation rate in Nigeria and INTR is the interest rate in Nigeria. The model, that is equation (1.2) above was used to adjust the estimation until the ECM turned negative. The negative sign of coefficient of the error correction term ECM (-1) shows the statistical significance of the equation in terms of its associated t-value and probability value.

Definition of Variables

Table 1: Description of the Variables used for the Model

SN	Variable	Symbol	Explaination	Measurement	Remark	Source
1	Annual Capital Market Capitalization of the in Nigeria.	ACMCN	The value of all listed bond securities based on their market prices	The bond price multiply by the number of bond outstanding	Dependent	SEC, NSE, DMO
2	Inflation Rate in Nigeria	INFR	The general price changes of goods and services in an economy overtime	The measure of changes in general price level of goods and services overtime in Nigeria	Independent	CBN, NBS
3	Interest Rate in Nigeria	INTR	Rate of interest an investor expects to receive after allowing for	This is approximately the nominal interest rate	Independent	CBN, NBS

			inflation	minus the inflation rate		

Source: *Author Compilation, 2020*

RESULTS AND DISCUSSIONS

To assess the impact of portfolio risk on capital market capitalization in Nigeria, model estimation was carried out using annual time series data covering the period 1986 to 2020. The capital market capitalization in Nigeria is the dependent variable which was proxy by Annual Capital Market Capitalization in Nigeria (ACMCN), while portfolio risk variables are the independent variables which are represented by Inflation Rate (INFR) and Interest Rate (INTR).

4.1 Descriptive Analysis of Variables

Table 2: Descriptive Analysis of Variables

	ACMCN	INFR	INTR
Mean	7324.133	20.28286	22.06371
Median	1359.300	12.90000	21.34000
Maximum	38589.58	72.80000	36.09000
Minimum	6.800000	5.400000	12.00000
Std. Dev.	9683.194	18.31077	5.004701
Skewness	1.342567	1.726163	0.428607
Kurtosis	4.301467	4.664401	3.737563
Jarque-Bera	12.98466	21.42114	1.864938
Probability	0.001515	0.000022	0.393581
Sum	256344.6	709.9000	772.2300
Sum Sq. Dev.	3.19E+09	11399.66	851.5992
Observations	35	35	35

Source: *Output from E-views 10.0 (2022)*

The summary of descriptive statistics of relevant variables of study is as reported in Table 2.As may be observed from the table, the mean, median, standard deviation as well as the skewness and kurtosis measures of our variables of interest are given. The mean values of ACMCN, INFR and INTR are 7324.133, 20.28286, and 22.06371respectively. Their respective standard deviations are 9683.194, 18.31077, and 5.004701. Also, the minimum values for Annual Capital Market Capitalization in Nigeria (ACMCN), Inflation Rate (INFR) and Interest Rate (INTR)are 6.8 Billion Naira, 5.4 percent and 12 percent respectively, while the maximum values of Annual Capital Market Capitalization in Nigeria (ACMCN), Inflation Rate (INFR) and Interest Rate (INTR) are 38589.58 Billion Naira, 72.8 percent and 36.1 percent respectively. The Jarque-Bera test of normality shows that the error term in our specified equation is normally distributed. This is evidenced by the respective insignificant Jarque-Bera statistics of the relevant variables.

Correlation Analysis

Table 3: Correlation Analysis

Covariance Analysis: Ordinary
Date: 03/13/22 Time: 15:47
Sample: 1986 2020
Included observations: 35

Correlation Probability	LACMCN	LINFR	LINTR
LACMCN	1.000000		

LINFR	0.817834 0.0014	1.000000 -----	
LINTR	0.747027 0.0399	0.740275 0.0316	1.000000 -----

Source: *Output from E-views 10.0 (2022)*

From table 3 above there is strong and significant positive relationship between Annual Capital Market Capitalization in Nigeria (ACMCN) and Inflation Rate (INFR, Annual Capital Market Capitalization in Nigeria (ACMCN) and Interest Rate (INTR). This is indicated by their high Pearson Correlation coefficient of 0.817834 and 0.747027 respectively and they are both significant at 5 percent level of significance (LOS) since their p-values are0.0014 and 0.0399. Meaning an increase or decrease in Annual Capital Market Capitalization in Nigeria (ACMCN) is associated with an increase or decrease in Inflation Rate (INFR) and Interest Rate (INTR)

Trend and Graphically Analysis

The trends associated with our key variables are equally shown in the following graphs below. Accordingly, the chart associated with Annual Capital Market Capitalization in Nigeria(ACMCN), Inflation Rate (INFR) and Interest Rate (INTR) variables exhibited significant fluctuations (at 5 years intervals) between 1986 to 2018whileMoney Supply (M2) showed upward trending 1990 to 2020 (see the graphs below).

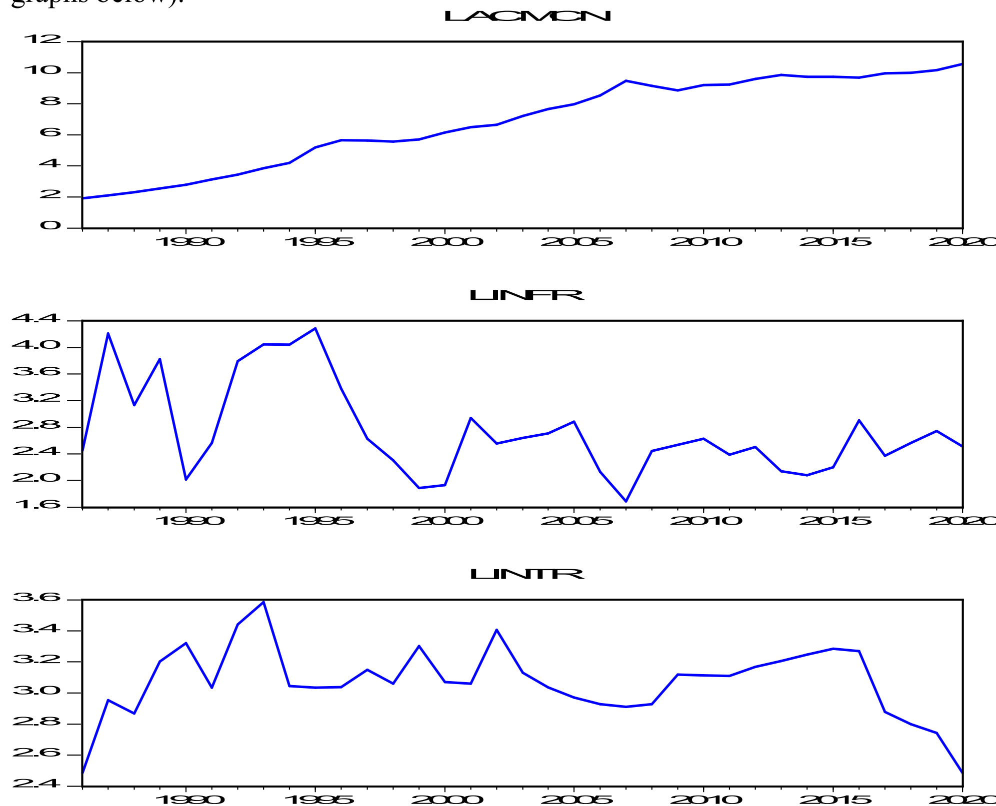

Figure 1: ***Trend Analysis for all the Variables (1986-2020***

Stationarity Test of Variables

Table 4: Augmented Dickey-Fuller Test

Variables	ADF @ Level	ADF @ 1st Stationarity	Stationary Status
ACMCN	0.5108	0.0012	I(1)
INFR	-	0.0321	I(0)
INTR	-	0.0219	I(0)
The critical values for rejection of hypothesis of unit root were from MacKinnon (1991) as reported in e-views 10.0.			

Source: *Output from E-views 10.0 (2022)*

Table 4 shows that the Augmented Dickey-Fuller stationarity test results of the three variables used in this study. From the results, log of Annual Capital Market Capitalization in Nigeria (ACMCN)was stationary after first difference, while log ofInflation Rate (INFR) and log of Interest Rate (INTR) were stationary at level. This implies that the variables are fit and suitable to be used for the analysis.

Co-integration ARDL Bounds Test

Table 5: ARDL Bounds Test of Co-integration

ARDL Long Run Form and Bounds Test
Dependent Variable: D(LACMCN)
Selected Model: ARDL(1, 0, 1)
Case 3: Unrestricted Constant and No Trend
Date: 03/13/22 Time: 15:22
Sample: 1986 2020
Included observations: 34

Conditional Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.768943	0.960967	0.800176	0.4301
LACMCN(-1)*	-0.030738	0.022172	-1.386339	0.1762
LINFR**	0.041391	0.085262	0.485452	0.6310
LINTR(-1)	-0.136523	0.270740	-0.504261	0.6179
D(LINTR)	-0.497582	0.273964	-1.816230	0.0797

* p-value incompatible with t-Bounds distribution.
** Variable interpreted as Z = Z(-1) + D(Z).

Levels Equation
Case 3: Unrestricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LINFR	1.346576	3.417974	0.393969	0.6965
LINTR	-4.441544	8.613107	-0.515673	0.6100

EC = LACMCN - (1.3466*LINFR -4.4415*LINTR)

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)

			Asymptotic: n=1000	
F-statistic	5.435040	10%	2.45	3.52
K	2	5%	2.86	4.01
		2.5%	3.25	4.49
		1%	3.74	5.06
			Finite Sample: n=35	
Actual Sample Size	34			
		10%	3.393	4.41
		5%	4.183	5.333
		1%	6.14	7.607
			Finite Sample: n=30	
		10%	3.437	4.47
		5%	4.267	5.473
		1%	6.183	7.873

t-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
t-statistic	-5.386339	10%	-2.57	-3.21
		5%	-2.86	-3.53
		2.5%	-3.13	-3.8
		1%	-3.43	-4.1

Source: *Output from E-views 10.0 (2022)*

Having established that the variables are an admixture of I (0) and 1(1)orders of integration. The ARDL bounds test for co-integration was carried out. Table 5 shows that the F-Statistic derived from the ARDL bounds test is 5.435040. When this was compared with the critical values obtained from the Pesaran table at 5% level of significance, its value exceeded both 2.86 and 4.01 for I (0) and I (1) respectively. Based on this, it can be said that the variables are co-integrated or show long run relationships (co-movements). Using the ARDL Bound test with critical value from Narayan (2005), the variables were co-integrated at 1per cent level of significance since the Wald F- statistics is greater than the critical lower and upper bound.

Discussion of Regression Results

Table 6 : ARDL Long-run regression results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFR	4.889517	19.245644	-0.254058	0.0019
INTR	-57.28967	71.465268	-0.801644	0.4317
C	1445.8629	1827.616743	0.791119	0.4377

Source: *Output from E-views 9.0 (2021)*

From the long-run regression results shown in Table 4.7 the following interpretation can be inferred; a unit increase in Inflation Rate (INFR) and Interest Rate in Nigeria (INTR) on the average, holding other independent variables constant will lead to 4.889517 and 57.28967-unit decrease in Annual Capital Market Capitalization in Nigeria (ACMCN)respectively. Based on the probability value, the Inflation Rate (INFR) and Interest Rate in Nigeria (INTR) were statistically insignificant in explaining the variation in Annual Capital Market Capitalization in Nigeria (ACMCN).

Based on the coefficient the inflation rate has positive and significant impact on capital market capitalization in Nigeria. Therefore, the $\mathbf{H_{01}}$ which stated that inflation rate as a portfolio risk has no significant impact on the capital market capitalization in Nigeriais **rejected**.Andthe coefficient the interest rate has negative and insignificant impact on capital market capitalization in Nigeria. therefore, the $\mathbf{H_{02}}$ which stated that interest rate as a portfolio risk has no significant impact on capital market capitalization in Nigeria is **accepted.**

Table 7: The Error Correction Model Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(ACMCN)(-1))	0.531035	0.236048	2.249692	0.0353
D(INFR)	6.218151	24.473581	-0.254076	0.0001
D(INTR)	-72.857063	89.153980	-0.817205	0.4230
ECM(-1)	-0.1304621	0.034294	-3.804224	0.0010

Source: *Output from E-views 10.0 (2022)*

From the short-run regression results shown in Table 7, the following interpretation can be inferred; since the variables were found to be co-integrated, implying that they have long-run equilibrium relationship, it is necessary to test for shortrun relationship. From table 7, the ECM parameter is negative (-) and significant which is -0.1304621, this shows that 13 percent disequilibrium in the previous period is being corrected to restore equilibrium in the current period.It has been established that the variables are co-integrated and also have short run relationship established from the ECM. Annual Capital Market Capitalization in Nigeria (ACMCN)at lag one and nflation Rate (INFR) at current period waspositively related to Annual Capital Market Capitalization in Nigeria (ACMCN), while Interest Rate in Nigeria (INTR) at current period was negatively related to Annual Capital Market Capitalization in Nigeria (ACMCN).

Discusion of Finding

The error correction model (ECM) andAutoregressive Distributed Lagged (ARDL) results revealed that Inflation Rate (INFR) was statistically significant in explaining the variation in Annual Capital Market Capitalization in Nigeria. This findings and results agreed to the work of Aziza (2020) also accomplished a study on the effects of inflation on stock market overall performance and demonstrated whether or not economic regulations in diverse international locations affect their personal stock market overall performance and improvement in Australia and New Zealand representing Australia; India and Indonesia representing Asia; Nigeria and South Africa representing Africa; Chile and Trinidad and Tobago representing South America and Jamaica and the United States representing North America. The result is also in line with the result of Okoro and Anne (2018) analyzed the effect of investment risk on financial boom in Nigeria. Besides, the study revealed that Interest Rate in Nigeria (INTR) was statistically insignificant in explaining the variation in Annual Capital Market Capitalization in Nigeria. This findings and results were consistent with the work of Asaolu (2021) who examined the relationships between stock market capitalization rate and interest rate risk. The findings of the study is also in agreement with the findings ofFelix, Amalachukwu and Oyinloye (2017) tested the empirical effect of portfolio policy tools on performance of the Nigerian capital market, but not in agreement of findings ofAziza (2020).

CONCLUSION AND RECOMMENDATIONS

Thestudy revealed that both in the long run and short run, Inflation Rate (INFR) waspositively related to Annual Capital Market Capitalization in Nigeria (ACMCN) and was statistically significant in explaining changes in Annual Capital Market Capitalization in Nigeria (ACMCN). On Interest Rate in Nigeria (INTR) was negatively related to Annual Capital Market Capitalization in Nigeria (ACMCN) but it was statistically insignificant in explaining changes in Annual Capital Market Capitalization in Nigeria (ACMCN). The study concludes that risk is a prevalent issue in investment decisions and Nigerian capital market development because it could not be avoided but can be managed. Investment without risk element might not be a worth-while investment because overcoming risk could launch the business into unprecedented success. The extent of to which it constitutes a discouraging factor to investment depends on the investor's attitude to risk. From the general perspective that "prevention is better than cure," managers need to pre-empt risk and its effect through risk analysis methods. Based on the findings the study recommends the following policies.

i. Government should improve the efficiency and effectiveness portfolio risk management in Nigeria since it was statistically significant in determining the improvement of Annual Capital Market Capitalization in Nigeria. Government should manage the activities relating to Inflation Rate (INFR) through targeting policies in order (for them to be significant and relevant as monetary policy tools)to encouraging the Annual Capital Market Capitalization in Nigeria.Besides, government needs to reduce the rate of policy changes as this usually leads to price instability and other negative impacts on investment.

ii. An investigation into the types of risk and plausible means of prevention is essential. Consideration should be given to the nature of business and the need to attain organization goals since each business is exposed to specific risk.Thereis need for regulatory bodies such as Central Bank, tax authorities among other to create investment friendly climate such easy access to loan at low interest rate and tax holiday and avoid multiple tax regime as in Nigeria where the Federal, State, and Local government impose tax on nearly the same tax field. Furthermore, the role of the accountants in educating loan beneficiaries on investment issues is needful as this will sensitize program beneficiaries to determining inherent risks in their decision to invest. To reduce risk meaningfully, the accountants should further ensure that the source of capital to the business be analyzed with interest rate attached, as well as the effect of inflation on the capital, the operations of the business, and Nigerian capital market development.

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

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Abstract

One major of the issues arising from the reform that require attention is the human resources management in the newly consolidated and merger bank. The study is an assessment of the effect of human resource management on financial performance of listed deposit money banks in Nigeria. The expo-facto research design was adopted with reliance on secondary data from annual report of listed firms. The purposive sampling technique was employed in selecting the 12 out of 19 deposit money bank in Nigeria for 2011-2020 financial years. To carry out this objective, three method of panel regression estimation was used which is random effect by Hausman test which was analysed using E-views 10. The finding show that salaries and wages and employee development cost has positive significant effect on return of asset. The study concludes that that salaries and wages with employee development cost has a significantly positive effect on financial performance and does substantially improve the performance of listed deposit money banks in Nigeria. The study recommends that Management should not recruit more staff and should consider retaining only efficient staff, this implies that deposit money bank firms should downsize their number of staff and focus on training and re-training of the most efficient members of staff.

Keywords: Human Resource Management, Salaries and wages, employee development cost, Return on Asset

INTRODUCTION

Over the years, human capital has long been recognized as a vital asset and value creator to enterprises. In contemporary times, experts 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 foreconomy recovery in developing economies such as Nigeria. A strategy for improving work force 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. The present business environment is changing rapidly due to phenomena such as globalization, rapid environmental change, changing customer and investor demands, and competition to provide innovative products and services. To compete successfully in the environment, firms need to constantly improve their competiveness by reducing costs, enhancing quality, and differentiating their products and services. The key to sustaining enviable competitiveness is the productivity of the workers. People are the most valuable resource of firms. Apart from the people, all the assets of an organization are passive resources which require human application to generate value (Fitz-enz, 2000). Thus, having the right human

resources (personnel) at the right place and at the right time is of utmost importance to the survival and success of any firm.

Human resource management (HRM) is concerned with the management of human resources as a means of improving firm performance and creating competitive advantage. Wright and Snell (1991) defined HRM as “organizational systems designed to achieve sustainable competitive advantages through people”. It lays more emphasis on a proactive, integrative and value-driven approach to human resource management (Schuler, 1989). Truss and Gratton (1994) considered SHRM as the linkage of HR functions with strategic goals and organizational objectives to improve business performance and cultivate an organizational culture that fosters innovation and flexibility. Wright and McMahan (1999) described HRM as the pattern of planned HR deployments and activities intended to enable an organization to achieve its goals. The banking sector reform in Nigeria, especially the recapitalization policy initiative has definitely posed some problems and challenges to both the banking system and economy. One major of the issues arising from the reform that require attention is the human resources management in the newly consolidated and merger banks.The study therefore seek to examine effect of human resource management on financial performance of listed deposit money bank in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Human Resource Management (HRM)

Human resource (HR) is a term used to describe the individuals who comprise the workforce of an organisation, although it is also applied in labour economics to business sectors or even whole nations. Human resource is also the name of the function within an organisation charged with the overall responsibility for implementing strategies and policies relating to the management of individuals (i.e. the human resource). This function title is often abbreviated to the initials HR‘. Human resources is a relatively modern management term, coined as early as the 1960s when humanity took a shift as human rights came to a brighter light during the Vietnam era (Nadler, 1984). The origins of the function arose in organisations that introduced 'welfare management' practices and also in those that adopted the principles of 'scientific management'. From these terms emerged a largely administrative management activity, coordinating a range of worker related processes and becoming known, in time as the 'personnel function'. Human resources progressively became the more usual name for this function, in the first instance in the United States as well as multinational or international corporations, reflecting the adoption of a more quantitative as well as strategic approach to workforce management, demanded by corporate management to gain a competitive advantage, utilizing limited skilled and highly skilled workers. On the other side, accounting is viewed as a child of production (Akindehinde, 2015). Production can be either the creation of tangible goods or the provision of services to satisfy human wants. The major factors of production are the land, labour, capital and entrepreneur. While every organisation reports on and includes land, capital and entrepreneur in its financial statements, labour is not given much attention and hence, its expenditure only represents periodic cost made by the organisation. The labour or employees are the human assets or resources organisations have. HRM considers human resource as equivalent to other assets in the organization. They require investment over time to make them productive. Such investment relates to the hiring, training, and development costs, which are capitalized and amortized over an assumed probably productive life for the human resource, taking into account attrition and eventual deterioration (Akintoye, 2012; Okpalu &Chidi, 2010). The concept of HRM has been defined in so many ways but the basic feature of the system remains the same in every definition. The American Accounting Association (1973:23) defined HRM as the process of identifying, measuring and communicating information about human resource in order to facilitate effective management within an organizational. This definition considers HRA as the process involving recognition and the quantification of human resource for the purpose of assisting the effective management of an organisation. The definition is not specific as to what constitutes the human resource expenditures and how it is to be recognized.

Salaries and wages

Salaries and wages are remuneration paid or payable to employees for work performed on behalf of an employer or services provided. It is also a fixed amount of money paid to a worker usually measured at monthly and annual basis, not hourly. As opposed to wages, salary is a fixed amount of money or compensation paid to an employee by an employer in return of work done. A worker doesn't simply view his salary as a naira amount; he sees it as the value his employer places on him as a worker. It is the level of appreciation the employer feels can have a direct impact the worker's overall performance. A worker is more likely to perform better if he is happy with the salary he earns. A person earning a high salary feels motivated to do a good job, because he wants to please his employer to retain his position. Employee remuneration is one of the myriad of factors that can impinge on firms' performance (Ayodele, 2012). Often, investigations are hardly made to unravel how much the top executives that directs the affairs of a company should receive by way of remuneration and other forms of compensations and incentives. According to Adeyemi (1991), executive remuneration is the package which goes with labour services. Hence Adeoti and Isiaka (2006) argued that the objective of employee remuneration is to attract; motivate and retain good people for attainment of the organizational performance. Executive compensation which is interchangeably used with employee pay or remuneration comprises of salary and incentive pay. Incentive pay could consists of cash and non- cash packages; and is an aspect in finance and accounting that is yet to gain ascendancy in research especially in developing countries like Nigeria. Compensation normally takes the form of basic pay such as salary or non-financial rewards (Ayodele, 2012).

Since executives play strategic roles in directing the affairs of the company so as to engender performance, it is expected they are adequately remunerated, but this should be done with caution. It is generally known that the primary goal of a firm is wealth maximization; and if this is not taken into cognizance by the executive in companies, then the aim of establishing it would be defeated from the onset. Most often executives who perform optimally are on high demand. Hence, Fama (1980) posits that high performing managers are always on high demand and should be rewarded in the form of higher employee remuneration than their poor performing counterparts. It becomes crucial in the light of present day global challenges rocking the business world to empirically ascertain how executive compensation influences companies' performances in a country such as Nigeria. The rate of empirical studies on employee remuneration has increased astronomically in developed countries while the same cannot be said in less developed countries like Nigeria. It is not enough to claim that a company is inefficient, illiquid, highly geared, affected by arrays of macro- economic factors, poor corporate governance and is poorly performing. There is need through an eagle eye to thoroughly find out the proportion of firm's performance that is consumed by the amount of employee remuneration as an expense in a given period. There is no doubt that a relationship exists between business expenses and performance. For instance, an increase in business expenses reduces performance, given that all other factors are held constant; and vice versa. Obviously, businesses tend to analyze operation expenses in an effort to become more competitive, and employee remuneration is usually part of the analysis (Shetty, 2013). Therefore, as the global competition increases and businesses attempt to improve their performance, there is an increasing need to relate employee remuneration to organizational performance (Nicely, 2009). The question of how much companies should pay to senior executives to attract, motivate and retain them to keep the business competitive and engender the attainment of the shareholders' wealth maximization goal has remained a subject of debate.

Employee Development Cost

Development cost is one of the main function that directly contribute to the development of employees. Research also suggests that the organizations investing considerably in training justify their investment by the contribution training makes to improve individual and firm performance (Manukaji, Osisioma & Okoye, 2019). Employee development cost being employed by organizations helps them to enhance employee skills and firm performance (Solkhe and Chaudhary, 2011; Delaney and Huselid, 1996). Rajashekharaiah (2014) assert that training and development is also attracting, developing, and retaining a

diverse workforce that helps in providing the different skills required to maintain and improve the firm performance and Chow (2005) opined that training and development are the component of HPWSs. The components of training and development activities including formal training develop employee skills and impart knowledge beyond the current position off the job training induction training program for new comers and training programs for present employees. Expenditure on staff training is another dimension of staff costs incurred by entities. Trainings usually involve costs payable by entities. Staff training costs are seen as expenditures incurred on staff or employees for capacity building in order to maximize performance (that is profit). Capacity building entails investment in human capital, institutions and practices necessary to enhance human skills, overhaul institutions and improves procedures and systems. According to Abiodun (1999), training is a systematic development of the knowledge, skills and attitudes required by employees to perform adequately on a given task. Employee's training and development is seen as the most important formation of any competent management.

The historical cost of human resources is the sacrifice made in getting personnel. It seeks to recognize the actual cost incurred in recruiting selecting, hiring, training and development of employee, which are capitalized and amortized over the expected useful life of the human resource. The replacement cost of human resource is the amount that would be incurred if the present employees are to be replaced. It estimates the current market value, as human resource is valued on the assumption that a new similar organization will be created from the scratch. By this, cost to the firm is calculated if the existing human resources are to be replaced with other persons of equivalent talents, skill and experience. The costs incurred by an organization in replacing terminated employees, for instance, relate to advertisement, reemployments administrative function, interviews, and traveling cost, amongst others. However, this approach is weak due to the inability of firms to replace knowledge, competency, and loyalty of human resource precisely. The opportunity cost model, also known as market value method, is based on the economic concept of opportunity cost. It relates to the value of an asset when there is an alternative opportunity of using it. This implies that there is no opportunity cost for human resources who are not scarce (hence only scarce people form part of the human resource cost outlay). An employee is scarce when the employment of such person denies competitors the possessed talent, skill and experience. Thus, opportunity cost relates to the offer made by other employers to attract the employee. The goodwill model is used for valuation, when a firm makes return on investment above the industry average, hence the capitalization infer that unstated human resource value are presented within the organization to account for the excess earnings. Hermanson (1964) posited that supernormal earning is indicative of resources not shown on the balance sheet. Determining this involves forecasting future earnings and allocating any excess above normal expected earnings to human resources. The weakness, however, remains that it underestimates the value of human resources, limiting it to the amount in excess of normal earnings (and ignoring the actual human resource base required to carry out normal operation). It also uses earnings of the most recent years as basis, thereby ignoring forecast of future earnings which is equally useful in managerial decisions. The economic value model advocates that group value should be determined by estimating contributions to the total economic value of the firm. By this, a firm forecasts future earnings and subsequently discounts them to reflect the present value, so that a portion is allocated to human resources according to their contributions.

Financial Performance

Financial performance Companies commonly regard profit as a key measure of their success. Using profits as a measure may seem to imply that the organizations will benefit more if costs such as salaries and depreciation for capital reinvestment are reduced. However, lowering salaries to increase profits tends to lead to conflicts in the relationship between employees and management. Minimizing capital investment often has a negative impact on the efficiency of operations, and eventually affects profit (Pandey, 2010). Therefore, increasing profits by reducing such expenses is only a short-term measure. The only viable way to increasing profits in a sustainable manner is to increase the "economic pie" or value added through higher productivity. This can be done with better cooperation from employees,

higher investment in capital, and optimal use of capital, through the adoption of an integrated approach to productivity measurement. This approach brings together the various dimensions or indicators of companies' operations and linked to show how each of them affects overall performance. Such indicators are usually financial, value added-based ratios that provide management with information on productivity and profitability. Nonetheless, value added based ratios are measures of efficiency that is usually avoided by researchers in the assessment of company performance. Value added is used as a measure of output that represents the wealth created through the organization's production process or provision of services. Value added measures the difference between sales and the cost of materials and services incurred to generate the sales (Deep & Narwal, 2014; Kamath, 2015).

Return on Asset

Return on asset measure the effectiveness of the economic unity in using its assets to generate profit especially manufacturing, the higher this ratio, the better the economic unity of them as it indicates the management efficiency in using its assets to generate profit and also it represents the ratio of how much a company has earned on its assets base, and the return on assets (ROA) can be obtained by dividing net profit with total assets. Micah, Ofurum and Ihendinihu (2012) noted that return on Asset (ROA) is measured as Profit before Tax/Average Total Assets. ROA is a measure of profitability that takes into consideration the assets necessary to produce income. 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.

Empirical Review

A number of related literature has been reviewed and properly documented to aid the study presented thus: Emmanuel, Chukwuma and Umunnakwe (2021), examined effect of employees' motivation on financial performance of insurance companies in emerging economies in Nigeria. The specific objectives of the study were to determine the extent at which intrinsic and extrinsic motivation strategies affect financial performance of insurance companies. They employed mixed research design using both research survey and ex-post facto and the sample size was 175 which was derived from a targeted population of 313 employees of insurance companies in Kaduna state, Nigeria. Data for the study was collected using structured questionnaire, annual publications of the Nigerian Insurance Digest (NIA) and financial reports of insurance company for 12 years' period 2008-2019. Regression results revealed that intrinsic motivational strategies significantly affect financial performance of insurance companies while extrinsic motivational strategies have no statistical significant effect on financial performance of insurance companies in emerging economies in Nigeria. The findings supported the prediction of Herzberg two-factor and self-determination theories. The study recommended that decision makers of insurance companies should put effective and efficient strategies in place by using the right ways to motivate both management and non-management staff in order to achieve increased financial performance that significantly justify opportunities in emerging economies.

Abdullahi, Adejola and Lambe (2020), examine impact of human resource accounting on investment decision in Nigeria. 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

Manukaji, Osisioma and Okoye (2019), examined the effect of human resources development on the performance of quoted companies in Nigeria. The study is anchored on resources based view theory by Barney (1991). The study adopted ex post facto research design. A total of five companies quoted on the Nigerian Stock Exchange were examined using their 2014 to 2018 annual reports and accounts. Data were sourced on employee remuneration, training and development cost, size of the employee, and return on assets a proxy for performance. The data generated were analyzed using descriptive statistics, correlation test and ordinary least square estimation technique. The study found that employee remuneration and training and development cost have significant effect on performance of quoted companies in Nigeria. Size of employees was found to have insignificant effect on performance of quoted companies in Nigeria. The study concludes that human resources development has significant effect on performance of quoted companies in Nigeria. The study recommends systemic and continuous evaluation of the human resources to determine those that needs development. Onipe (2019) examined effect of intellectual capital management and financial competitiveness of listed oil and gas firms in Nigeria. In Nigeria, most of the interests of scholars and policy makers are on the competitiveness of the economy. Very little is said about firm-level competitiveness. In view of this, this study interrogates the influence of intellectual capital management on firm financial competitiveness. Financial competitiveness is measured using financial performance proxies (return on assets, return on equity and asset turnover). Intellectual capital management is measured by value added intellectual coefficient score, human capital efficiency, structural capital efficiency and capital employed efficiency. The analysis is based on oil and gas firms listed on the Nigerian Stock Exchange and covers the period 2006 to 2018. Results indicate that capital employed and human capital have significant positive effects on return on assets. However, structural capital shows significant negative effect on return on assets. The study, therefore, recommends that management of oil and gas firms should increase their investment in capital employed and human capital while reducing investment in structural capital.

Oyedokun and Saidu (2018) examined the impact of intellectual capital on financial performance of listed Nigerian oil marketing companies over 10 years (2007-2016). Intellectual capital was measured by market to book value ratio (MB), Value Added intellectual coefficient (VAIC), and monetary model of Tobin's Q (MMQR) while financial performance was measured by return on asset (ROA). Ex-post facto research design was adopted while data was extracted from the firms' financial statements. Results showed that market to book value has a negative significant impact on return on asset. Monetary model of Tobin's Q has insignificant impact on return on asset while Value added intellectual coefficient also has insignificant impact on return on asset. The study recommends that oil and gas companies in Nigeria should not put more resources in intellectual capital. Ugwuanyi and Onyekwelu (2018) assessed the effect of intellectual capital on revenue and market values of 3 listed information and communication technology firms in Nigeria over 10-year period (2004-2013). Human capital, structural capital and capital employed were used as proxies for intellectual capital while gross revenue and market price per share were used for measuring financial performance. The study adopted ex-post facto research design and data were sourced from annual reports and accounts and analyzed using Ordinary Linear Regression. Results showed that intellectual capital has positive and insignificant influence on revenue. Also, result showed that human capital efficiency has positive and insignificant influence on share price. The study recommends that human capital efficiency should be increased so that share price of oil and gas companies can be maintained in Nigeria.

Sani and Usman (2018), examine the impact of financial performance on human capital efficiency of quoted oil and gas companies in Nigeria. The secondary sources of data were employed while the panel data collected were analysed using multiple regression model. The findings revealed that the level of human capital efficiency in the Nigerian oil and gas companies could be influenced by market price per share and book value per share. The study recommends that oil and gas companies in Nigeria should increase their human capital investment to boost their book value per share through continuous training and retraining of human asset, among others. Omole, Yusuf and Adeyemo (2017) examined effect of human capital accounting on shareholders' value in oil and gascompanies in Nigeria. This is with a view to providing information on how costs incurred on personnel could be identified, measured and disclosed on the statement of financial position of companies as an asset which is the key factor to the successful operation in oil and gas industry. The study made use of secondary data collected for the period 2004 – 2016. The entire oil and gas companies listed on the Nigerian Stock Exchange (NSE) were selected for the study based on availability of human capital accounting information in their Annual Reports. Data on variables such as human capital disclosure, dividend per share and earnings after tax were collected from the Annual Reports of the companies. Data collected were analyzed using correlation and regression analysis using the E-view statistical package. Findings revealed that that the nature and characteristics ofinvestments on the human resource require them to be capitalized rather than expensed. The study establishedthat there is positive significant relationship between human capital costs and the shareholders' value in oil and gas companies in Nigeria. The study recommended that that standard should be created for human resource disclosure and measurement in order to enhance valuation of human capital, ensure uniformity in disclosure and more reliable interpretation and comparison of financial statements.

Theoretical Framework

Resource Based Theory

This was introduced by Wemerfelt (1984) and refined by Banney (1991) central to the proposition of Resource Based Value (RBV) is that a firm represents a collection of unique resources and capabilities that provide basis of sustained competitive advantage so long as they are valuable, rare, difficult to imitate and non-substitutable (VRIN) (Barney, 1991). The theory presumes that firms are a bundle of heterogeneous, capabilities that are imperfectly immobile across firms. According to this view, firm performance can be attributed to unique resource rather than industry structure, a proposition supported by strategy literature (Gathrie, Datha & Wright, 2004). Hall (1992) and Grant (1996) classified resources into tangible assets, intangible assets and human resources with human being characterized as the most productive asset. Corporate reputation, corporate culture and employees Know-how were characterized as more influential than tangible assets as they are likely to meet Baneys (1991) four conditions outline. Competitive advantage can be attributed to unique resources particularly intangible ones when they are combined or integrated. The prevalent belief among academics and management practitioners is that individual employee performance affects firm level of outcomes. This means that the contributions of individual employee at various levels of organisation results in corporate goal. For these reason employee‘s intellectual competence, employee‘s skill and corporate human resource function, must be properly developed if corporate goals must be achieved. Thus, this position is rooted in Barney (1991), resource based theory of the firm as cited by Bassey and Tapang (2012). The resource based theory indicated that human resource provides a source of sustained competitive advantage which consists of four basic requirements of value, rare, imitable and organisation (VRIO) that must be present within the organization's human resource at all times.

Expectancy theory

This theory was propounded by Victor Vroom (1964). The theory focuses on the relationship between rewards and behavior. It posits that behaviour (job performance) can be described as a function of ability and motivation while motivation is a function of expectancy, instrumentality, and valence perceptions. Although this theory implies that linking an increasing amount of rewards to performance will increase

motivation and performance, some authors have argued against this assumption, emphasizing that monetary rewards may increase intrinsic motivation. Extrinsic motivation depends on rewards – such as pay and benefits – which are controlled by some external variables whereas intrinsic motivation depends on rewards that flow naturally from work itself. Therefore, while it is important to keep in mind that money is not the only effective way to motivate behaviour, and that money rewards will not always be the answer to motivation problems, it does not appear that monetary rewards run much risk of compromising intrinsic motivation in most work settings. The relevance of the theory to this study is that it is believed a well paid staff will be motivated to work better, which will further translate to improved profitability of the entity.

Human Capital Theory

This study is built on the Human Capital theory proposed by Schultz (1961) and extensively developed by Becker (1964) as cited in (Seth, 2009). The theory has its root from labour economics which is a branch of economics that focuses on general work force in quantitative term. According to the theory, Human capital theory contends that education or training raises the productivity of workers by imparting useful knowledge and skills, thus raising workers' future income through increase in their lifetime earnings. The theory postulates that expenditure on education or training and development is costly, and should be considered as investment since it is undertaken with a view to increasing personal incomes.Human capital approach is used to explain or support occupational wage differential. However, the position of this study is that education or training and development will not only increase employee personal income, it will also serve as a means of achieving corporate competitive advantage which reflects ultimately in organisational performance. According to Flamholtz and Lacey (1981), as in Baney and Wright (1997), human capital theory distinguished between general skills and firms' specific skills of human resources. General skills are 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 skills are of no value to competing firms. An instance of this is the knowledge of how to use a particulartechnology used only by one firm, or knowledge of a firm's policies and procedures provided to that firm, but usuallywould not be valuable to other firms. Thus, human capital is a means of production into which additional investment yields additional output. Human capital is substitutable, but not transferable like land, labour or fixed capital.

The human capital theory underpin this seminar because considered the cost of education, training, development and even workers' medical treatment as investments towards improved productivity (efficiency) of individual workers and also creates a sort of competitive advantage which ultimately could result in improved firm performance.

METHODOLOGY

This study adopted the ex post facto research design since the study is a secondary data research and the population of the study consists of nineteen (19) listed deposit money bank operating on the Nigeria Exchange Group (NGX) as at 31st December 2020. The sample size is 12 and purposive sampling techniques was adopted.Data required for this study were obtained from audited financial statements and annual reports of the listed deposit money bank firms in Nigeria 10 years under consideration and from the Nigerian Exchange Group fact book. The inferential analyses will also involve the application of the appropriate statistical technique of Panel Regression Analysis; this is due to the nature of the data.

Panel regression model

$ROA = \beta_0 + \beta_1 SW + \beta_2 EDC + \epsilon_{it}$.. (1)

Where:

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

$\beta_1 - \beta_2$ = Parameter coefficient of Human Resource Management

ROA = Return on Asset
SW = Salaries andWages
EDC = Employee Development Cost
ϵ_{it}= Stochastic Error term

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

	ROA	SW	EDC
Mean	36.23217	6.486667	1.468333
Median	36.98000	5.870000	1.085000
Maximum	46.98000	23.54000	5.700000
Minimum	23.50000	1.050000	0.090000
Std. Dev.	4.483476	3.636525	0.998821
Skewness	-1.202471	1.252783	1.808988
Kurtosis	4.572787	5.914419	6.749765
Jarque-Bera	41.28702	73.85851	135.7524
Probability	0.000000	0.000000	0.000000
Sum	4347.860	778.4000	176.2000
Sum Sq. Dev.	2392.085	1573.694	118.7197
Observations	120	120	120

Source: E-View 10 Output (2022)

Table 1 presents the descriptive statistics of the effect of human capital efficiency on financial performance of listed oil and gas firms in Nigeria during the period of 2011 to 2020. The table shows that return on asset (ROA) and return on equity ROE as a measure of financial performance has a mean of 36.23217 and 15.64275 respectively, with a standard deviation of 4.483476 and 3.746562, with a minimum value of 23.50000 and 10.10000 and maximum values of 46.98000and 27.54000respectively. 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. For the other measure of human capital efficiency, employee remuneration (ER) from the table shows a mean of value of 6.486667with standard deviation of 3.636525 and the minimum and maximum values of 0.090000 and 1.990000 respectively. This implies that the human capital efficiency in terms of employee remuneration witnessed a substantial increase during the study period, as the standard deviation is so large compared to the mean, together with the huge range between the minimum and maximum values. Similarly, the table shows that the training and development cost (TDC) during the period has an average value of 1.134500 with standard deviation of 0.469353 and the minimum and maximum values of 0.090000 and 1.990000 respectively. This implies a tremendous increase in the training and development of employees during the study period. Also the mean value for medical and health expenses (MHE) is 1.133392, while the standard deviation also indicates 0.605262. The minimum and maximum value for medical and health expenses is 0.090000 and 3.000000 respectively.

Table 2: 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	1.030108	2	0.5975

Source: E-View 10 Output (2022)

The Result of Hausman test shows that chi-square statistics value is 1.030108 while the probability values is 0.5975. This implies that there is enough evidence to acceptthe null hypothesis which states that random effect is most appropriate for the Panel Regression analysis. It thus stands that error component model (fixed effect) estimator is not the most appropriate because the fixed effects are not 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 randomeffect regression model is most appropriate for the sampled data because the Hausman test statistics as represented by corresponding probability value is greater than 5%.

Decision Rule: The decision rule for accepting or rejecting the null hypothesis for any of these tests will be based on the Probability Value (PV) and the Probability (F-statistic). If the PV is less than 5% or 0.05 (that is, if PV < 0.05), it implies that the regressor in question is statistically significant at 5% level; and if the PV is more than 5% or 0.05 (that is, if PV > 0.05), it is categorized as not significant at that level.

Table 3: Panel Regression Result (Random Effect)

Dependent Variable: ROA
Method: Panel EGLS (Cross-section random effects)
Date: 03/14/22 Time: 01:55
Sample: 2011 2020
Periods included: 10
Cross-sections included: 12
Total panel (balanced) observations: 120
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	31.83464	1.178119	27.02157	0.0000
SW	0.436486	0.141419	3.086470	0.0025
EDC	1.066643	0.424532	2.512513	0.0133
	Effects Specification			
			S.D.	Rho
Cross-section random			2.608044	0.3607
Idiosyncratic random			3.472401	0.6393
	Weighted Statistics			
R-squared	0.196512	Mean dependent var		14.05956
Adjusted R-squared	0.182778	S.D. dependent var		3.825182
S.E. of regression	3.457978	Sum squared resid		1399.041
F-statistic	14.30759	Durbin-Watson stat		0.991600
Prob(F-statistic)	0.000003			

Source: E-View 10 Output (2022)

From table 3 above, the coefficient of multiple determinations (R^2) is 0.196512. This indicates that about 19% of the total variations in return on asset is explained by the variations in the independent variables (SW and EDC), while the remaining 81% of the variation in the model is captured by the error term. This indicates that the line of best fit is 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 of the numerical value of the parameter estimate, it can be concluded that the estimate is statistically significant. Having carried out a standard error test on the parameters estimated and as also indicated by their respective probability values, the parameter estimate for SW is statistically significant, given that the individual probability is 0.0025which is less than 5%, while that of EDC is statistically significant, given that the individual probability is 0.0133 which is less than 5%. However, when taken collectively, the regressors (ER and TDC) against the regressed (ROA), the value of F-statistic is 14.30759and the value of the probability of F-statistic is 0.0000. This result implies that the overall regression is both positive and statistically significant at 5%. The coefficient of salaries and wages (SW) is 0.43646, while that of employee development cost (EDC) is 1.0664. This shows that all the explanatory variables SW and EDC are all positively related to ROA, such that a unit increase in SW and EDC will increase ROA by 0.43 and 1.06 respectively. This result is consistent with 'a priori' expectation which hypothesizes that increase in SW and EDC will lead to a significant increase in ROA and the empirical evidence suggests that the relationship between SW, EDC and ROA is infact statistically significant. Consequently, when taken collectively and based on the probability (F-Statistics) value of 0.0000, which is less than 0.05, the null hypothesis of the study is hereby rejected

Discussion Of Findings

This study aptly examined the effect of human resource managementon financial performance of listed deposit money banks in Nigeria, using panel series data and regression analysis approach. The human capital management proxied by salaries and wage (SW), employee development cost (EDC) for twelve (12) listed deposit money bank in Nigeriafor 10 years ranging from 2011 to 2020 were the independent variables while the return on asset (used to financial performance) was the dependent variable for the study. The effect of the independent variable on 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 themodel of the study showed that when taken individually and collectively,salaries and wages and employee development cost (EDC) has a positive and significant effect on return on asset taken as a measure of financial performance.This implies that salaries and wages, employee development cost is a significant and relevant predictor of financial performance in listed deposit money bank in Nigeria. That is to say there are empirical evidences to suggest that the attributes exhibited by the human resource management of deposit money bank, which naturally should promoteefficiency and productivity in deposit money bank financial dealings in Nigeria, is already having the desired effect.As such, the human resource elements of the listed deposit money banks have been able to exert the needed level of influence that is required to improve the tendencies of improved financial performance framework of the banking sector in Nigeria.The findings of the study is also in agreement with the position of Onipe (2019), who examined the effect of human resources development on the performance of quoted companies in Nigeria. The study specifically found out that employee remuneration and training and development cost have positive and significant effect on performance of quoted oil and gas companies in Nigeria.

CONCLUSION AND RECOMMENDATIONS

In the Accounting and financial literature several studies have investigated the link between human resource management and financial performance of listed deposit money banks in Nigeria. The conclusion of the study therefore is that salaries and wages with employee development cost has a significantly positive effect on financial performance and does substantially improve the performance of listed deposit money banks in Nigeria. The following recommendations were made based on the finding;

i. Management should not recruit more staff and should consider retaining only efficient staff, this implies that deposit money banks should downsize their number of staff and focus on training and re-training of the most efficient members of staff.

ii. Management should make retirement benefits attractive so as to attract best brains to their respective firms, and there should be a well-coordinated program for staff development if the firm‘s profitability and performance are desired to increase positively.

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Effect of Government Capital Expenditure on Manufacturing Sector Output in Nigeria

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Abstract

The study examined the effect of government capital expenditure on the Manufacturing Sector Output (MSO) in Nigeria from 1981 to 2020. The ex-post facto research design was adopted for the study because the data used were sourced from the Central bank of Nigeria (CBN) 2020 Statistical Bulletin and the World Bank data indicators. The MSO was used as the dependent variable while the government capital expenditure which was disaggregated into government capital expenditure on administrative services (GCEXA), government capital expenditure on economic services (GCEXE), government capital expenditure on social and community services (GCEXS) and government capital expenditure on transfers (GCEXT), were used as the explanatory variables. The Auto-Regressive Distributed Lag (ARDL) model method of analysis was employed for the study. The F-bound test revealed that there is a long-run equilibrium relationship amongst the variables; hence, the Error Correction Model (ECM) was further employed to ascertain the short-run relationships and the speed of adjustment should there be any disequilibrium in the model. The study found that the GCEXA and GCEXT have a long-run positive relationship with the MSO while the GCEXE and GCEXS have a long-rum negative relationship with the MSO. Also, all the variables have significant effects on the MSO except the GCEXS which has an insignificant on the MSO. The study recommends that; Since the Nigerian government capital expenditure on administrative services, economic services and transfer services are have long run significantly effect on the manufacturing sector, the government is advised to increase its budgetary allocation on these components of the capital expenditure; while allocation of capital expenditure to social and community services should be reduced. By so doing, the aim of the capital expenditure which is economic growth will be achieved through the increase in the manufacturing output.

Keywords: Manufacturing, Output, Government, Capital, Expenditure

INTRODUCTION

Government expenditure refers to spending made by the government of a nation on assets that will be used for a long time in the provision of goods and services. Government expenditure came into prominent in the 1930s by Lord John Maynard Keynes. Prior to this period, was the doctrine of laisser-fair by the Classical which believed in leaving the activities of the economy in the hands of private individual. The debate on government expenditure came at a time when Europe and the United States were passing through the Great Depression, accompanied by sever fall in output, low aggregate demand; and high unemployment rate. The inability of the Classical to proffer solution to the Great Depression gave rise to the emergence of Keynes. Keynes argued in favor of the role of government intervention in an economy through government spending. According to him, when government spend, it leads to increase in aggregate demand, increase in output, increase in employment and consequently will lead to economic growth. The governments keyed into the doctrine of Keynes and consequently came out of the Great Depression. Since then, government expenditure has shown increasing trend in mostly all economy. Government expenditures are grouped into capital expenditure and the recurrent expenditure. Capital expenditure refers to government spending in the acquisition of fixed (productive) assets such as the development of machinery, building of roads, railways, health facilities, education and whose life extends beyond the fiscal year, as well as expenditures incurred in the upgrade of existing fixed assets as lands, building, roads etc (Aigheyisi, 2013). In other words, capital expenditure is associated with investment or development spending. While on the other hand, recurrent expenditure refers to government spending on activities that neither creates assets nor reduces liability of a government, such as payment of salaries, interest payment on past debt, payment of subsidies, pensions and so on (Aigheyisi, 2013). Recurrent expenditure is recurring in nature (IMF, 2010). However, based on the theme, the study will focus on

capital expenditure and its effect on the manufacturing sector in Nigeria. According to CBN (2020), capital expenditure is disaggregated into expenditures on: administration, economic services, social community and transfers.

The manufacturing sector played a significant role in the transformation of an economy through increasing productivity related to import replacement and export expansion, creating foreign exchange earning capacity; and raising employment and per capital income which causes unique consumption patterns. The sector has the capability of accelerating the growth and development process of a nation due to the nature of its activities in the sector which is believed to contain full-size linkages throughout other sectors in terms of contribution to and from those sectors (Okigbo, 1993; Opaluwa, Umeh, and Ameh, 2010). The manufacturing sector is a path for trade increase and it is a vital source of innovation and competitiveness as it makes outsized contributions to exports and productivity growth; thus, providing a channel for stimulating the growth of other sectors. Ogwuma (1995) opines that the sector creates investment capital at a faster rate than any other sector of the economy while promoting wider and more effective linkages among different sectors. Thus, the Nigerian government has introduced various policies to bust the sector such as import substitution strategy, export promotion strategy, the introduction of bank of industry to induced credit facility to the sector, the National Economic Empowerment and Development Strategy (NEEDS) and most recently the National Development Plan 2021-2025 whose one of the main objective is to create 21 million full-time jobs and lift 35 million people out of poverty by 2025.

Over the years, the federal government of Nigeria has increased her capital expenditures in other to improve the growth of the economy through investment in the manufacturing sector. However, despite the huge spending in capital expenditures, the manufacturing sector output in Nigeria is not improving in commensurate to the spending, as evidence in the sector's outputs over time (Adeboye, 2010; Peter and Simon, 2011 and Loto, 2015). The graveness for imported goods and services by Nigerians has led to the gradual decline in the manufacturing sector output. Going by the trend for instance, from 1981 to 2005, the average contribution of manufacturing sector as percentage of our GDP was 17.54% while the average contribution of the manufacturing sector output to GDP from 2006 to 2020 is 8.90%. Conversely, the neglects of Nigeria made goods have led to increase in the demand for imported goods. Nigeria percentage of import to the GDP has continuously increased from 17.42% in 2010 to 19.80% in 2020. It is against this background that this study seeks to examine the effects of government capital expenditure on the manufacturing sector output in Nigeria. Several studies have been written by researchers on the effect of government expenditure on economic growth, but this study seeks to be specific by examining the effect of government capital expenditure on manufacturing sector output in Nigeria, by disaggregating government capital expenditure into expenditure on administration, economic services, social community and transfers. Based on the background of the study, the following hypothesis are fundamental to the study.

$H0_1$: Government Capital Expenditure on Administrative has no Significant Effect on Manufacturing Sector Output in Nigeria.

$H0_2$: Government Capital Expenditure on Economic Services has no Significant Effect on Manufacturing Sector Output in Nigeria.

$H0_3$: Government Capital Expenditure on Social Community Services has no Significant Effect on the Manufacturing Sector Output in Nigeria.

$H0_4$: Government Capital Expenditure on Transfers has no Significant Effect on the Manufacturing Sector Output in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Government Capital Expenditure

Government capital expenditures are expenses incurred by the government of a nation on fixed assets and capital projects for the improvement of the economy. Government capital expenditures are usually directed at enhancing production; and also to influence the pattern of production and composition of output. Anyafu (1996) asserted that when suitable capital expenditure programme is designed by a government, it could result in the diversion of resources from undesirable areas to desirable ones. Furthermore, government capital expenditure helps in restoring funds taken from the circular flow through taxation into the flow. This is achieved through capital expenditures on transfer such as pensions, gratuity etc. Such funds are often spending back to the economy.

Government Capital Expenditure on Administration Services

These are funds budgeted annually for fixed assets and other major expenditures in the administration of the economy channeled on general administration, defense, internal security, capital projects, and national assembly.

Government Capital Expenditure on Economic Services

These are funds allocated for the procurement of fixed assets and other infrastructures in the agricultural sector, manufacturing sector, construction sectors, transport, mining and quarrying, and communication sector.

Government Capital Expenditure on Social and Community Services

These are government expenditures channeled on education sector, health sectors, housing and other social services.

Government Capital Expenditure on Transfers

These are expenditures allocated by the government for managing external obligations such as debt service. Other includes payment of pensions, gratuities, capital recovery and replacement, and contingencies and subventions.

Figure 1: Trend of MSO, GCEXA, GCEXE, GCEXS and GCEXT

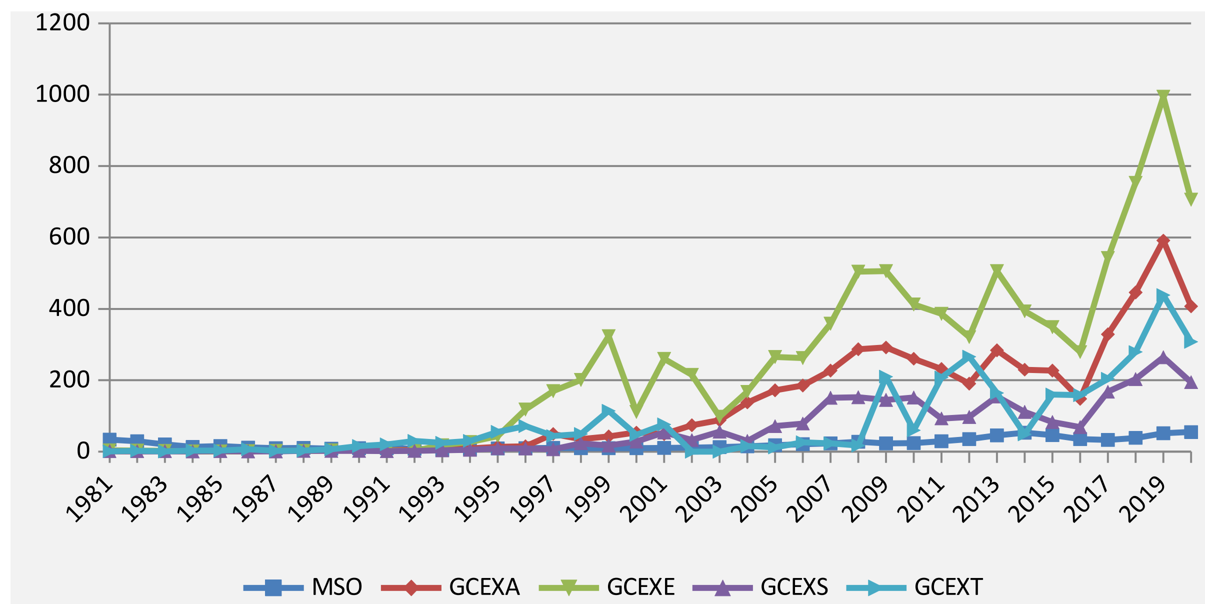


Figure one shows the trend of the variables in the model. The MSO was 33.33 in 1981 and kept on falling up to 5.1 in 1993. Afterwards, the MSO kept on increasing up to 23.16 in 2007 before the global financial meltdown which made the MSO to fall. Also the 2014/2015-2016 recession affected the MSO negatively due to difficult in accessing fund from the banks. Afterwards, the MSO starts increasing. In the same vein the GCEXA, GCEXE, GCEXS and GCEXT were rising and falling as indicated by the graph.

Empirical Review

Onuarah (2018) examined the composition of sectoral expenditure allocation and the Nigeria economy. The study used total government expenditure on administration, economic service, social community service and transfer as the dependent variable, while real gross domestic product was used as proxy for economic growth. The OLS estimation technique was used to analyze the variables. The study found that the variables are directly related to the RGDP. Thus, the researcher recommended that government should channel its expenditure to the sectoral spending because it reduces the cost of government spending in public welfare. Nwanne (2018) investigated the effect of government capital expenditure on the manufacturing sector output in Nigeria. Quantitative time series data from the CBN was used and the multiple regression techniques in the analysis. Total capital expenditure on road infrastructure, health, and telecommunication were used as the independent variables while the manufacturing output was used as the dependent variable. The study revealed that capital expenditure on road infrastructure and also on telecommunication affects the manufacturing output in Nigeria significantly; while government capital expenditure on power has insignificant effect on manufacturing output. The study recommended the need for government to place more emphasis on capital expenditure so as to accelerate economic growth in Nigeria through the manufacturing output.

John (2017) examined the federal government capital expenditure on the growth of the Nigeria economy from 1985-2014, using federal government expenditure on administration, economic service, social and community service and transfer. The multiple regression estimation technique was used to analyze thye data. The study found that a positive federal government capital expenditure on administration and social community services had a positive relationship with GDP; while economic service and transfers have negative relationship with GDP. The study recommended more allocation of budgeted expenditure to the federal government capital expenditure in economic service, transfer, social and community service and administration. Muritala and Taiwo (2011) examined the trends and effects of government spending on the growth of real GDP in Nigeria between 1970 and 2008, using Ordinary Least Square technique. The findings revealed a positive relationship between real GDP and recurrent and capital expenditure. Adebiyi (2015) explored the impact of public expenditure on human capital in Nigeria considering government spending on both education and health. The study found that public expenditure such as defense spending and debt servicing reduces health expenditure in the short run. However, they increase education expenditure in the same period.

Theoretical Framework

The study based its theoretical framework on the work of Keynes which came up due to the Great Depression of the 1930s in Europe, associated with low aggregate demand. Keynes discussed the relationship between government expenditure and economic growth. Keynes advocated for increased in government expenditure and lower taxes to stimulate demand and pull the economy out of the depression. According to Keynes (1929), if aggregate demand falls, it will result to fall in production and workers will be layout thereby resulting to increase in unemployment decline in economic growth.

METHODOLOGY

This study adopts the ex-post facto research design. The Manufacturing Sector Outputs of Nigeria is used as the dependent variable, while the government capital expenditure on administration (GCEXA), government capital expenditure on economics service (GCEXE), government capital expenditure on social and community service (GCEXS) and government capital expenditure on transfer (GCEXT)s are used as the independent variables. The

model was estimated using Auto-Regressive Distributed Lag (ARDL) Model. A pre-diagnostic test of stationarity was carried out using Augmented Dicker-Fuller (ADF) to ascertain the robustness, reliability and healthiness of the data. Data are sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin, 2020 and the World Bank Data Indicators. The period of study covers from 1981 to 2020. After conducting the pre-diagnosis test, the variables were integrated of mixed order I(0) and I(1). Therefore, the Auto-Regressive Distributed Lag (ARDL) Model method of analysis was employed on the time-series data spanning from 1981 to 2020. The bound test was used to test for existence of long-run relationship among the variables. Discovering that a long run relationship exists among the variables, the Error Correction Model (ECM) was employed to test for the short-run relationship among the variables.

Model Specification

$MSO = \beta_0 + \beta_1 GCEXA + \beta_2 GCEXE + \beta_3 GCEXS + \beta_4 GCEXT + \varepsilon$ ……………… (1)

Where:

MSO = Manufacturing Sector Output.
GCEXA = Government Capital Expenditure on Administration Services.
GCEXE = Government Capital Expenditure on Economic Services.
GCEXS = Government Capital Expenditure on Social and Community Services.
GCEXT = Government Capital Expenditure on Transfers.
β_0 = Intercept
$\beta_1, \beta_2, \beta_1, \beta_3, \beta_4$ = parameters for estimating the exogenous variables.

RESULT AND DISCUSSION

Table 1: Descriptive Statistics

	MSO	GCEXA	GCEXE	GCEXS	GCEXT
Mean	21.37150	127.5413	232.9768	61.91890	80.06821
Median	15.17000	51.41425	185.2375	28.99886	30.10575
Maximum	54.76000	591.2642	994.1862	264.6905	438.8550
Minimum	5.100000	0.262700	0.656300	0.237600	0.010000
Std. Dev.	14.34481	148.7001	245.0476	71.80461	105.0303
Skewness	0.933442	1.170605	1.089941	1.027901	1.628036
Kurtosis	2.697672	3.819699	3.847463	3.034968	5.068959
Jarque-Bera	5.961096	10.25528	9.116800	7.045901	24.80433
Probability	0.050765	0.005931	0.010479	0.029512	0.000004
Sum	854.8600	5101.653	9319.071	2476.756	3202.729
Sum Sq Dev.	8025.166	862357.0	2341885.	201080.2	430222.9
Observations	40	40	40	40	

Source: Author's Computations using E-view 10 output.

The descriptive statistics from table 1 revealed that MSO has a mean value of 21.37150 while GCEXA, GCEXE, GCEXS and GCEXT have a mean value of 127.5413, 232.9768, 61.91890 and 80.06821, respectively. Note that the mean describes the average value of each of the series in the model. The GCEXE has the highest Std. Dev with the value 245.0476. This implies that the GCEXE is the most volatile variable in the model as it has the highest percentage of dispersion from the mean. In terms of skewness, the variables are all skewed to the right because they are all positive.

Kurtosis measures the peak or flatness of the distribution of a series. The kurtosis of a normal distribution is 3. If it exceeds 3 it means the distribution is peaked or leptokurtic relative to the normal distribution. On the other hand, if less than 3, it indicates the distribution is flat of platykurtic relative to the normal distribution. From table 1, the GCEXA is platykurtic with its value of 2.697672 less than 3, while

GCEXE, GCEXS and GCEXT are leptokurtic because their values of 4.437047, 3.2622774 and 5.259144 are more than 3 respectively. Jarque-Bera (JB) tests whether the series is normally distributed or not. The test statistics measures the difference of the skewness and the kurtosis of the series with those from a normal distribution. In JB statistics, the Null Hypothesis which states that the distribution is normally distributed is rejected at 5% level of significance. From the result of table 1, all the variables are not normally distributed because their probability values of 0.050765, 0.005931, 0.010479, 0.029512 and 0.000004 are less than 5% level of significance. The 40 number of observations depict that duration of the study.

Unit Root

Augmented Dicker-Fuller (ADF) unit root test is used to conduct a pre-diagnostic test to ascertain the underling properties of the time series variables. This test is important because estimating a model in the presence of non-stationary time series variable usually leads to spurious (meaningless, nonsensical) regression output with biased and inconsistent estimates of the standard errors of the coefficients, which could lead to misleading inference. Table 4.2 shows the summary of the computed Augmented Dicker Fuller Unit Root test for each of the variables.

Table 2: Summary of Augmented Dicker Fuller Stationarity Test

Variable	ADF Test Statistics	Critical Value @ 5%	Probability Value	Order of Integration
MSO	-5.620873	-3.540328	0.0003	I(1)
GCEXA	-5.295682	-3.562882	0.0008	I(1)
GCEXE	-3.790165	-3.536601	0.0284	I(0)
GCEXS	-6.291391	-3.533083	0.0000	I(1)
GCEXT	-8.776093	-3.533083	0.0000	I(1)

Source: Authors Computation using E-view 10

From the summary of table 2, it could be seen that GCEXE is stationary at level while MSO, GCEXA, GCEXS and GCEXT are stationary at first difference. Based on the mixed order of integration I(0) and I(1), without any variable integrated at I(2), we shall proceed to estimate the variables using the Auto-Regressive Distributive Lag (ARDL) model which is best suited for the analyses.

The ARDL Bound Test

The ARDL Bound test shows the long run relationship between the dependent variable and the independent variables. The criteria is that if the value of the F-statistics is lower than the value of the lower and upper bound, we cannot reject the null hypothesis but; if it the value of the F-statistics is greater than the lower and the upper bound, we can reject the null and accept the alternate there is a long run relationship amongst the variables.

Table 3: ARDL Bound Test

Test Statistics	Value	Significance	I(0)	I(1)
F-statistic	8.406420	10%	2.45	3.52
K	4	**5%**	2.86	4.01
		1%	3.74	5.06

Sources: Authors Computations using E-views 10

ARDL Hypothesis
H_0: $\beta_{1i} + \beta_{2i} + \beta_{3i} + \beta_{4i} = 0$ (No Cointegration relationship)
H_1: $\beta_{1i} + \beta_{2i} + \beta_{3i} + \beta_{4i} \neq 0$ (there is Cointegration relationship)

In table 3, the bounds test value of the F-statistics which is 8.406420 is greater that the values of the upper I(I) and lower I(0) bound limit which are 4.01 and 2.86 at 5% critical level of significance. This means

that there is co-integration between the dependent variable (MSO) and the independent variables (GCEXA, GCEXE, GCEXS and GCEXT). Therefore, there exist a long-run relationship between the manufacturing sector output and the government capital expenditure.

ARDL Long Run Form

This shows the long run equilibrium relationship among the individual explanatory variable and the dependent variable. Table 4.4 shows the summary of the ARDL Long run relationship between the dependent variable and the independent variables.

Table 4: ARDL Long-run Form

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GCEXA	0.140415	0.056185	2.499137	0.0186
GCEXE	-0.056534	0.027639	-2.045445	0.0503
GCEXS	-0.007393	0.102064	-0.072434	0.9428
GCEXT	0.121968	0.033258	3.667290	0.0010

Sources: Authors Computations using E-views 10

In table 4, the coefficient value of the GCEXA is 0.140415, indicating that there is a positive long run equilibrium relationship between the GCEXA and the MSO in Nigeria during the period under review. If the GCEXA increases by 1 percent will lead to increase in the MSO by approximately 14 Billion naira. The GCEXA probability value of 0.0186 shows that in the long run, the GCEXA has a significant effect on the MSO in Nigeria because its probability value is less than 5%. Also, the GCEXT has a positive long run equilibrium relationship with the MSO. A percentage increase in the GCEXT will lead to increase in the MSO by approximately 12 Billion naira. It's probability value of 0.0010 shows that GCEXT has a significant effect on the MSO during the period under review. Furthermore, the coefficient value of GCEXE which is shows -0.056534 shows that there is a negative long run relationship between the GCEXE and the MSO. If the GCEXE increases by 1 %, the MSO will decrease by approximately 5.6 Billion naira. The probability value of GCEXE which is 0.0503, shows that it has a significant effect on the MSO. Also, the coefficient of GCEXS which is -0.007393, shows that the relationship between GCEXS and the MSO is negative. When GCEXS increases by 1 %, the MSO will decrease by approximately 0.7 Billion naira. The corresponding probability value of 0.9428 indicates that GCEXS has an insignificant effect on the MSO in Nigeria during the period under review.

ARDL-Error Correction Model (ECM)

In our Cointegration analysis, the results showed that the F statistics value is greater than the upper and the lower bound limit, thus indicates that the variables are co-integrated. Consequently, we shall proceed to test for our ECM which shows the short run relationship among the variables and also the overall significance of the model. The Error Correction Model (ECM) shows the short run relationships between the dependent and the independent variables. It is expected that the Error Correction Term (ECT) must be negative and less than 1 and should be statistically significant. Table 4.5 shows the summary of the ECM.

Table 5: Error Correction Model Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.789892	0.581772	4.795511	0.0000
D(MSO(-1))	0.352295	0.092990	3.788538	0.0007
D(GCEXE)	-0.006211	0.005774	-1.075627	0.2913
D(GCEXT)	-0.008300	0.006764	-1.227139	0.2300
D(GCEXT(-1))	-0.026925	0.008243	-3.266454	0.0029
CointEq(-1)*	-0.335804	0.048451	-6.930850	0.0000
R-Square 0.771234 F-statistic 21.57623				

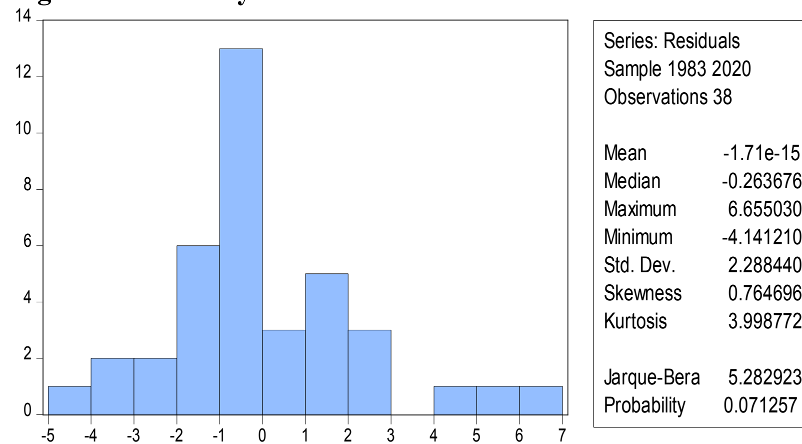
Prob(F-statistic) 0.000000
Durbin-Watson Stat 2.169804

Source: Author's computation using E-view 10

The error correction term (ECT) shows the speed of adjustment from a disequilibrium states. As earlier mentioned, the rule is that the value of the ECT must be negative, less than 1 and be statistically significant (less that 5%). From table 4.5, the value of the ECT is -0.335804 which indicates that it is negative, less than 1 and statistically significant. By interpretation, it means that if there is any disequilibrium, it will take approximately 33.6% speed of adjustment for the model to adjust from the short run to the long run within a year. The adjustment rate is considerable ok. The R-Square value of 0.771234 indicates that GCEXA, GCEXE, GCEXS and GCEXT accounted for about 77% of variation or changes in the MSO, while the remaining 23 percent are accounted for by other factors outside the model. The probability value of 0.000000 of the F-statistics shows that GCEXA, GCEXE, GCEXS and GCEXT are jointly significant in explaining the MSO during the period under review.

Normality Test

Figure 1 Normality chart



The normality test is conducted to ascertain if the error term in this study are normally distributed. Observing from the normality diagram in figure 1, the Jarque-Bera value of 5.282923 and its corresponding p-value of 7 % which is greater than 5 % significant level, confirms that the error term is normally distributed.

Test for serial correlation

Table 7: Serial correlation

Breusch-Godfrey Serial Correlation LM Test			
F-statistics	0.431570	Prob. F(2,26)	0.6541
Obs*R-square	1.220978	Prob. Chi-Square(2)	0.5431

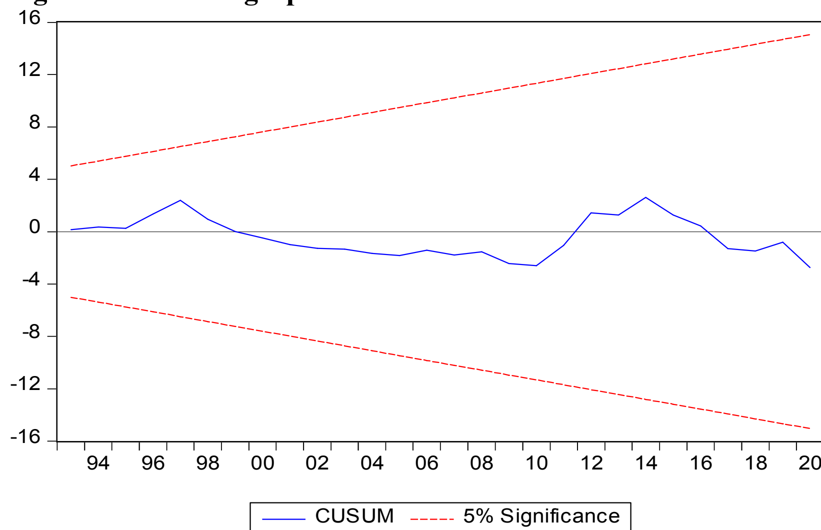
Source: Author's computation using E-view 10

In line with the rule, the Breusch-Godfrey Serial Correlation LM Test in table 7, it shows that the probability values of 0.6541 and 0.5431 for both F-statistic and Obs*R-squared are statistically insignificant at 5% level of significance. Hence, the null hypothesis that there is serial correlation in the model is rejected. Thus, the model is said to be free from serial correlation.

Stability Diagnostic Test

A CUSUM test assesses the stability of coefficients whether there is a stability in a model or not. The blue line represents the Cumulative Sum of the recursive residuals and the red dotted lines represent the confidence intervals at 95%. The null hypothesis for CUSUM test states that the parameters are stable while the alternate hypothesis states that the parameters are not stable.

Figure 2: CUSUM graph



The guideline is that, if the blue line lies within the red line, we accept the null hypothesis that the parameters are stable. On the other hand, if the blue line crosses the red line, we reject the null and accept the alternative hypothesis that the parameters are not stable. From figure 4.8, it could be seen that the CUSUM series lies between the upper and the lower critical boundaries of 5%. This is an indication that the estimated model is stable. So, it can be concluded that the model is stable and the estimated results are reliable, and can therefore be used for further analysis and prediction.

CONCLUSION AND RECOMMENDATION

The study examined the effect of Government capital expenditure on the Manufacturing Sector Output (MSO) in Nigeria from 1981 to 2020. The ex-post facto research design was adopted for the study. The MSO was used as the dependent variable while the GCEXA, GCEXE, GCEXS and GCEXT which were the components of the government capital expenditure were used as the independent variables. The ARDL and ECM method of analysis was employed for the study. The study found that the GCEXA and GCEXT have a long-run positive relationship with the MSO while the GCEXE and GCEXS have a long-rum negative relationship with the MSO. Also, all the variables have significant effects on the MSO except the GCEXS which has an insignificant on the MSO. Hence, the study concluded that the government capital expenditure has a long-run effect on the manufacturing sector outputs in Nigeria fro the period under review.

Based on the finding of the study, the following recommendations were made; Since the Nigerian government capital expenditure on administrative services, economic services and transfer services are have long run significantly effect on the manufacturing sector, the government is advised to increase its budgetary allocation on these components of the capital expenditure; while allocation of capital expenditure to social and community services should be reduced. By so doing, the aim of the capital expenditure which is economic growth will be achieved through the increase in the manufacturing output.

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Effect of Insecurity on Nigeria's Economic Growth

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Abstract

The frightened level of insecurity in Nigeria has increased the crime rate and terrorists' attacks in different parts of the country, leaving unpalatable consequences for the nation's economy and the continued security challenges in Nigeria. The study examined the effect of insecurity on Nigeria economic growth. The research design employed for the purpose of this research is ex-post facto research design. The data used for this study are basically time series data covering 2011 to 2020. The procedure in the analysis was multiple regression econometric procedure. The study commenced its analysis with descriptive statistics, to verify if the data sets are normally distributed so as to avoid spuriousness of empirical result. The Autoregressive distributed lag regression was also employed with the help of E-view 10 package to ascertain the significance of each of the constant parameters. The study found that insecurity indices (terrorism risk index and corruption perspective index) have significant effect on Nigeria economic growth. The study recommended that Federal government should formulate and effectively implement policies and programmes capable of addressing the root causes of insecurity in Nigeria such as poverty, corruption, unemployment, environmental degradation, dearth of infrastructural facilities, uneven development, among others.

Keywords: Insecurity, Terrorist, Corruption, Insurgency, Economic Growth

INTRODUCTION

Security challenges can be traced to the early years of military rule when large quantities of arms were imported into the country for the use of the military during and after the Nigerian civil war, some of which got into the hand of the civilians. Soon after the civil war these arms were used by civilians and ex-military men for mischievous purposes such as armed robbery (Olabanji & Ese 2014). The inability of government to provide a secure and safe environment for lives, properties and the conduct of business and economic activities has led to resentment and disaffection among the citizenry. This has resulted in communal clashes, and religious violence and crime in different parts of the country that has destroyed lives and properties, disrupted businesses and economic activities, and retarded economic growth and development in Nigeria.

The economic landscape in Nigeria as stated by Akindiyo (2014), has been shattered by the prevalent twin evil of violence and crime. The failure of the successive administration in Nigeria to adequately address issues of unemployment, poverty, social inequality and unequal distribution of wealth among ethnic nationalities, decisively resulted to agitation anger and violent crimes against the Nigerian state by some groups and individual. Akindiyo (2014); Otto and Ukpere (2012), since the advent of the present democratic dispensation, raw forms of violence such as Boko Haram, kidnapping for ransom, bombing innocent people, pipeline vandalization, armed robbery and destruction of government properties. The menace of insecurity remains a threat to governance and economic growth in Nigeria.Given the inadequate response or inaction on the part of government, it is considered that the Nigerian governmentis unable to solely secure its citizens. Despite acclaimed huge recurrent expenditure on internal security bothat the national and state levels, individuals in their various rights, work place and houses spend heavily to providesecurity for their personal lives and properties, yet the menace keep increasing uncontrollably. It has thereforebeen observed that the insecurity prone areas in the country are lacking behind with respect to economic activitiesand other variables. It is on the basis of this background that this present study seeks to examine the effect of insecurity on the economic growth of Nigeria. The following research hypotheses will be examined;

$H0_1$: Terrorism risk index has no significant effect on gross domestic product

$H0_2$: Corruption perception index has no significant effect on gross domestic product

There is high level of insecurity in the country, particularly, in the Northern zone where Banditry, 'BokoHaram' has become a threat to business activities. No investor will be willing to invest where hisinvestment is not secured. Many companies and businesses in the Northern part of the countryhave stopped operation due to Bandit and Boko Haram scourge. The cost of life and material resourceslost to insecurity in the country since the past few years is unquantifiable. The frequentoccurrence of kidnaping and bomb explosions, orchestrated by the acclaimed religious extremists in thenorthern part of the country, has assumed a worrisome dimension. According to securityinformation released by crime guard, a security monitoring group, between March andDecember 2021, there were a total of 1,029 successful kidnaped in the country which claimed. Several lives and properties and led to closure of many businesses in the country. As a result ofinsecurity in the country many businesses and companies in their numbers are closing downoperations in the north and relocating to other African countries for fear of loss of lives andproperties. And the few remaining companies operate on skeletal bases. Insecurity in the country not only affects foreign direct investment and business activities, it also affects businessconfidence as many companies lost confidence in establishing businesses in some parts of thecountry.

LITERATURE REVIEW

Insecurity in Nigeria

Insecurity is the fear of the unknown; A feeling of trepidation and unsafe. Also, it is a state of being unable to protect lives and property (Ezeajughu, 2021). In other words, the person is vulnerable to damage, injury or loss from both internal and external causes. Thus, one can deduct from the definition that a nation's sovereignty cannot safeguard the citizen and her resource both within and outside the country (Ezeajughu, 2021). There are various types of insecurity according to (Ezeajughu, 2021) these includes; job insecurity, food insecurity, political insecurity, economic insecurity, financial insecurity, social insecurity, demographic insecurity, gender/sexual insecurity, health insecurity, environmental insecurity, relationship insecurity, religious insecurity, moral insecurity and insecurity complex. The concept of insecurity connotes different meanings such as: absence of safety; danger; hazard; uncertainty; lack of protection, and lack of safety. Beland (2005), insecurity is "the stateof fear or anxiety stemming from a concrete or alleged lack of protection." It refers to lack orinadequate freedom from danger. Achumba et al (2013) defines insecurity from twoperspectives. Firstly, insecurity is the state of being open or subject to danger or threat of danger, where danger is the condition of being susceptible to harm or injury. Secondly insecurity is thestate of being exposed to risk or anxiety, where anxiety is a vague unpleasant emotion that isexperienced in anticipation of some misfortune. These definitions of insecurity underscore amajor point that those affected by insecurity are not only uncertain or unaware of what wouldhappen but they are also vulnerable to the threats and dangers when they occur. In the context of this paper insecurity is defined as a breach of peace and security, whether historical, religious, ethno-regional, civil, social, economic, and political that contributes to recurring conflicts, and leads to wanton destruction of lives and property.

Causes of Insecurity in Nigeria

Many scholars have identified several causes of insecurity in Nigeria that are inimical to socio-economic and national development (Ali, 2013; Okorie, 2011; Jega, 2002; Salawu, 2010; Onyishi, 2011; Ezeoba, 2011; Lewis, 2002; Achumba and Akpor 2013). These causes have been classified into external and internal causes. In Nigeria the internal causes of insecurity pose major challenge to socio-economic development than the external causes of insecurity.

Ethno-religious conflicts

These have arisen from distrust among various ethnic groups and among the major religions in the country. Ibrahim and Igbuzor (2002), Hazen and Horner, (2007), Salawu (2010) and Igbuzor, (2011) identified ethno-religious conflict as a major cause of insecurity in Nigeria. Ethno-religious conflict was defined as a situation in which the relationship between members of one ethnic or religious group and another of such group in a multi-ethnic and multi-religious society is characterized by lack of cordiality, mutual suspicion and fear, and a tendency towards violent confrontation (Achumba et al. 2013; Salawu, 2010). Frequent and persistent ethnic conflicts and religious clashes between the two dominant religions (Islam and Christianity), present the country with a major security challenge. In all parts of Nigeria, there exist ethno-religious conflicts and these according to Ibrahim and Igbuzor (2002) have emerged as a result of new and particularistic forms of political consciousness and identity often structured around ethno-religious identities. The claim over scarce resources, power, land, chieftaincy, local government, councils, control of markets and sharia among other trivial issues have resulted in large scale killings and violence amongst groups in Nigeria (Adagba, *et al,* 2012). In all parts of Nigeria, ethno-religious conflicts have assumed alarming rates. It has occurred in places like Shagamu (Ogun State), Lagos, Abia, Kano, Bauchi, Nassarawa, Jos, Taraba, Ebonyi and Enugu State respectively. These ethno-religious identities have become disintegrative and destructive social elements threatening the peace, stability and security in Nigeria (Eme and Onyishi, 2011).

Weak Security system

A weak security system results from inadequate equipment for the security arm of government, both in weaponry and training (Achumba et al. 2013). This is in addition to poor attitudinal and behavioural disposition of security personnel. In many cases, security personnel assigned to deal with given security situations lack the expertise and equipment to handle the situations in a way to prevent them from occurring. And even when these exist, some personnel get influenced by ethnic, religious or communal sentiment and are easily swallowed by their personal interest to serve their people, rather than the nation. Thus, instead of being national watch dogs and defending national interest and values, and protecting people from harm by criminals, they soon become saboteurs of government effort, by supporting and fueling insecurity through either leaking vital security information or aiding and abetting criminals to acquire weapons or to escape the long arm of the law (Achumba&Akpor 2013).

Unemployment and Poverty

As a result of the high level of unemployment and poverty among Nigerians, especially the youths, they are adversely attracted to violent crime (Adagba, *et al,* 2012). Nwagbosa (2012) argued that the failure of successive administrations in Nigeria to address challenges of poverty, unemployment and inequitable distribution of wealth among ethnic nationalities is one of the major causes of insecurity in the country. Unemployment has a severe negative implication on national development in Nigeria as most of its productive force is unemployed. What this means theoretically is that poverty and unemployment increase the number of people who are prepared to kill or be killed for a given course at token benefit Salawu (2010). It could predispose one to engaging in illicit activities that would undermine security of the environment. According to the National Bureau of Statistics, Nigeria's unemployment rate increased to 23.9 percent in 2011 compared with 21.1 per cent in 2010 and 19.7 per cent in 2009. The country has a youth population of 80 million, representing about 60 per cent of the total population with a growth rate of 2.6 per cent per year, and the national demography suggests that the youth population remains vibrant with an average annual entrant to the labour force at 1.8 million between 2006 and 2011. In 2011, 37.7 per cent of Nigerian youths were aged 15-24 years and 22.4 per cent of those between ages 25 and 44 were willing to work but did not get jobs.

Porous Borders

Achumba*et al.* (2013) observes that the porous frontiers of the country, where individual movements are largely untracked have contributed to the level of insecurity in Nigeria. As a result of the porous borders

there is an unchecked inflow of Small Arms and Light Weapons into the country which has aided militancy and criminality in Nigeria (Hazen &Horner, 2007). Available data show that Nigeria host over 70 percent of about 8 million illegal weapons in West Africa (Edeko, 2011). Also, the porosity of the Nigerian borders has aided the uncontrollable influx of migrants, mainly young men, from neighboring countries such as Republic of Niger, Chad and Republic of Benin responsible for some of the criminal acts (Adeola & Oluyemi, 2012).

Systemic and political Corruption

It has been described as cancer militating against Nigeria's development, because corruption deeply threatens the fabric of the Nigeria society (Nwanegbo and Odigbo, 2013). Corruption hampers economic growth, disproportionately burdens the poor and undermines the effectiveness of investment and aid (Iyare, 2008). It has been described in the academic circles as cancer militating against Nigeria's development; corruption is deeply threatening the fabric of the Nigeria society (Iduh, 2011). The existence of two anti-graft agencies; Independence Corrupt Practices Commission (ICPC) and Economic and Financial Crimes Commission (EFCC) since 1999 appear to have done little in an effort to totally eradicate corrupt practices in Nigeria. The ICPC and EFCC seem to have come under severe criticisms owing to what appeared as selective prosecution in handling corrupt related matters.

Economic Growth

Economic growth is the increasing capacity to satisfy the needs and wants of the economy overtime. It is conventionally measured as the percentage rate of increase in real gross domestic product, or real GDP. On the other hand, economic growth can be defined as "the process of improving the quality of human life through increasing per capita income, reducing poverty, and enhancing individual economic opportunities. It is also sometimes defined to include better education, improved health and nutrition, conservation of natural resources, a clear environment and a richer cultural life" (Penn State University, 2008).Economic growth in most developing and underdeveloped societies especially in the Latin America and Africa do not provide corresponding social good. Evidently, economic growth could not significantly address the spate of unemployment, poverty, diseases, hunger, illiteracy and ever-increasing crimes and insecurity. Economic growth is the process of steady increase in the real gross national product (GNP) per head of population. However, when people talk about "growth" they think chiefly of different it makes to the standard of living rather than general welfare, while growth can start from a position of less than full employment, it usually refers to the rate a t whichoutput continues to expand in the long run after employment has been achieved. Growth is essentially a long run phenomenon. To Ebipre and Wilson (2020), economic growth is the steady process by which the productive capacity of the economy is increased over time to bring about rising level of national income. Brooman (2004) economic growth is the process of steady increase in the quantity and quality of goods and services the economy can produce. Friedman (2006), defined growth as "an expansion of the system in one or more dimensions without a change in its structure, AchumbaIghomereho and Akpor-Robaro (2013) defined economic growth as the increase in national output which is due to greater utilization of existing resources.From the foregoing, economic growth is viewed, in this study, as the increase in productive capital of goods and services produced by an economy over time which can be conveniently measured as the gross domestic product (GDP) sustainable within a period of time.

Empirical Review

Ezeajughu, (2021) in their study examined the relevant issue of insecurity in Nigeria and its effect in socioeconomic development. The continuous rise in Insecurity and deterioration in the economic development in Nigeria call for a concern among researchers and policy makers over the years. However, these two hydra-headed problems still remain the greatest challenges facing nations all over the world. Since the past decade or more, Nigeria has witnessed an unprecedented security challenges occasioned by the activities of militants in the South-South region, kidnappers in the south east, violent armed robbery in

almost parts of the country, political assassination, ritual killings and more recently activities of Boko Haram in some parts of the northern region especially north east. These social menaces, when put together impinge on the security of lives and property of both Nigerian citizens and foreigners living or even trying to invest in the country. To ensure economic development in Nigeria therefore, the study recommends various measures of curbing insecurity including preventive community policing, human development centered growth perspective, equitable distribution of resources as well as channeling of resources to frontline sectors of the economy among others. This has become worrisome in the face of Nigeria's preparedness to be ranked among the twenty (20) developed countries of the world by the year 2020. These social menace triggers off a worrisome sense of insecurity that challenges Nigeria's efforts towards national economic development and consequently its vision. It also scares the attraction of foreign investment and their contributions to economic development in Nigeria. This study recommends effective leadership and good governance as a panacea to solving problems of insecurity, unemployment, poverty, hunger, disease, among other negative indices.

Ebipre and Wilson (2020), examined the impact of national insecurity on economic growth: The case of Nigeria. It aims at addressing the challenges of kidnapping, robbery, and Herdsmen farmers" conflict, Ethno-Religious crisis and Terrorism, and proffer solutions to the attendant impacts that negatively affect the economy. Descriptive analysis was adopted as a method of the study. It was discovered that national insecurity has not only impeded the attainment of sustainable economic growth but that there has been a drastic decline in economic activities in all geo-political zones in the country. The study recommends that government should develop strategies to enhance good governance, increase recurrent and especially capital expenditures on internal security, workable anti-terrorism measures, build strong and legitimate institutions that can safely curb the menace of insecurity. Nkwatoh and Nathaniel (2018) in their own study investigated the effect of insecurity on economic growth in Nigeria. The vector autoregressive model was employed using quarterly data from 2009Q1 to 2016Q4. The major findings show that economic growth and investment activities tend to increase during periods of insecurity. Also, the rate of unemployment reduced during periods of insecurity. This the study concludes that insecurity only threatens economic activities with no negative effect on the entire economy as conjectured by various economic theories. Thus, to continuously sustain the Nigeria's economic growth rate, the study concluded that the government needs to protect domestic and foreign investments by stepping up its national security.

Okonkwo, Ndubuisi and Threasa (2015) This study examines security challenges and the implications for business activities in Nigeria. The study seeks to determine the implications of security problems on the business operation and investment in Nigeria. The study adopts the Democratic Peace Theory. Secondary data was mostly used in the study. The study identifies the root causes of insecurity in Nigeria which has hindered business activities and some Security challenges confronting Nigeria was also highlighted. Security challenges in any environment constitute threat to lives and properties, hindered business activities, and discourage local and foreign investors, which effect and retards socio-economic development of a country. The study recommends effective formulation and implementation of policies capable of tackling the root causes of insecurity in Nigeria, such as Ethno- religious conflict, weak security system, systemic and political corruption, unemployment, among others. The study concluded that security challenges in any environment constitute threat to lives and properties, hampered business activities, and discourage local and foreign investors, all of which stifle and retards development of a country. The study recommended that Federal government should include security management in school curriculum at all levels of education in Nigeria. This will enable the Nigerian youths to appreciate the importance of security in a secular state like Nigeria.

Theoretical Framework

Even though a plethora of studies have analyzed insecurity using different theoretical approaches, only four of such theories have an economic bearing the democratic peace theory, rational choice approach,

deprivation theory and the religious fanaticism theory'. The underpinning theory of this present study is democratic peace theory.

Democratic Peace Theory

This study adopts the democratic peace theory propounded by a philosopher Immanual Kant in the (1960s) to explain the Security challenges in Nigerian. According to this theory, security largely depends on encouraging liberal institutions to discharge their responsibilities creditably; and a security policy must have as its long-term the spread of liberalism (Doyle, (1998). Therefore, the route to peace is to encourage democratic system, the universal respect for human rights and the development of civil society. But such conclusion depends largely on untroubled and robust correlation between the democratic nature of a state and peaceful inclination. Thus, the democratic peace theory assumes that liberal states do not fight wars against other liberal states. This theory was first enunciated in a keynote article by Michael Doyle in Journal of Philosophy and Public Affairs (Doyle, 1998). Thus, Doyle argued that there was a difference in liberal practice towards liberal societies and liberal practice towards non-liberal societies. From security point of view, the recommendations of democratic peace theory are clear.

METHODOLOGY

The research design employed for the purpose of this research is ex-post facto research design. The data used for this study are basically time series data covering 2011 to 2020. The data were sourced from the Nigeria bureau of statistics (NBS). In measuring the effect of the Nigeria insecurity on economic growth, the study adopted the convectional method of using their proxies. Thus, insecurity was proxied by Terrorism risk index and corruption perception index while economic growth was proxied by Real Gross Domestic Product (RGDP). In this study, the researcher adopted the statistical method of multiple regression approach in line with that applied by Olawoye (2011) and Ewah*et al* (2009). Their studies infer that economic growth is significantly influenced by insecurity indices. The study has, however, made some adaptations to suit the study.

The functional relation of the model is given as:

$RGDP=\beta_0+ \beta_1 TRI+ \beta_2 CPI+ \mu$……………………………..………………. (i)

Where:

RGDP= Real Gross Domestic product
TRI = Terrorism Risk Index
CPI = Corruption Perception Index
β_0, β_1, and β_2 = constant parameters and;
μ = the error term

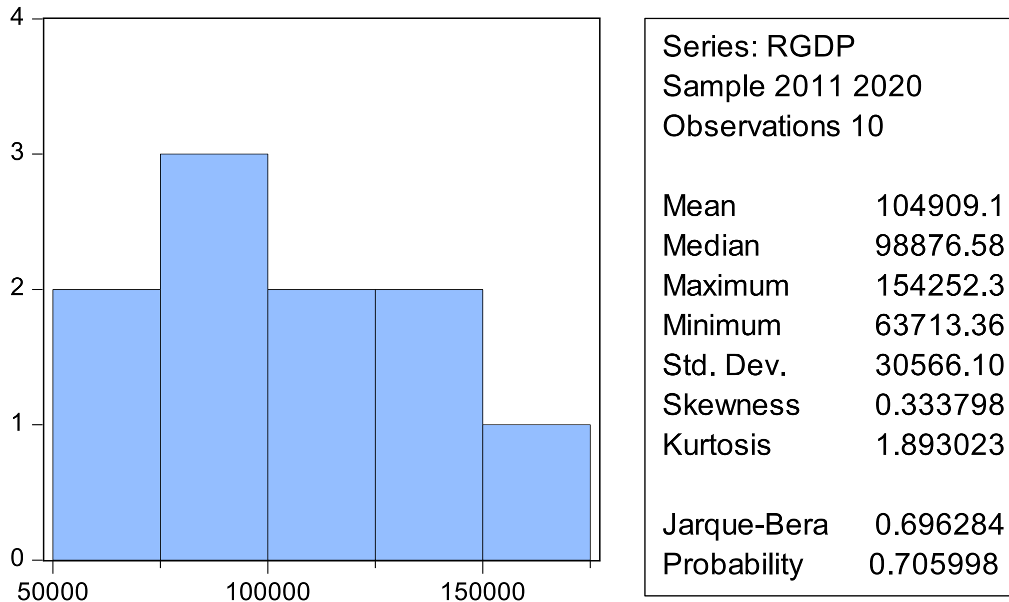
The procedure in the analysis was multiple regression econometric procedure. The study commenced its analysis with Descriptive statistics, to verify if the data set are normally distributed so as to avoid spuriousness of empirical result. The Autoregressive distributed lag regression was employed with the help of E-view 10 package to ascertain the significance of each of the constant parameters, while the diagnostic test based on the coefficient of determination (R^2) were used to check for the goodness of fit of the model.

RESULT AND DISCUSSION

Descriptive Statistics

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. The summary statistics and graph is presented in Figure 1-3.

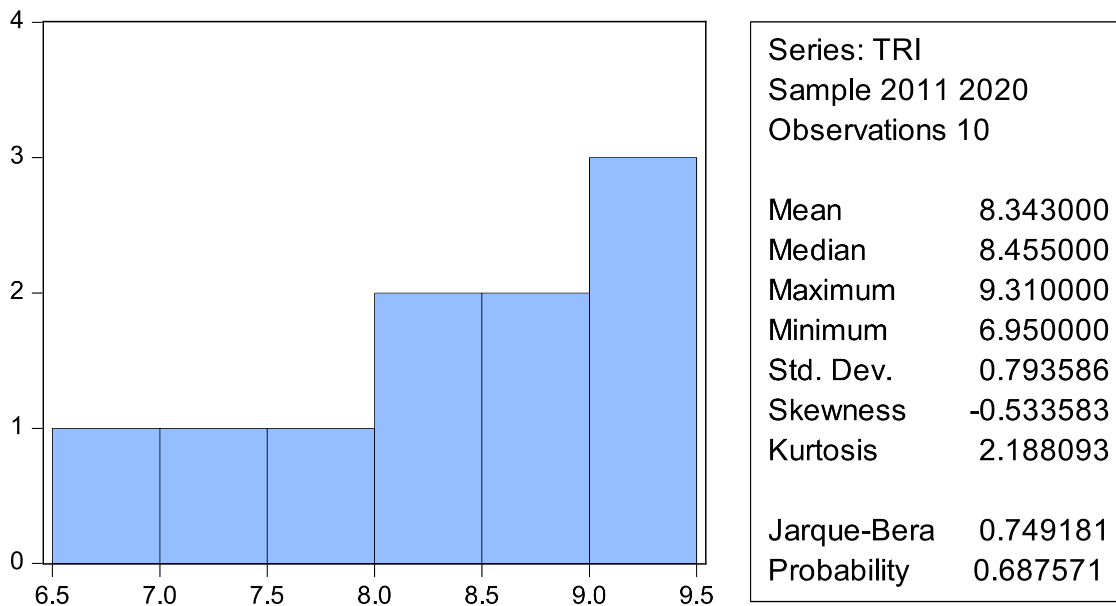
Figure 1: Representation of Real Gross Domestic Product



Source: E-view 10

The mean value for Gross Domestic Product is 104909.1 while the median is 98876.58. The standard deviation is 30566.10 which is not volatile while the insignificant Jarque-Bera Statistic of 0.696284 depicts a normal distribution of the time series data. The GDP graph shows some fluctuations resulting from instability in economic indices.

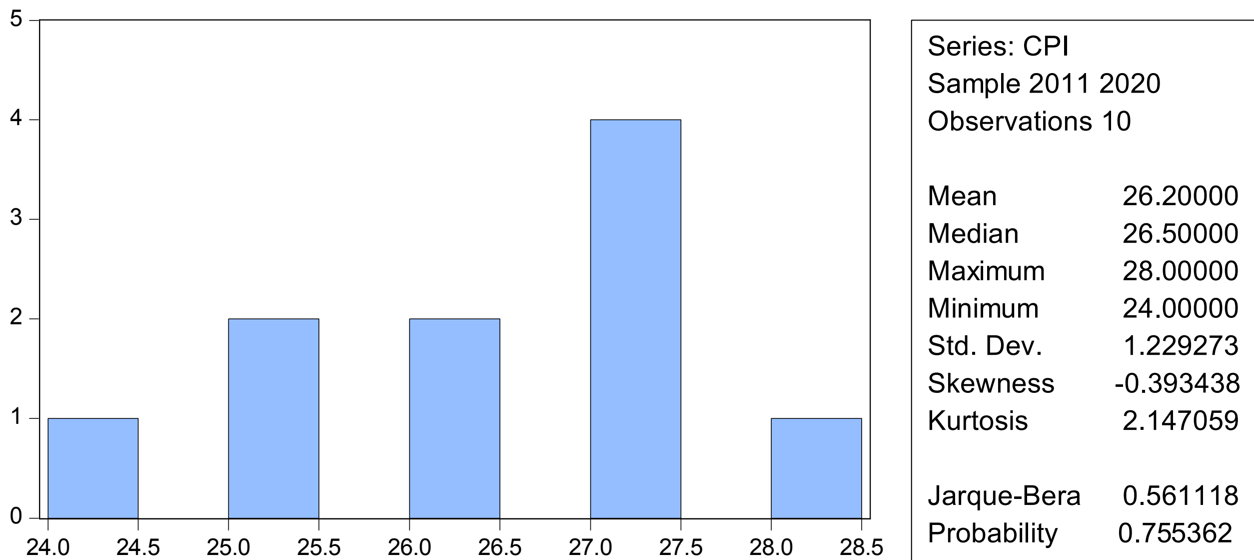
Figure 2: Representation of Terrorism Risk Index



Source: E-view 10

The mean value for terrorism risk index (TRI) is 8.34 while the median is 9.31. The standard deviation is 0.79 which is not volatile while the insignificant Jarque-Bera Statistic of 0.74 depicts a normal distribution of the time series data. The terrorism risk index graph shows some parallel and fluctuations resulting from instability in security indices.

Figure 3: Representation of Corruption Perception Index



Source: E-view 10

The mean value for corruption perception index (CPI) is 26.2 while the median is 26.5. The standard deviation is 1.23 which is not volatile while the insignificant Jarque-Bera Statistic of 0.56 depicts a normal distribution of the time series data. The corruption perception index (CPI) graph shows some parallel and fluctuations resulting from instability in economic indices and security parameters. On a general note, the descriptive statistics revealed that all the data sets are normally distributed.

Statistical Test of Hypotheses

The level of significance for the study was 5 percent (for the two-tailed test); as such the hypothesis formulated in this study was tested using F-statistic test as well as their associated p-value.

Decision rule: The decision rule is that the null hypothesis will always be rejected when the t-statistic is above two (2) or when the probability (p-value) as calculated is less than 5% level of significance (< 0.05).

Table 1: Regression Analysis Result

Dependent Variable: RGDP
Method: ARDL
Date: 03/24/22 Time: 12:46
Sample (adjusted): 2012 2020
Included observations: 9 after adjustments
Maximum dependent lags: 1 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (0 lag, automatic): TRI CPI
Fixed regressors: C

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
RGDP(-1)	1.066032	0.056355	18.91646	0.0000
TRI	-849.7789	2632.991	-0.322743	0.0799
CPI	1073.348	1640.588	0.654246	0.0418
C	-17668.25	39260.52	-0.450026	0.6715

R-squared	0.988536	Mean dependent var	109486.4
Adjusted R-squared	0.981657	S.D. dependent var	28554.61
S.E. of regression	3867.305	Akaike info criterion	19.65961
Sum squared resid	74780244	Schwarz criterion	19.74726
Log likelihood	-84.46823	Hannan-Quinn criter.	19.47045
F-statistic	143.7133	Durbin-Watson stat	1.708233
Prob(F-statistic)	0.000029		

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

Source: E-view 10

The result in table 1 above shows that terrorism risk index (TRI) have negative effect on RGDP growth rate while corruption perspective index (CPI) have positive effect on GDP growth rate and both of these effects are significant (P-values > 0.05). The coefficient of determination R^2 shows how well the model fits the sample data, and about 98% has been accounted by the model.This value implies that 98% of the variation in economic growth is explained by the independent variables (Insecurity). It shows a good fit for the model since greater variation of the dependent variable is accounted for by the variables in the model. The F-test which tests the significance of R^2 and the joint significance of parameters is statistically significant at 5%. This fact confirms the goodness of fit implied by the R^2; and shows that all the independent variables put together contribute in influencing economic growth. The Durbin-Watson statistic of 1.7 is within the acceptable range of 1.5 to 2 for a sample of at least 50 observations. The result rejects the null hypotheses one and two and there is no enough evidence to support the null hypotheses.

Discussion of Findings

The study empirically examines the effect of insecurity on Nigeria economic growth. The study runs through the period of 10 years (2011 -2020). The findings show that terrorism risk index and corruption perspective index are all joint predictor of economic growth provide by RGDP, though significantly. The terrorism risk index and corruption perspective index exert significant negative and positive influence on RGDP growth rate respectively. The implication of the result is that an increase in terrorism risk index and corruption perspective index will significantly decrease economic growth (RGDP), and this is supported by Osinubi and Amaghionyeodiwe (2003), Abu (2009), Agarwal (2001), Chinwuba and Amos (2011) and Ewah et al (2009), who in their different studies, found that terrorism risk index in Nigeria has negative impact on economics growth. Ewah*et al* (2009) made it abundantly clear that although corruption perspective index exerts positive influence on economic growth, it has not contributed meaningfully (significantly) to the growth of the Nigerian economy. This confirms the position of Ilaboya and Ibrahim, (2004), that the significant effect suggest that Nigeria populace are at very big risk of insecurity. The result of the hypothesis one and two earlier stated shows that the effect of insecurity indices on economic growth, whether negative or positives, is significant hence the research reject the null hypothesis and therefore conclude that insecurity has significant impact on economic growth in Nigeria.

CONCLUSION AND RECOMMENDATIONS

The present study concludes that insecurity have significant effect on Nigeria economic growth. Nigeria needs increased defense spending (albeit with a close monitoring on spending to avoid mismanagement) to enhance the country's arms and ammunitions, increases its number of armed personnel and train them efficiently. Higher recurrent spending in form of improved salaries may also boost motivation and improve performance amongst security personnel. Together, both stronger arsenal and motivated defense personnel could do a lot more to contain insecurity. However, should the government decide to sustain its relatively low defense spending in the country, the impact of the defense sector to combat insecurity is

poised to be limited and the continued negative impacts on the economy, infrastructure and Nigeria's population are set to persist. On the basis of this conclusion the following recommendations are advocated;

i. The Federal government should formulate and effectively implement policies and programmes capable of addressing the root causes of insecurity in Nigeria such as poverty, unemployment, environmental degradation, dearth of infrastructural facilities, uneven development, among others.

ii. Government must be proactive in dealing with terrorism and security issues and threats, through training, modern methods of intelligence gathering, and intelligence sharing, logistics and deploying advanced technology in managing security challenges. This will add more values in checking incessant bombings, robbery, kidnapping and violent crimes/crises by hoodlums in the country.

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Effect of Financial Control System on Fraud Prevention in the Nigerian Public Sector

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Abstract

The study broadly examined the impact of Financial Control System in Transmission Company of Nigeria (TCN). Specifically, the study examinedthe extent to which communication, control activities, and effective monitoring impact on Transmission Company of Nigeria.The population of study was the entire staff of TCN in Nigeria. The sample population was the staff of accounts Department of TCN in the South-Southern and South-Eastern regions of Nigeria. The study adopted the descriptive research design using the questionnaire as the research instrument for data generation. Data generated from the research instrument was used for the analysis of the study. The analytical technique used in the study was the descriptive statistics and the econometric approach. Our findings showed that Communication and effective monitoring have a strong positive impact on the Transmission Company of Nigeria.However, our findings also showed that control activity has no significant effect on improvement in the government sector.It was recommended that focus should be on the use of less forceful and very subtle ways of achieving financial control by government. Human relations activities should always be a key factor in carrying out public sector accounting and financial control functions. Also, communication channels and monitoring activities should be improved on in the public sector. Finally, there should be adequate financing of public sector firms in general.

Keywords: Public Sector, Accounting, Financial Control System, Transmission Company

INTRODUCTION

Adams (2014) defines public sector as all organizations that are not privately established and operated but which are owned, run and financed by the government on behalf of the public. While Public sector is that portion of an economic system that is controlled by the federal, state and local governments,Public Sector Accounting is the process of recording, communicating, summarizing, classifying, analyzing, and interpreting government financial statements in aggregate and in details, reflecting all levels of transactions involving the receipts, custody and disbursements of government funds and rendering of stewardship of public funds entrusted in them (Kara, 2012). It is an accounting method that helps to regulate the resources and expenditures of government. The practice of Public Sector Accounting had evolved over the years with the focus on cash receipts and disbursements on the cash accounting basis or the modified cash accounting basis.Therefore, government revenue is only recorded and accounted for when cash is actually received and expenditure incurred. Nonetheless, the system is not planned to provide information on the cost of services, earned revenues, account receivables, account payables, long-term assets and liabilities, accrued interest on external debt and stock value (Akenbor, 2011). The cash accounting system is not significantly effective in providing accounting information for efficient performance of public sector organization as indicated by Okoye and Oghoghameh (2011). Government accounting is interested in gathering information that will enable her to prepare receipts and payments account (Omolehinwa and Naiyeju 2012) for better financial management and greater accountability by government. This is because public sector has a direct impact on the financial control system of Nigeria. The essence of financial management control is to ensure the inflow and outflow of revenues and safeguarding the assets and liabilities and ensuring that the resources are sufficient to implement the plans. However, this was found unachievable by government, hence, the adoption of accrual basis of accounting.

Presently, Ministries, Departments and Agencies (MDAs) in Nigeria have adopted the accrual basis of presenting and reporting financial statements of government as stipulated by the International Public Sector Accounting Standards (IPSASs). This was reinforced by other international organizations whose

position was that IPSASs compliance is a condition for providing funds to developing countries (IPSAS, 2011). The program received endorsement and financial support from several international financial and development institutions interested in advancing the cause of better financial management and greater accountability. Most Ministries, Department and Agencies (MDAs) in Nigeria encountered problems in handling the financial control of their respective departments. These problems include inadequate funding, inappropriate use of accounting principles, poor administration and management of public funds, ineffective and inadequate internal control systems in place and so on, whichhas led to the shortfalls in financial management of public funds by government. These problems were identified with Transmission Company of Nigeria, being a unit of public sector, hence, the need for this study. To this end, the study seeks to examine the impact of financial control system on public sector of Nigeria using Transmission Company of Nigeria as a study. The basic hypotheses underlying this study are stated thus;

Ho_1: Communication has no significant impact on the financial activity in TCN.
Ho_2: Control activities have no significant effect on improvement in the financial activity in TCN.
Ho_3: Effective monitoring does not significantly impact on the financial activity in TCN.

LITERATURE REVIEW

Conceptual Framework

Odike, (2006) defines public sector accounting as an accounting method applied to not-for-profit pursuing entities in the public sector which includethe central, local, and quasi-governmental special corporations for which the size of its profits does not provide an effective measurement for evaluating performance. The regulatory frameworks of public sector include the constitution of the Federal Republic of Nigeria, 1999 as amended, the Finance (Control and Management) Act of 1958, the Audit Ordinance Act of 1956, Financial Regulation and Revenue Allocation Laws (Adams, 2014) and the International Public Sector Accounting Standards (IPSASs, 2011). This implies that all activities of public sector are regulated by government's pronouncements and the constitutions.These regulations help to effectively and efficiently monitor the public sector activities with a view to achieving her set objectives.Public activities include but not limited to national defense, homeland security, police protection, firefighting, urban planning corrections, taxation, provision of social amenities, infrastructural facilities and other various social programs.

Basis for Recognition of Transactions under Public Sector

The bases for recognition of public sector transactions are the 'cash' and 'accrual' bases of accounting. The cashbasisof accounting recognizes revenues and expenses only when cash is received and expenses paid out. This accounting basis does not match costs incurred and revenues earned to the appropriate period in which transactions took place, hence, negates the "Matching Concept" principles which is the Generally Accepted Accounting Principles. The accrualbasisof accounting recognizes revenues and expenses when a transaction has been concluded and sealed between two willing parties in an arms-length-transaction. This means that transactions are recorded when revenues are earned and costs incurred, not minding that cash has not been received and expenses not paid. This basis of accounting gives a true financial position of government account as it conforms to the matching concept of GAAP. This method of recording transactions is currently adopted by countries that have adopted International Public Sector Accounting Standards including Nigeria.

Measures Used by Public Sector in Controlling Financial Systems

The variables considered in this study as measures to control financial system in TCN and by extension the Nigerian public sector are: (i) Control activities, (ii) Communication, and (iii) Effective monitoring.

Control Activities

Control activities are the policies, procedures, tools, techniques, and mechanisms put in place by management or government that help identify, prevent or reduce the risks that can impede the

accomplishment of set objectives arising from management directives and executions (Whittington & Delaney, 2009). Control activities are a component of internal control system which includes such activities as authorizations, approvals, verifications, reconciliations, reviews of operating performance, safeguarding of assets, and the segregation of duties (Quall, 2004), organization control, physical control, arithmetical and accounting controls, personnel controls, and supervision control(Jenfa,2002). They are essential for proper stewardship and accountability of government resources for achieving effective and efficient program results.

InformationCommunication

Information has recently been identified as a major asset to both public and private establishments. Therefore, pertinent financial information must be identified, captured, and communicated in forms and timeframes that enable people to carry out their responsibilities effectively and efficiently. Information systems produce reports of operational, financial, and compliance-related information that make it possible to run and control the business (COSO, 2013). Information systems deal not only with internally generated data but also information about external events, activities, and conditions necessary to informed business decision making and external reporting (COSO, 2013).Employees in an organization must understand their own role in the internal control system, as well as how individual activities relate to the work of others (Pickett & Pickett, 2005). Effective communications should occur in a broad sense with information flowing down, across, and up the department (Jackson, 2006). Effective communication must exist with external parties, such as customers, suppliers, regulators, and shareholders (COSO, 2013).Management should establish communication channels that: provide timely information, inform employees of their duties and responsibilities, enable the reporting of sensitive matters including fraudulent or unethical behaviors, enable employees to provide suggestions for improvement, convey top management's message that internal control responsibilities are important and should be taken seriously (Quall, 2004).

Monitoring Activities

Monitoring activity is a process that assesses the quality of the internal control system's performance over time through ongoing monitoring activities, separate evaluations, or a combination of the two (COSO, 2013). Monitoring activity is the review of government's activities and transactions to assess the quality of performance over time and to determine whether controls are effective. Ongoing monitoring that occurs in the course of operations includes regular management and supervisory activities as well as other actions that personnel undertake while performing their duties (Jackson, 2006). The Monitoring performed by a department should focus on the following major areas: control activities, mission control, environment, communication, risks and opportunities. The scope and frequency of separate evaluations depend primarily on an assessment of risks and the effectiveness of ongoing monitoring procedures (COSO, 2013). Internal control deficiencies should be reported upward, with serious matters reported to top management and the board of directors (Jackson, 2006).

Empirical Study

Ademola (2003) carried out a study on the fund management and control in the state governments of Nigeria, using Ekiti State Government as the case organization, with the objective of findingout whether there is effective fund management and control of the state government fund. The study adopted the survey design using a 21-item questionnaire. The sample size was 175 respondents drawn from the treasurers, accountants, cashiers and other fund managers in the state. The formulated hypotheses were tested using the Spearman's correlation method. The findings show that there is weak internal control over the state government funds which leads to ineffective fund management; that fund management positively correlated with the procedures and the state government performances. Onuorah and Appah (2012) on accountability and prudent financial management in Nigerian public sector, the control of public funds with respect to the manner of account rendition of public office holders as stewards were

evaluated. Data was collected from Central Bank of Nigeria Statistical Bulletin for 48 years.The findings show that the level of public accountability in Nigeria is not something to write home about due to the non-availability or partially available socio-economic and political information about the activities of government for the governed to assess the performance of their leaders. The study recommends that integrity, transparency and accountability in the management of public funds are of paramount importance if Nigeria is to move higher in the area growth and development. Also, accountability mechanisms and institutions of control need to be solidified to minimize the tempo of corruption in the country.

Ademola (2012) studied the effect of internal control system in Nigeria public sector; a study of the Nigerian National Petroleum Corporation. Using chi-square to test the hypotheses showed that understanding the Internal Control techniques by both the management and the low level employees helps to reduce embezzlement and fraud in the corporation. Emem (2008) carried out a study on public fund management and control in Nigeria using Boki Local Government as the case organization. A survey research design was adopted using 27 questions administered on 75 respondents. The result of the study revealed that the laid down procedures of fund administration are not strictly followed which leads to ineffective fund management in the public settings. Also, there is ineffective fund management caused by weak internal control system in the council as well as collaborations by the public fund administrators. Ugwoke and Onyeanu (2013) studied the problems in the principal instrument of control of public sector accounting and financial management in Nigeria. The paper aimed at determining the effectiveness and adequacy of the existing financial authorities. With a robust literature review, the primary data collected from 200 federal public/civil servants was used. The student t-test statistic at 5% level of significance was adopted as the suitable statistical tool to test the 2 formulated null hypotheses. The results indicate that the financial authorities are both ineffective and inadequate. It thus recommends that a substantial review of the existing laws, rules and regulations that guide public sector accounting and financial management be done; and a strengthening of the legal process not only to include very punitive sanctions but also to enforce same timely and exhaustively upon any infringement. It was observed from all the empirical studies reviewed that there is need for the improvement of the ardency of the internalcontrol over public funds in order to achieve the set objective for which they were created. WhileOnuorah and Appah (2012) examined accountability and prudent financial management with respect to the manner of account rendition of public office holders as stewards in the Nigerian public sector using the secondary data, however, the researchers observed that none of the studies examined the impact of financial control system in Transmission Company of Nigeria (TCN) using primary data and Qualitative Response Modeling technique of analysis. This is the knowledge gap the study seeks to fill.

Theoretical Framework

This study hinges on the agency theory which explains the relationship that exists between principals and agents in a business environment, in this context, government and its employees. An agency relationship arises whenever one or more individuals, called principals, hire one or more other individuals, called agents, to perform some service and then delegate decision-making authority to the agents(Meckling and Jensen, 1976). The primary agency relationships in business are those between stockholders and managers and between debt-holders and stockholders.The most common agency relationship in finance occurs between shareholders (principal) and company executives (agents). These relationships are not necessarily harmonious; indeed, agency theory is concerned with so-called agency conflicts, or conflicts of interest between agents and principals. Agency theory addresses problems that arise due to differences between the goals or desires between the principal and agent.This situation may occur because the principal is not aware of the actions of the agent or is prohibited by resources from acquiring the information. This has implications for and among other things, corporate governance and business ethics. Agency theory is therefore concerned with resolving problems that exist in agency relationships due to unaligned goals or different aversion levels to risk (Uguru, 2016). When agency conflict occurs, it also tends to give rise to agency costs, which are expenses incurred in order to sustain an effective agency

relationship (e.g., offering management performance bonuses to encourage managers to act in the shareholders' interests and so on).

METHODOLOGY

The research is descriptive in nature and generally surveys and assesses issues of perception of control systems. The research made use of primary source of data using the questionnaire as an instrument to harvest data used for the study. Sixty (60) questionnaires was distributed to respondents, 54 which forms 90% were retrieved for the analysis of the study while 6 questionnaires which forms 10% could not be retrieved, hence, voided. Two main analytical methods were applied in this study, namely, descriptive statistics and econometric approach. In order to effectively conduct a valid analysis in the presentation and analysis of the data collected on the research field, the researchers used descriptive statistical methods. However, in order to determine the effects of the selected determinant factors on audit independence, econometric techniques were employed, using the Qualitative Response Modeling technique. This method was applied since the responses from the questionnaire generated qualitative data which was obtained by taking the average responses of the respondents based on the subsections in the questionnaire. The Ordinary Least Squares (OLS) method breaks down the estimation of such data set since the probability distribution of the dependent variable was not continuous. The particular qualitative response modeling technique applied is the *Logit* method which estimates the relationships using the Maximum Likelihood approach.

A simple regression model was used to identify the relationships between audit independence and each of the independent variables based on the survey method in the study. Given the nature of the data derived for the dependent variable (i.e., either audit independence or no audit independence), the *Qualitative Response* model is adopted in the estimation of the relationships. Here, we estimate the probability of audit independence given the perception of the respondents. Therefore, the baseline model for the primary data analysis may be specified as:

Pr[FCONTROL] =f(COMM, CONSY, MONITOR, X)

Where; FCONTROL = financial control system – used in three scenarios (i) appropriateness of financial control system (ii) basic financial control (ii) outcome of financial control (each of the variables are captured as a binary indicator taking the value of 1 when the perception is "positive" and 0 when the perception is "negative").
COMM = communication
CONSY = Control system which is based on computerization and TSA
MONITOR = Monitoring activities
X = other control variables that improve financial control in the organization including irregularities, sufficiency of revenue, and effectiveness of revenue use.

It should be noted that the determination of the variables above is based on qualitative data obtained from the questionnaire. Following Bieren (2008) and Greene (2004), the Maximum Likelihood econometric form of the model is written as:

$$Pr[FCONTROL_j = 1|Z_j] = \frac{1}{1+\exp(-\alpha_0-\beta_0 X_j)},$$

$$Pr\left[AUDIND_j=0\middle|Z_j\right]=1-Pr\left[AUDIND_j=0\middle|Z_j\right]$$

$$¿\frac{\exp(-\alpha_0-\beta_0 X_j)}{1+\exp(-\alpha_0-\beta_0 X_j)}$$

Where; the Z_j's are the explanatory variables and α_0 and β_0 are unknown parameters to be estimated.

According to Greene (2004), the *Logit* regression model is a type of regression analysis used for predicting the outcome of a binary dependent variable (a variable which can take only two possible

outcomes, e.g. "yes" vs. "no" or "available" vs. "not available") based on one or more predictor variables. Logistic regression attempts to model the probability of a "yes/success" outcome using a linear function of the predictors. Specifically, the log-odds of success (the logit of the probability) is fit to the predictors using linear regression. Logistic regression is one type of discrete choice model, which in general predict categorical dependent variables - either binary or multi-way. In order to ensure that the estimated equations are standard and tabled across the various cross sections in the study, various robustness check are provided. These are the multicollinearity test which helps to ensure that independent variables in the estimates are not highly related; the heteroskedasticity test which ensure that the variances among the different cross section in the observations are constant; and the CUSUM of Squares test.

RESULT AND DISCUSSION

Relevant background information about the respondents that participated in the study relates to their gender, age, marital status, qualifications and job status since each of these could influence the extent to which the respondents are knowledgeable about the variables that were involved in the study and the extent to which the data that they provided can be generalized to the population. Subsequently, information pertaining to these variables was elicited and the findings are summarized in table 4.1. Table 4.1 shows that a cross section of gender (that is, male 35.2% and female, 64.8%) in TCN in South-South and South-East states was involved in the study. This means that the conclusions based on the data that they provided is trustable and plausible, since it was generated from all the key categories of stakeholders in terms of gender. In the same vein, slightly more female staff of TCN was involved in the study.

Table 4.1: Distribution of respondents that participated in the study

	Outcome	**No**	**Percentage**
Sex	Male	19	35.2
	Female	35	64.8
	Total	**54**	**100**
Marital status	Single	26	48.1
	Married	28	51.9
	Total	**54**	**100**
Age	25 years and above	41	75.9
	below 25 years	13	24.1
	Total	**54**	**100**
Working Experience	15 years and above	28	51.9
	below 15 years	26	48.1
	Total	**54**	**100**
Qualification	WAEC	0	0
	NCE/ND	5	9.3
	B.Sc./HND/BA	27	50.0
	M.Sc./MA	20	37.0
	Ph.D.	2	3.7
	Total	**54**	**100**
Professional qualification	ACA	18	36.0
	ACCA	17	34.0
	ACTI	0	0
	Others	15	30.0

	Total	**50**	**100**
Ranks attained	Top management	12	26.0
	Ordinary staff	17	37.0
	Middle management	17	37.0
	Total	**46**	**100**

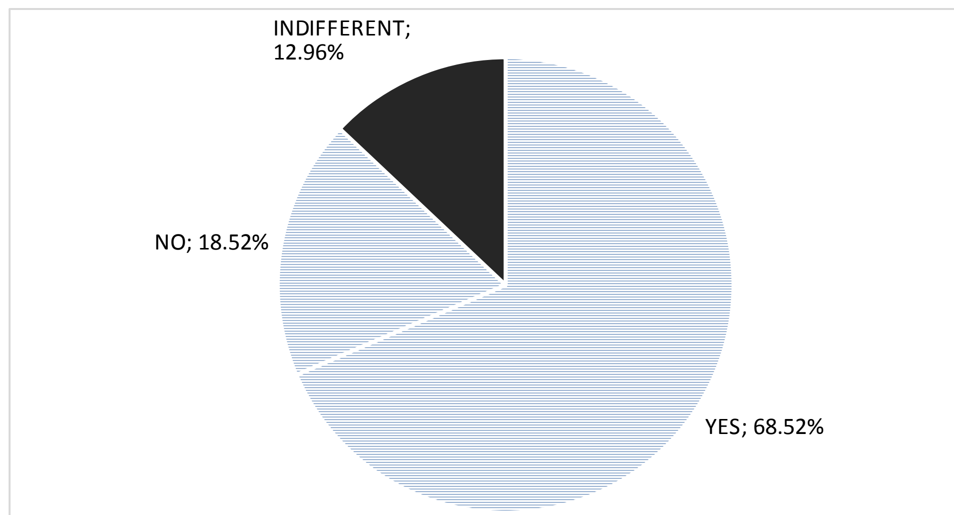
Source: Authors' field survey, 2017.

Information was also collected on the characteristics of the individuals that were involved in the study. This information pertained to the TCN staffs' age and marital status. The results in table 4.1 indicates that slightly more of the staff (51.9%) were married and more of them (75.9%) are aged 25 years and above. This perhaps explains why more of the respondents (51.9%) have over 15 years of experience on the job. In terms of educational qualification of the respondents, 50 percent have their first degree or HND, while 37.0 percent have Masters' degree. In the same vein, most of the respondents have academic qualification in the area of accounting. The job status of the respondents reveals that 26.0 percent are in top management, while 37.0 percent are in middle level and ordinary staff. The information from the respondents' background analysis indicates that most of the staff in the study are well informed of the activities that may go on in their various homes and provide reliable information.

Analysis of Questionnaire

In this section the responses of the survey instruments are reported and analyzed using statistical techniques. The focus is on financial control system in the public sector. In Figure 4.1, the responses on the appropriateness of the overall public sector accounting principles in TCN; South-South and South-East stateswere reported. It can be seen that 68 percent of the respondents agreed that the accounting principles are appropriate while 19 percent did not agree. Also, 13 percent of respondents are however indifferent about the appropriateness of the principles. These responses suggest that generally, the public sector accounting principles adopted in South-South and South-East states are appropriate in the parastatal.

Fig. 4.1: Is public sector accounting principles by TCN in South-South and South-East *states appropriate and effective?*

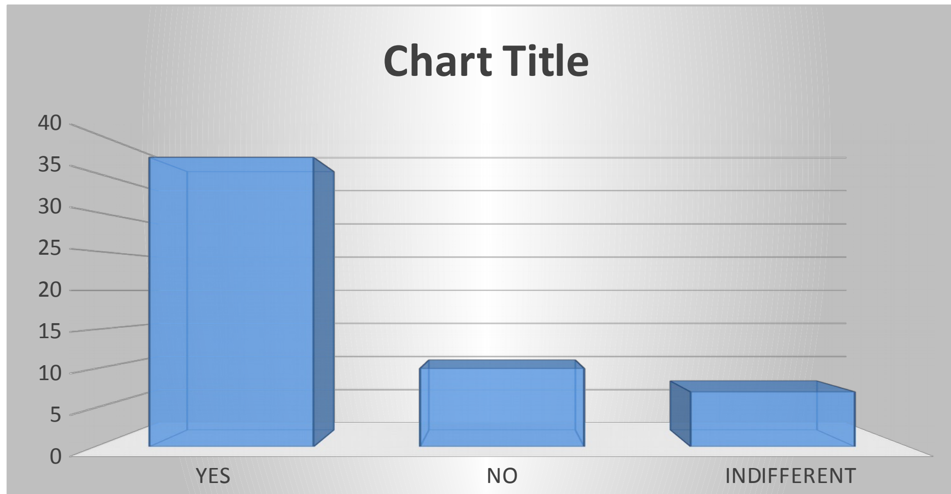


Source: Authors' field survey, 2017.

In Figure 4.2, we show the responses on the appropriateness of the internal control system of public funds adopted by TCN (the sampled organization). 32 respondents (59%) agreed that the control system is appropriate while 11 respondents or 20 percent did not agree. The responses thus indicate that the overall

perception of public sector accountants is that the internal control system of public funds in TCN is appropriate.

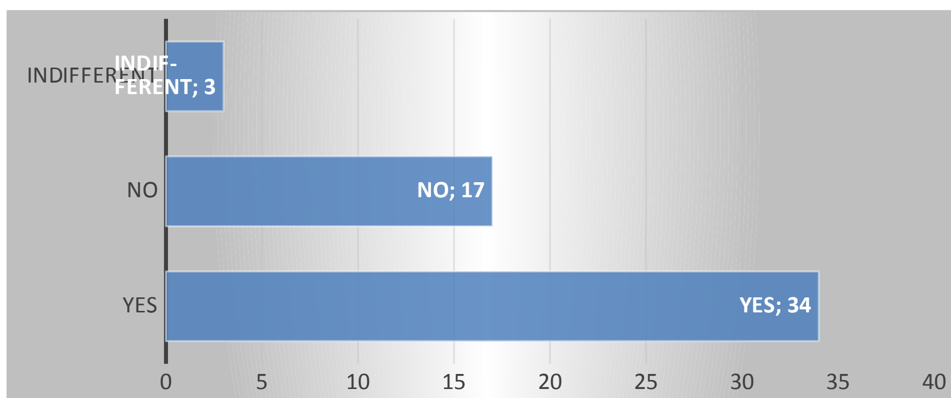
Fig 4.2 Is the internal control system of public fund adopted by TCN in South-South and South-East *states appropriate?*



Source: Authors' field survey, 2017.

In terms of the perception of the respondents about the effectiveness of the monitoring of financial controls in TCN in South-South and South-EastStates the Chart in Figure 4.3 shows that 34 respondents or 62 percent of the responses went with yes, while 17 respondents or 31 percent of respondents indicated that the monitoring system was not effective. These responses give a slight indication that monitoring may not be as effective as expected in TCN inSouth-South and South-Eaststates.

Fig 4.3:. Has the monitoring of financial controls in TCN in South-South and South-East *state been effective?*



Source: Authors' field survey, 2017.

Table 4.2 shows the responses on the other questions contained in the questionnaire. Most of the respondents indicated that the sources of revenue available to the organization (TCN, South-South and South-East states) were not enough for the parastatal's needs. On the other hand, the respondents generally agreed that the funds generated by the parastatal was being put to good use (48%), that the introduction of treasury single account policy helped in the financial control of TCN accounts in South-South and South-Eaststates(77.8%), that the financial control used by TCN in South-South and South-East stateshelped in maximizing the use of cash resources (70.4%), that the manual accounting method introduced by TCN in South-South and South-Eaststates help improve the financial control system(50%),

that the computerized accounting method introduced by TCN in South-South and South-Eaststates help improve the financial control system (85.2%).

Econometric Analysis

In this section, the model specified in section three was estimated and the results interpreted as follows: The overall performance of the models was observed from the McFadden R^2 statistic values and the LR statistic. The results show that the first model which shows the effectiveness of financial control systems performed better based on the McFadden R^2 statistic which is 0.224. This implies that there was assurance of about 22.4 percent that the independent variables predict the responses on financial control systems. Though this value is low, the LR statistic, which shows the overall significance of the first model pass the significance test at the 5 percent level. This implies that only the results from the first model are reliable for analysis. This was because the LR test fails for the other two equations.

Table 4.3: Model Results

	Model 1			Model2			Model3		
Variable	Coeff.	z-Stat.	Prob	Coeff.	z-Stat.	Prob	Coeff.	z-Stat.	Prob
C	-0.896	-0.90	0.37	2.047	1.10	0.27	-3.109	-1.63	0.10
Communication	0.541	2.14*	0.03	0.339	0.87	0.39	0.456	1.15	0.25
Monitoring	1.032	2.06*	0.04	1.200	1.51	0.13	1.920	2.25*	0.02
Computerized	-0.310	-0.56	0.58	-0.229	-0.23	0.82	0.740	0.85	0.40
Irregularities	0.327	1.17	0.24	-0.153	-0.33	0.74	0.292	0.64	0.52
manual_acct	-0.415	-0.88	0.38	0.338	0.43	0.67	1.017	1.20	0.23
revenue sufficiency	-1.406	-2.53*	0.01	-0.970	-1.16	0.25	0.130	0.17	0.87
revenue use	0.534	1.05	0.29	0.420	0.51	0.61	-1.402	-1.51	0.13
TSA	-0.601	-1.04	0.30	-1.994	-1.63	0.10	0.393	0.40	0.69
McFadden R^2	0.224			0.155			0.178		
LR statistic	14.73			9.214			11.7		
Prob(LR statistic)	0.05			0.32			0.165		
Mean dep var	0.70			0.76			0.70		
Obs with Dep=0	16			13			16		
Obs with Dep=1	38			41			38		

Source: ***Authors' computation, 2017.***

The relevance of the individual variables in explaining the financial control systems is determined by observing the individual coefficients of the explanatory variables in terms of signs and significance. From the results, only the coefficients of communication, monitoring and sufficiency of revenues are significant at the 5 percent level since their respective z-values are greater (in absolute terms) than the 5 percent critical value of 1.96 for the communication and monitoring variables, the coefficients are positive. This shows that more communication in the parastatal tends to improve financial control systems in TCN. Indeed, any improvement in communication has a 54 percent chance of improving financial control in the organization. For the monitoring variable, the results show that monitoring has a positive impact on financial control of government sector. Increases in monitoring activity have a more than 100 percent chance of improving financial control system. Thus, communication and monitoring in the organization are strong and effective tools for improving financial control systems. The coefficient of sufficiency of

revenue is negative and shows that since revenues are not sufficient, financial control tends to fall in the organization or establishment. The coefficients of the measures of control activities all fail the significance test at the 5 percent level. This implies that internal control activities do not have significant impact on financial control in the parastatal. These results revealed that forceful or overt activities may not be as strong as covert and less forceful methods in improving financial control systems. It shows that the covert and less forceful methods of communication and effective monitoring are more potent tools to achieve financial control than overt methods of direct control activities.

Robustness Checks

In order to check for the robustness of the estimates in the study, multicollinearity and heteroskedasticity tests are conducted and the results presented.

Multicollinearity test

The repressors in the models used in the study are numerous with outcomes that may measure the same effects. Multicollinearity test are therefore conducted on the models to ensure that the explanatory variables are not excessively collinear. Apparently, high collinearity tends to amplify the standard errors of the estimates and render the reliability of the estimated model quite low. In Table 4.4, the result of the multicollinearity test for each of the model results are presented. In the result, only the centred variance inflation factors (VIF) for each of the variables are reported.

Table 4.4: Multicollinearity test Result

	Model1	Model2	Model3
Variable	VIF	VIF	VIF
Communication	2.78	2.75	2.45
Monitoring	2.73	2.70	2.43
Computerized	1.17	1.18	1.17
Irregularities	1.10	1.10	1.08
manual_acct	1.05	1.06	1.04
Revenue Sufficiency	1.04	1.04	1.03
Revenue use	1.13	0.95	1.01
TSA	1.04	1.60	1.01
Mean VIF	1.64	1.64	1.53

Source: ***Authors' computation, 2017***.

For each of the results, the VIF values are quite low with values lower than 5 as required. Thus, the results of the multicollinearity test based on the VIF values imply that there is no form of multicollinearity among the variables of the model. The estimates from the regression results are therefore shown to be effective for drawing conclusions.

Heteroscadasticity Test

Another robustness test conducted for the models is the test of heteroskedasticity given that data used are cross-sectional. Woodridge (2004) has noted that such investigation gives direction on the appropriate estimation technique to be used in emotion. Apparently, a highly heteroskedastic set of observations may lose efficiency properties when estimated with the ubiquitous OLS technique. It should be noted that the Breusch-Pagan-Godfrey tests are used for the analysis. Only the F-value for the test results for each of the models in the study is reported in Table 4.5. The F-statistics for all the results (apart from that of the pooled data and regulators) have probability values less than 5 percent. This means that the null hypothesis of no heteroskedasticity for each of the models is accepted. The non-significance of the test statistics indicates the presence of homoscedasticity in data series for each of the models. This again, confirms the robustness of the estimates from the models.

Table 4.5: Test of Heteroskedasticity Results

Model	**F-statistic**	**Prob.**
Model 1	1.583	0.18
Model 2	1.355	0.26
Model 3	0.662	0.65

Source: ***Authors' computation, 2017***.

Hypotheses Testing

In this section, the working hypotheses of the study are tested based on the outcome of the results from the estimated models of the study. The hypotheses were tested using the coefficients estimated in the model in terms of significance and signs.

Hypothesis One

HO1: Communication has no significant impact on the financial control system in TCN

To test this hypothesis, the result from Model 1 in Table 4.3 is employed. In the result, the coefficient of the communication variable is 0.541 with a z-value of 2.14. The Z-value is greater than the critical z-value of 1.96 (in absolute term) at the 5 percent level. This shows that the coefficient of communication in the parastatal is significant at the 5 percent level. The significance of the communication variable shows that there is a significant relationship which is positive. The positive sign of the coefficients shows that communication actually has a strong positive impact on financial control system in the parastatal. The null hypothesis is therefore rejected; this implies thatCommunication has a significant impact on the financial control system.

Hypothesis Two

HO2: Control activities has no significant effect on improvement in the financial control system in TCN

The results from Table 4.4 are employed to test this hypothesis. In the result, none of the control activities in the parastatal's coefficients (computerization, manual accounting and TSA) passed the significance test at the 5 percent level. Since these control activities measures failed the test at the 5 percent level, the null hypothesis is accepted and it is stated that control activities has no significant effect on improvement in the financial control system in TCN.

Hypothesis Three

HO3: Effective monitoring does not significantly determine the financial control system in TCN

The test of this hypothesis is based on the results from the first output in Table 4.3. In the result, the coefficient of the monitoring variable is 1.032 with a z-value of 2.06. The z-value is greater than the critical z-value of 1.96 (in absolute term) at the 5 percent level. This shows that the coefficient of monitoring in the parastatal is significant at the 5 percent level. The positive sign of the coefficient shows that monitoring actually has a strong positive impact on financial control system in the organization. The null hypothesis is therefore rejected implying that effective monitoring has a significant impact on the financial control system in TCN.

CONCLUSION AND RECOMMENDATIONS

In this study, the impact offinancial control system was investigated in the public sector with focus on the Transmission Company of Nigeria. The study seeks to identify the financial control system mechanisms that have direct impacts on public sector by considering the roles of communication, monitoring and

internal control activities. The survey method of data collection was employed using structured questionnaires administered to staff of TCN in the South-South and South-East regions of Nigeria. Both statistical and econometric techniques were employed in the analysis of the data. The overall conclusion of the study was that the method of public sector accounting procedure adopted by a firm matters in ensuring financial control systems in the parastatal. In particular, the study finds that; Communication actually has a strong positive impact on financial control system in the public sector; A control activity has no significant effect on improvement in the financial control system; Monitoring actually has a strong positive impact on financial control system in the government sector; and the covert and less forceful methods of communication and effective monitoring are more potent tools to achieve financial control than overt methods of direct control activities.

Given the foregoing, financial control issues constitute strong consideration for both public and private organizations in Nigeria, especially in the era of increased drive for more revenue by government. In this study, it has been shown that when communication and monitoring activates are improved, instead of undue focus on direct controls in public sector organizations, financial control systems are improved also. Apparently human relations activities should always be a key factor in carrying out financial control functions in the Nigeria public sector. The results from the analysis are apt for recommendations on the appropriate use of effective financial control system in ensuring that adequate accounting procedures are observed in the public sector.

i. Firstly, focus should be on the use of less forceful and very subtle ways of achieving financial control. Any system of financial control adopted should not focus more on direct controls; rather the focus should be on getting the personnel to do their jobs through indirect monitoring and improved communication.

ii. Secondly, communication channels should be improved in the public sector. With proper communication activities, there will be less need for direct control of sub-ordinates and there will be room for improvement in accounting activities in the public sector.

iii. Thirdly, monitoring activities should be improved in the organization. In this regard, peer monitoring in the organization will improve trust and encourage healthy rivalry that will directly contribute to accounting and financial responsibility in the public sector.

iv. Finally, there should be adequate financing of public sector firms in general. Poor funding leads to unprofessional accounting activates which hinder effective financial controls in the organizations.

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Effect of Market Analysis on Capital Market Development in Nigeria

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Abstract

The significance of a developed capital market in order to foster economic growth is highly imperative to developing countries, Nigeria inclusive. More so, capital market provides long-term financing that is designed to encourage economic growth. In view of the foregoing, this study examines the effect of market analysis on capital Market development in Nigeria, using secondary data covering the period of 2010 to 2020. Findings reveal the existence of a negative and longrun relationship between capital market development and Market Analysis in Nigeria. The empirical findings review that there is no significant Effect of Market Analysis on Capital Market Development in Nigeria. Given the F-Statistics value of 4.286903 of the regression analysis as well as the probability (F-Statistics) value of 0.060878, which is more than 0.05, there is enough evidence to accept the null hypothesis of the study. In lieu of that, there is need to make provision for modern facilities in the capital market targeted towards encouraging foreign investors by maintaining state of the art technological services. More so, there is need for Nigeria to develop a capital market that is effective and efficient, by expanding access to credit and financial services, encourage long-term savings mobilisation and long-term capital for investment.

Keywords: Market Analysis, Capital Market Development, Liquidity Risk, Price per share

INTRODUCTION

Investment decisions are part of economic development and growth. The highly subjective nature of such decisions and the varying results necessitate the study into research and analysis into the investment activities. This analysis concerns organizational financial growth and capital market development. Emeh and Chigbu (2014) posit that capital market adds to firm's financial growth. However, the specific services it performs either directly or indirectly, notable among these functions are: mobilization of savings, creation of liquidity, risk diversification, improved dissemination and acquisition of information, enhanced incentive for corporate control and operational efficiencies. Adeusi (2013) opines that capital market is a driver or lubricant that keeps turning the wheel of not only firm's specifics financial performance, capitalization development, but also economic growth because of its imperative function of not just mobilizing of long term funds and channeling them to productive investment, but also effectively allotting these assets to projects of best returns to wealth owners. As Donwa and Odia (2010) submits that, there is no gain saying the fact that, the rate of development at the Nigerian capital market has not been able to effectively mobilize capital for the development of other vital sectors of the Nigerian economy. The major reason adduced for this seeming neglect is due to the predominant role the oil sector is playing as the major foreign exchange earner in the country. Although, recently, the ugly face of oil dependency surfaces again, queuing is opening again. Fuel prices are on the rise to further challenge the prevailing issues of capital market development and economic development.

Shallu (2014) opined that analyzing capital market will be effective and efficient tool in the investment decision making to predict prices of securities, level of market liquidity, value for price per share and capitalization. In the same vein, Richa (2020) opined that it is a well-known fact that stocks fall in price nearly as often as they rose. Therefore, Donwa (2010) opined that market analysis is as a veritable tool for traders seek a system which can predict the best time to buy, hold, or sell securities, precisely taking into account the nonlinearities and discontinuities of the factors which are considered to impact stock market. Market analysis enables expert predictions and that made. Richa e'tal (2020) suggest that use of technology may be necessary for the precise security analysis in the market as it is done in the developed capital markets around the world. Isobo Nelson D., Donald Ene, Cookey Ibiere and Godwin F. Lenu (2022) opined that Stock market prediction is a challenging real-

world problem as the prediction model is trained on data with uncertainties and fluctuations, yet it is one of the most attractive places for any investor. The Nigerian Stock market is one of the stock indices in the world that posies a lot of benefits to its traders but also, predicting its outcome correctly is one of the most challenging tasks because of the nature of the market uncertainties Shallu (2014). Market analysis resulting to predicting stock market had always been risky yet many sees it as a good investment destination for high profit making. Preethi (2012) opines that market analysis and selection aims at expectation of high profit, it also comes with a high-risk implication. Decker (2000) posits that basic model market analysis leading to predictions looks at the past financial performance of a firm, behaviour of the economy as a whole and the industry in which the company belongs. Some even use the knowledge of the past performance of the directors. Rajendran (2014) expressed that in market analysis; most of the noise comes from forecasters and economists, making market predictions about the next big boom or bust.In market analysis basically, neither an expert nor amateur has the least idea what is going to happen with the economy in the future.

Isobo e'tal (2022) expresses that challengesin market analysis can be in the form of:(a) Perspectives of different individuals (profit perspective, predicting the unpredictable) (b) Ambiguity, nonlinear and dynamic nature of the market (c) Working with big data set (knowing how to separate market signal from noise) (d) Uncertainties and the complexity of human behaviour in general.Apart from the fundamental analysis methods that were used to recognize and predict market fluctuations, Isobo e'tal (2022) postulate that attention had been moved to the application of various Artificial Intelligence techniques in predicting the stock market timing. Survey of different Artificial Intelligence techniques is aimed to better understanding and predicting of stock indexes. Preethi (2012) argue that the most popular of them all are the data mining, neuron-fuzzy systems, neural networks, and fuzzy logic. Several other researchers have used neural network for solving stock market analysis and prediction problem as well. This study is particularly analyzing firm specific liquidity risk and operational risk associated with stock market analysis. A firm should consider the interactions between exposures to funding liquidity risk and market liquidity risk. Firms that obtain liquidity from capital markets should recognize that these sources may be more volatile than traditional retail deposits. For example, under conditions of stress, investors in money market instruments may demand higher compensation for risk, require roll over at considerably shorter maturities, or refuse to extend financing at all. Moreover, reliance on the full functioning and liquidity of financial markets may not be realistic as asset and funding markets may dry up in times of stress. Market illiquidity may make it difficult for firms like banks to raise funds by selling assets and thus increase the need for funding liquidity. Looking at the feasibility of asset sales during stress on its liquidity position for example, a bank's sale of assets under duress to raise liquidity could put pressure on earnings and capital and further reduce counterparties' confidence in the bank, further constraining its access to funding markets. In addition, a large asset sale byone bank may prompt further price declines for that type of asset due to the market's difficulty in absorbing the sale. Rajendran (2014) posits regarding the time horizons over which to identify, measure, monitor and control liquidity risk, a firm should ensure that its liquidity risk management practices integrate and consider a variety of factors. These include vulnerabilities to changes in liquidity needs and funding capacity on an intraday basis; day-to-day liquidity needs and funding capacity over short and medium-term horizons as well as longer-term liquidity needs and vulnerabilities to events, activities and strategies that can put a significant strain on internal cash generation capability. Basel Committee on Banking Supervision (1997) as cited in Lan-Feng Kao, Chuan-Yi Yeh (2009) refers to liquidity risk arises from the inability of a firm to accommodate decreases in liabilities or to fund increases in assets. When a firm has inadequate liquidity, it cannot obtain sufficient funds, either by increasing liabilities or by converting assets promptly, at a reasonable cost, thereby affecting profitability. Besides, Decker (2000) indicated that liquidity risk can be divided into funding liquidity risk and market liquidity risk.

Many studies confirm that Nigerian capital market development has not been able to efficiently and effectively mobilize capital for the development of other vital sectors of the Nigerian economy. The major reason adduced for this seeming neglect is due to the predominant oil concentrated economy and the role market liquidity plays. However, constant problems arise especially during distress periods like, political upheaval, credit crunch, and terrorism. Firms are aloft to liquidity risk, operational risk resulting into non-performance of firms to the detriment of capital market development in Nigeria. Very few studies have been conducted in the era of Market analysis reflecting market liquidity risk, operational risk, average market price per share and so on. This study adopts operational risk, liquidity risk to test against the dependent variable- market capitalization, thus the primary objective of this study is to examine the

determinants on market analysis that affect capital market development in Nigeria and the underlisted hypothesis are those which are germane to this study;

H_{o1}: Market Capitalization does not have significant relationship with Capital Market Development in Nigeria.

H_{o2}: Capital Market Development (Market Operational Risk and Market Liquidity Risks) does not have any significant relationship with Market Analysis (Market Capitalization)

LITERATURE REVIEW

Market Liquidity Risk

Liquidity risk is the inability of firms to accommodate decreases in liabilities or to fund increases in assets. When a firm has inadequate liquidity, it cannot obtain sufficient funds, either by increasing liabilities or by converting assets promptly, at a reasonable cost, thereby affecting profitability. In the case of banking firms, many studies made reference to firm in credit risk and operational risk in the past, but do not focus on liquidity risk. However, liquidity risk will cause severe consequence to firms following the subprime mortgage crisis. Besides, the credit crunch of 2007 reminded many firms of the importance of liquidity risk Matz (2008). Thus, it is important for firms to strengthen liquidity risk management, and liquidity risk will be an important issue in the future. Generally, liquidity risk measures can be calculated from balance sheet positions. In the past, better practices for liquidity risk measures focused on the use of liquidity ratios. However, Poorman and Blake (2005) indicated that it was not enough to measure liquidity just using liquidity ratios to have a solution. Beyond mere liquidity ratios, firms must develop a new view of liquidity measurement. Recently, there are many methods provided to assess firm liquidity risk besides traditional liquidity ratios. Therefore, the purpose of this study is to employ the test of liquidity risk measures against capitalization.

Capital Market Development

Development of capital market in Nigeria can be traced back to 1946 when the British colonial administration floated the first set of government securities (loan stock) for the financing of developmental project under the ten-year plan local ordinance. The loan stock which had a maturity of 10-15 years was oversubscribed, and yet local participation of the issued was abysmal. At that time, there was no institutional framework in place to support this business operation, hence the existence of less formal market arrangement for the operation of capital market; until 1960 when the Lagos Stock exchange was established. Activities and other operational undertakings of the Nigerian capital market started with the creation of Lagos Stock Exchange in 1960, which was later incorporated by law in 1961 through the combined efforts of Central Bank of Nigeria (CBN), industrial development banks, and the business communities; and promptly begins operations with 19 securities listed on the floor for trading. As the national development continues under the post-colonial reform and also following the recommendations of the government financial review committee of 1976, the Lagos Stock Exchange was later metamorphosed into the Nigerian Stock Exchange (NSE) in 1977. With this advent, it developed into many branches with itself.

Market Analysis

Stock markets are financial markets for the buying and selling of long-term debtor securities that are equity- backed. Stock market enhances economic growth through different essential roles that it plays. Its functions include channeling resources, promoting reforms to modernize the financial sectors and financial intermediation aimed at linking deficit with the surplus sectors of the economy. It is a tool for the mobilizing and allocating savings among competitive uses. Since its installation, firms having various adventures in search of sources and applications of financial resources through the market analysis and interpretations. It serves as a barometer for measuring economic performance. Stock markets as enhancing the operations of the domestic financial system in general and the capital market in particular Kenny and Moss (1998). Because of its ability to mobilize savings and investments, capital market is an essential agent of economic growth. In developing countries, high rate of capital formation is targeted to

achieving objectives of development plans. As such, financial institutions are required to mobilize domestic savings and attract foreign investment with the view to accelerating sustainable economic growth. Miftahu (2020) posits that the growth of capital marketis a precondition to inspire and guide capital formation. The potential role of capital market in encouraging investment and enhancing economic growth cannot be over emphasized. In today's competitive business environment, most countries around the globe are assessed by the performance of their capital market

Average Price per share

Poorman e'tal (2005) posited that market share is the percent of total sales in an industry generated by a particular company. Market share is calculated by taking the company's sales over the period and dividing it by the total sales of the industry over the same period. Hypothetical, a firms average share is illustrated as (Average Cost per share = Total purchases (N2,750) ÷ total number of shares owned (56.61) = $48.58. To calculate the average cost, divide the total purchase amount (N2,750) by the number of shares purchased (56.61) to figure the average cost per share = N48.58.)

Empirical Review

Miftahu Idris (2020) This study examines the impact of capital market development on economic growth in Nigeria using annual data covering the period of 1981 to 2019.The analysis involves evaluating the stochastic characteristics of each variable under consideration bytesting their stationary property and further estimates the model using ordinary least square technique, Johansen co-integration test and Granger causality test. Findings reveal the existence of a positive and long run relationship between capital market development and economic growth in Nigeria. Further result from granger causality test indicates the presence of a unidirectional causality running from capital market to economic growth for the period under consideration. In lieu of that, there is need to make provision for modern facilities in the capital market targeted towards encouraging foreign investors by maintaining state of the art technological services. More so, there is need for Nigeria to develop a capital market that is effective and efficient, by expanding access to credit and financial services, encourage long-term savings mobilisation and long-term capital for investment. Elias Igwebuike Agbo and John Onyemaechi Odo (2020) examine the participation of governments of several nations that have opted to develop their stock markets to create risk capital for their business sector as foreign capital funds continue to dwindle. They make financial policies that which motivates corporate ventures to develop such culture that promotes economic growth. Despite the gains realizable from equity market development, the financial sector reforms implemented in some African countries are yet to translateinto a significant boost in the size and depth of their stock markets as a result of some stock market challenges. The objective of is to review the issues as they are currently. Further, the controversy on what is the actual impact of stock markets on growth in developing countries like those in Africa is yet to be settled. The study sought to review the genesis and update stock market development - particularly in Africa. It reveals that currently the world stock markets have witnessed significant growth. However, the issues illiquidity and size faced by the majority of African stock markets have remained unresolved. The study recommends a greater involvement of institutional investors in African stock exchanges as a means of fixing those nagging issues.

Udo, Nwezeaku and Kanu (2021) examines the effect of capital market development on the economic growth of Nigeria using Real Gross Domestic Product and Market Capitalization, All Share Index, Number of Listed Securities and the number of listed companies a time series from 1983 -2016. Augmented Dickey-Fuller unit root test was used for preliminary analysis; an Autoregressive Distributed Lag (ARDL) was used for the model estimation. .A combination of ARDL bounds test for co-integration, ARDL short and long run error correction models were used for estimation. All the tests helped to confirm the integrity of the models. The study findings indicate that, the Number of listed Securities and All Share Index maintained a significant relationship with economic growth in Nigeria both in the short and long runs. The study recommended that government should help to remove all impediments to stock market development in the form of tax, legal and regulatory barriers as they act as disincentives to investments in the capital market. Again, government should help to maintain policy consistency in the

pursuit of growth in the Nigerian capital market. Some counter developmental policies should not be allowed to crowd out the gains of capital market development and by extension on economic growth in the long run. Lastly government should find ways and means of boosting the confidence of investors to retain their portfolio investments. Lan-Feng Kao, Chuan-Yi Yeh (2009) study employ alternative liquidity risk measures besides liquidity ratio, and investigate the causes of liquidity risk (causes of liquidity risk model), using an unbalanced panel dataset of 12 advanced economies commercial banks over the period 1994-2006. The study adopts panel data instrumental variables regression, using two-stage least squares (2SLS) estimators to estimate bank liquidity risk and performance model. The study finds that liquidity risk is the endogenous determinant of bank performance. The causes of liquidity risk include components of liquid assets and dependence on external funding, supervisory and regulatory factors and macroeconomic factors. Second, that liquidity risk may lower bank profitability (return on average assets and return on average equities) because of higher cost of fund, but increase bank's net interest margins. Third, classify countries as bank-based or market-based financial system. The result shows that liquidity risk is negatively related to bank performance in market-based financial system. However, it has no effect on bank performance in bank-based financial system.

Shafiqul Alam Md., Rubel Miah and Md. Abdul Karim (2016) investigates forces that affecting share prices in the capital market of Bangladesh. The study considers a panel data set of 7 companies of cement industry listed in the DhakaStock Exchange (DSE) (2006-2015).The investigation approach is designed with Ordinary LeastSquare (OLS) regression with fixed effects and random effects models. Six fundamental and technical issues namely Earning Per Share (EPS), Net Asset Value Per Share (NAVPS), Price Earnings (P/E), Gross DomesticProduction (GDP), Consumer Price Index (CPI) and Interest Rate Spread (IRS) have been brought in light as themajor determinants of prices in cement industry. The findings claim that these variables are instrumental inaffecting the share prices in the Bangladesh market as far as the cement industry is concerned. Among thesefactors EPS, NAVPS, P/E and CPI have been found significantly instrumental for cement industry in Bangladeshcontexts while other variables were not found noticeably significant. A moderate R square (0.1142-.4567) foundin both the Fixed and Random models justify the considerable impact of these variables on the market price ofshares. Hence, the study recommends present and potential investors to consider these factors prior to trade andinject funds on securities as the study witnessed volatility in share prices by the fluctuations of these factors. This research study intends to bridge the gap that very few or no studies have been conducted on the Market analysis using market liquidity risk, firms operational risk, All share index and average market price per share to measure capital market development in Nigeria. It is a fact to say that many studies are conducted on market capitalization on the development of capital market in Nigeria. Udo Ginikachi Cynthia, Nwezeaku N., Chinedum and Kanu S., Ikechi (2021) and also forces that affect share prices in the capital market of Bangladesh as an international study see also Shafiqul Alam Md., Rubel Miah and Md. Abdul Karim (2016)

Theoretical Framework

Efficient Market Hypothesis (EMH)

The efficient market hypothesis, known as the random work theory, propounded by Fama (1992), is one of the theories of capital market economic growth nexus. The EMH predicts that market prices incorporate all available information at any point in time. The theory posits that at any time stock prices would fully reflect all available information about the worth of the firm.It assumes that there is no opportunity for one to earn excess profits (more than the entire market) by using the information that has very significant implications for both investors and financial managers. Efficiency in the market is tested by whether the stock prices incorporate all available information at the time. At each point in time, a stock market has one of the three alternative forms of efficiency, namely strong, semi-strong and weak forms of efficiency.

Signaling Theory

According to signaling theory, also referred to as the information content hypotheses, this is where corporate announcements are hypothesized to have information content, for example mangers use cash dividend announcement to signal changes in their expectations about the future prospect of the company when the market becomes imperfect. The investment and financing decisions of firms' are made at the management discretion. It is argued that company managers use earnings as a tool to convey information about the prospects of the company. Like dividends, if earnings convey useful information, it will reflect on stock price changes immediately following a public announcement. An increase in equity (shares) issued by a company reduces the price of its share, stock splits cause price increase while issuing more debt instruments leads to price increase actions. Berhardt, Douglas, and Robertson (2005) in their study noted that markets are rarely in equilibrium, the information has a cost and it does not reach all at the same time. When a firm announces its earnings or dividend it sends signals to investors and if they react to the signals as expected this will affect the share prices of the companies listed on the stock market, consequently this effects investor's Decisions.

Meta Theory Model

Ruchala and Mauldin (1999), argue that previously Information Technology (IT) was used in accounting systems merely to process transactions that would reciprocate the old order (manual processes). Meta theory is the formation of technical orientations, cognitive as well as the holistic models in the discovery of Accounting Information System. The theory has consequently been useful in tackling the current limitations in IT that are inevitable and highlighted in former studies such as the inability to acknowledge the responsibility to which Information Technology is being applied, the failure to consider the suitable nature of a false process, incapability to account for scientific design in the real field of study and failure to direct the procedure for selecting the required decisions and handling all the transactions equally.

METHODOLOGY

This study adopted the ex post facto research design since the study is a secondary data research. The population of the study consists of ten (10) listed firms operating in the Nigerian capital market and the study focusses on Cadbury Nig. Plc. The firms' liquidity risk position as well as operational risk position as it relates to its quoted stock capitalization.The secondary data required for this study were obtained from CBN statistical Bulletinfor period of 10 years under consideration. The inferential analyses also involved the application of the appropriate statistical technique of time series analysis; this is due to the nature of the data. In order to investigate the relationship that e[illegible];

Table1. Descriptive Statistics

Date: 03/09/22
Time: 08:34
Sample: 2011 2020

	MCAP	MLQR	OPR
Mean	201.7307	0.949027	0.510000
Median	180.4041	0.874954	0.415000
Maximum	385.8958	1.273233	0.970000
Minimum	102.7534	0.565848	0.330000
Std. Dev.	77.50346	0.261820	0.221761
Skewness	1.303710	0.075427	1.397248
Kurtosis	4.346009	1.472612	3.247296
Jarque-Bera	3.587657	0.981529	3.279318
Probability	0.166322	0.612158	0.194046
Sum	2017.307	9.490268	5.100000
Sum Sq. Dev.	54061.08	0.616945	0.442600
Observations	10	10	10

Researcher's Computation (Eview 9)

...ariables are positively related to the

This descriptive analysis of Table one, indicates that annual Market Capitalization in Nigeria during the period of 10 years (2011-2020) has minimum and maximum values of 102.7534 and 385.8958 respectively. Market Capitalization average 201.7307 with standard deviation of 77.5%, implying that, the data deviate from both sides of the mean by 201.7%. This suggests that Market Capitalization in Nigeria is relatively widely dispersed during the period under study. The implication of this disparity shows fluctuations in the growth of Market Capitalization which has relatively remained poor over the years. The fluctuations in Market Capitalizationmay also be attributed to inconsistent policy changes that characterized different market analysis in Nigeria capital market development over time.

It further showed that, the performance of the capital market has been very uncertain, even nearly chaotic, for many years Shallu, (2014). Skewness, which measures the shape of the distribution revealed that, co-efficient of 1.03710 (which is greater than zero) implied that, though; Mcapis positively skewed, it is not symmetrical around the mean and thus deviating from normal distribution. With a kurtosis value of 4.346009, it implied that MCap is platykurtic (fat or short tailed) meaning that, the distribution is not peaked relative to the normal distribution. The descriptive normality results also showed that MCap is normally distributed. This was captured by the Jarque-Bera probability value of 0.166322, found to be greater than 0.05.Further showed that MLQR during the period has minimum and maximum values of 0.565848% and 1.273233%, respectively. The average value of MLQR during the period is 0.510000% (which is quite high) with standard deviation of 0.261820%, implying that the data deviate from the both sides of the mean by 0.949027%. This suggests that, the data from the MLQR variable is not widely dispersed from the mean during the sample period, as the standard deviation was found to be lower than the mean value. The skewness co-efficient of 0.075427 suggests that the data is positively skewed and did not comply with the symmetrical distribution assumption. With a kurtosis value of 1.472612 (found to be less than three) implied that MLQR is platykurtic (fat or short-tailed), suggesting that, MLQR distributions is not steep relative to normal distribution. More so, the p-value of 0.612158 for Jarque-Bera implies that the Gausian distribution assumption of normal data was not met at 5%. Furthermore, the OPR during the period under study has minimum and maximum percentage values of 0.33% and 0.97% respectively. The average amount of OPR disbursed during the period is 0.51% with standard deviation of 0.22%, implying that, the data deviated from the both sides of the mean by 0.51%. This suggests that, the data on OPR is quite widely dispersed from the mean during the sample period, as the standard deviation was also found to be relatively high. The co-efficient of skewness of 1.397248 suggests that the OPR data

is positively skewed and did not comply with the symmetrical distribution assumption. With a kurtosis value of 3.247296, it implies hat, OPR is platykurtic (fat or short-tailed), suggesting that the distribution for OPR is flat relative to normal distribution. The p-value if 0.194046 for Jarque-Bera implied that the Gausian distribution assumption of normality was not met for OPR at 5%.

Table 2. Correlation Matrix

Covariance Analysis: Ordinary
Date: 03/13/22 Time: 17:12
Sample: 2011 2020
Included observations: 10

Correlation t-Statistic Probability	MCAP	MLQR	OPR
MCAP	1.000000		

MLQR	-0.736357	1.000000	
	-3.078267	-----	
	0.0152	-----	
OPR	-0.431962	0.477906	1.000000
	-1.354677	1.538829	-----
	0.2125	0.1624	-----

The correlation can be considered in two ways. This referred to as either weak correlation with – 1 or +1, it can also be -0 or +0 as the can may be. Looking at the table above, it shows the correlation of Market capitalization (MCAP) correlation with that of Market liquidity risk (MQLR) of -0.736357. This can be said to be a strong negative correlation among the two variables. Considering Market Capitalization (MCap) correlation with that of Operational Risk (OpR) has the value of -0.431962. This is negatively strong
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Table Three
Regression Result
Dependent Variable: MCAP
Method: Least Squares
Date: 03/13/22 Time: 17:23
Sample: 2011 2020
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	41315.83	7467.050	5.533086	0.0009
MLQR	-20329.85	8539.335	-2.380730	0.0488
OPR	-3625.877	10081.88	-0.359643	0.7297

R-squared	0.550527	Mean dependent var	20173.07
Adjusted R-squared	0.422107	S.D. dependent var	7750.346
S.E. of regression	5891.759	Akaike info criterion	20.44382
Sum squared resid	2.43E+08	Schwarz criterion	20.53460
Log likelihood	-99.21911	Hannan-Quinn criter.	20.34424
F-statistic	4.286903	Durbin-Watson stat	1.643874
Prob(F-statistic)	0.060878		

Source: E-View 9 Output (2022)

The table above, Shows the correlation matrix displaying the coefficient of multiple determinations (R^2) is 0.550527. This indicates that about 55% of the total variations in Market Capitalization is explained by the variations in the independent variable (MLQRand OPR), while the remaining 45% of the variation in the model is captured by the error term. This indicates that the line of best fit is 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. As indicated by their respective probability values, the parameter estimate for MLQR is not statistically significant, while that of OPR is statistically significant. However, when taken collectively the value of F-statistic is 4.286903 and the value of the probability of F-statistic is 0.60878.
In panel regression analysis, the ultimate goal is estimation of the relationship between dependent and independent variables. This goal can be achieve through the estimation of the coefficients of each independent variable in the model.

Decision Rule: The decision rule for accepting or rejecting the null hypothesis for any of these tests will be based on the Probability Value (PV) and the Probability (F-statistic). If the PV is less than 5% or 0.05 (that is, if PV < 0.05), it implies that the regressor in question is statistically significant at 5% level; and if the PV is more than 5% or 0.05 (that is, if PV > 0.05), it is categorized as not significant at that level. This implies that the level of significance for the study is at 5% (for the two-tailed test). Thus, the decision rule for accepting or rejecting the null hypothesis is based on both the Probability Value (PV) and the Probability (F-statistic).

Test of Hypotheses

H_o: There is no significant Effect of Market Analysis on Capital Market Development in Nigeria. Given the F-Statistics value of 4.286903 of the regression analysis as well as the probability (F-Statistics) value of 0.060878, which is more than 0.05, there is enough evidence to accept the null hypothesis of the study. This result implies that the overall regression is negative and statistically not significant at 5% level of significance, given that the probability of F- statistic is 0.060879 greater than 0.05.

CONCLUSION AND RECOMMENDATION

This study succinctly examined the effect of Market Analysis on Capital Market Development in Nigeria using panel series data and regression analysis approach. The study period is for 10 years ranging from 2011 to 2020 were the independent variables while the liquidity risk and operational risk (used to proxy Market Analysis) and Market capitalization used as proxy for the Capital market Development is dependent variable for the study. The effect of the independent variables on dependent variable was analyzed in terms of *strength* and significant and the Ordinary Least Square (OLS) regression *compares the* relationship among the variables. MLQR is not significantly related to MCAP, given that the individual probability of MLQR is 0.0488 (which is less than 0.5), while the individual probability of OPR is 0.7297, showing a negative and significant relationship between OPR and MCAP. This result is not consistent with ‘a priori’ expectation which hypothesizes that an increase in OPR will lead to increase in MCAP and the empirical evidence suggests that the relationship between MLQR and MCAP is

statistically significant. Therefore, when taken collectively and based on the overall probability (F*Statistics) value of 0.060878, which is higher than 0.05.

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Macroeconomic Variables and Bank's Performance in Canada, Ghana and Nigeria: A Panel Data Analysis

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Abstract

Bank performance has been fluctuating over the years all over the world. Several attempts have been made to unravel possible causes and how they can be corrected. The aim of this study is to examine macroeconomic variables and bank performance of Nigerian, Ghana and Canadian quoted banks for a period of 2008 to 2017. The bank performance is measured by return on assets (ROA) and as a function of macroeconomic variables. This study adopted Ex-po factor research design and a panel data covering a total of 10 years period from 2008-2017 which were collated from published annual reports of banks. The population consists of 15 banks from 3 different countries with 5 banks from each country. The study employs the convenience sampling in selection of the sampling size. The results from the study showed that inflation rate and interest rate has an insignificant effect on Bank Performance of the sampled firms in Ghana, Nigeria and Canada while exchange rate has an insignificant effect on bank performance of the sampled firms in Canada and Ghana but has a significant effect on bank performance of sampled firms in Nigeria during the years understudied.

Keywords: Exchange rate, Inflation rate, Interest rate, Macroeconomic variables, Return on Asset, Bank performance

INTRODUCTION

Aside being the highest contributor to the market capitalization of the Nigerian stock exchange and smooth and stable income provision to money and capital market, banking industry is capable of attracting potential investors which is a source of every economic development. Financial institutions, banks in particular play a crucial role in the development process of mobilizing fund from the surplus sector of the economy to the deficit economy. Banks helps in increasing the quantum of national savings and investment. Banks enhance stable and smooth income to attract potential investors in line with Modigliani and Miller (1958) theory that investors generally have preference for smooth and stable income. Banking in its modern sense evolved in the 14th century in the prosperous cities of renaissance Italy but in many ways was a continuation of ideas and concepts of credit and lending that had their roots in the ancient world. The Nigerian banking sector over the past 20 to 25 years has experienced boom and bust in a cyclical pattern. After the implementation of the structural adjustment program(SAP) in 1986 and the deregulation of the financial sector, new banks emerged, mainly because of the attractive arbitrage opportunities in the foreign exchange market (Heiko 2007). Prior to the deregulated period, financial intermediation never took off and even declined in 1980s and 1990s (capirio and kligbiel 2003). The sector was highly oligopolistic with remarkable features of market concentration and leadership. Lemo (2005) noted that there are ten Nigerian banks that control more than 50% of the aggregate assets of the banking sector, more than 51% of the aggregate deposit liabilities and more than 45% of the aggregate credits.

In the 1980s and early 1990s a number of developed economies, developing countries, and economies in transition experienced severe banking crises. Such proliferation of large-scale banking sector problems has raised widespread concern, as banking crises disrupt the flow of credit to house holds and enterprises, reducing investment and consumption and possibly forcing viable firms into bankruptcy. Banking crises may also jeopardize the functioning of the payments system and, by undermining confidence in domestic financial institutions, they may cause a decline in domestic savings and/or a large-scale capital outflow. Finally, a systemic crisis may force sound banks to close their door. In most countries, policymakers have responded to banking crises with various interventions, ranging from loose monetary policy to the bailout

insolvent financial institutions with public funds. Even when they are carefully designed, however, rescue operations have several drawbacks: they are often very costly for the budget; they may allow inefficient banks to remain in business; and they are likely to create the expectation of future bailouts, thereby reducing incentives for adequate risk management by banks. Rescue operations may also weaken managerial incentives when, as is often the case, they force healthy banks to bear the losses of ailing institutions. Finally, loose monetary policy to prevent banking sector losses can be inflationary and, in countries with an exchange rate commitment, it may trigger a speculative attack against the currency.

Preventing the occurrence of systemic banking problems is undoubtedly a major concern of policymakers, and understanding the mechanisms that are behind the surge in banking crises in the last fifteen years is a first step in this direction. Recently, a number of studies have analyzed various episodes of banking sector distress in an effort to draw useful policy lessons, Most of this work consists of case studies, and econometric analyses are few. Gonzalez-Hermosillo, Pazarbalioglu, and Billings (1997) use an econometric model to predict bank failures using Mexican data for 1991-95. In a paper focused primarily on the connection between banking crises and balance of payments crises, Kaminsky and Reinhart (1996) examine the behavior of a number of macroeconomic variables in the months before and after a crisis in a sample of 20 countries; using a methodology developed for predicting the turning points of business cycles, they attempt to identify variables that act as "early warning signals" for crises. The problem simply includes such practices as fraudulent activities and mismanagement by bank officials, poor liquidity and unavailability of adequate credits to deserving customers. The phenomenon technically referred to as "Bank Distress" has become a regular feature in the Nigerian industry. It includes the washing away of the capital of organizations which is commonly traced to the indigenous banks. People and government set up these banks with the objective of meeting the business needs of fellow economic entities. In respect to all these problems, further deep enquiry is required to understand the influence of macro economic variables on bank performance in Canada, Ghana and Nigeria. The objectives of this study is to examine the selected macro economic variables(interest rate, exchange rate and inflation) on the performance of selected banks in Canada, Ghana and Nigeria using Return on Assets (ROA) as a measurement for bank performance. This research work covered fifteen banks over a period of ten years which is sufficiently wide enough to depict the effect of macro economic variables on bank performance.

LITERATURE REVIEW

Empirical Review

Inflation and Bank Performance

Gul *et al*. (2011) examine the relationship between bank specific and macroeconomic characteristics over bank profitability by using data of top fifteen Pakistani commercial banks over the period 2005-2009. They investigates the impact of assets, loans, equity, deposits, economic growth, inflation and market capitalization on major profitability indicators i.e., return on asset, return on equity, return on capital employed and net interest margin separately. The empirical results have found strong evidence that both internal and external factors have a strong influence on the profitability. Athanasoglou *et al.* (2006) examine the profitability behaviour of bank-specific, industryrelated and macroeconomic determinants, using an unbalanced panel dataset of South Eastern European (SEE) credit institutions over the period 1998-2002. The estimation results indicate that, with the exception of liquidity, all bank-specific determinants significantly affect bank profitability in the anticipated way. The macroeconomic environment has a direct impact on the aggregate performance of the industry. Concentration is positively correlated with bank profitability. With respect to the macroeconomic variables, inflation has a strong effect on profitability. Sayilgan and Yildirim (2009) investigates the relationship between the return on assts and the return on equity ratio for a sample of Turkish banks for the 2002-2007 time period using monthly data. The profitability of the banking sector seems to have increased along with declining inflation rate, consistently increasing industrial production index and improving budget balance. It is found that profitability positively affected by capital adequacy and negatively by growing off-balance

sheet assets.Demirguc-Kunt and Huizinga (1999) Notice that banks in developing countries tend to be less profitable in inflationary environments, particularly when they have a high capital ratio. In these countries, bank costs actually increase faster than bank revenues.

Exchange Rate And Bank Performance

Osundina*et al.,* (2016) examines the effect of exchange rate on bank performance and concluded that exchange rate has no significant effect on bank performance using ROA as a measure while exchange rates fluctuation had a significant negative effect on bank liquidity using LDR as a measure. Lambe Isaac (2015) examines the effect of exchange rate on bank performance and indicated that there is a significant relationship between exchange rate management and financial institutions especially banks. Manyok, Andrew J (2016) examined the effects of exchange rate fluctuations on financial performance of commercial banks in south sudan and found out that exchange rate fluctuations and financial performance had a weak negative association.

Interest Rate and Bank Performance

Afanasieff *et al*. (2002) examines the determinants of banks interest spreads using macro and micro variables in Brazil and find that macroeconomic variables have the most impact on bank interest spread in Brazil. Naceur (2003) investigates the impact of banks characteristics, final structure and macroeconomic indicators on banks net interest margin and profitability in Tunisian Banking Industry for the 1983-2000 period. High net interest margin and profitability tend to be associated with banks that hold o relatively high amount of capital, and with large overheads. Molyneux and Thorton (1992) were the first to investigate a multi-country setting by examining the determinants of bank profitability for a panel of 18 European countries for the 1986-1989 time period. It is found that significant positive association between the return on equity and the level of interest rates in each country, bank concentration and government ownership. It is generally believed that a rising interest rate should lead to higher banking sector profitability by increasing the spread between the saving and the borrowing rates. Hanweck and Kilcollin (1984) find that this relationship is particularly apparent for smaller banks in the USA during the 1976-1984 period.They notice that falling interest rates during recession lead to slower growth in loans and increase in loan loss. Consequently, banks, particularly the small ones, may have difficulty in maintaining profit as market rate drops. Further studies by Demirguc-Kunt and Huizinga (1999), Staikouras and Wood (2003) and Cheang (2005) all notice a positive relationship between interest rates and bank profitability.

Theoretical Review

A lot of arguments have been made trying to figure out the relationship between macroeconomic variables and bank performance. The presently dominant financial intermediation theory holds that banks are merely financial intermediaries, not different from other non-bank financial institutions: they gather deposits and lend these out. In the words of recent authors, "Banks create liquidity by borrowing short and lending long" Dewatripont, Rochet, &Tirole (2010), meaning that banks borrow from depositors with short maturities and lend to borrowers at longer maturities. Banks benefit the economy by taking deposits and making loans. Of these two activities, deposit taking is unique to banks. Loans can also be made by any other institution that has the capacity to assess the loan applicants' creditworthiness and to monitor their performance. The concentration of banks on lending is due to ready availability of funds from deposit therefore banks make their profits by taking in deposits and lending the funds out at a higher rate of interest.

The fractional reserve theory of banking also argues that each bank is a financial intermediary. However, it disagrees with the former theory concerning the collective, macroeconomic role of banks: it argues that, together, the banking system creates money, through the process of 'multiple deposit expansion'. Thus when Gurley and Shaw (1955) argued that banks and non-bank financial institutions are largely similar in that they were both financial intermediaries able to 'create financial claims', they were challenged during

the 1950s and 1960s in influential journals by, among others, Culbertson (1958), Aschheim (1959), Warren Smith (1959), Solomon (1959), Paul Smith (1966) and Guttentag and Lindsay (1968), many of whom were supporters of the *fractional reserve theory.* Phillips' citation of the credit or money multiplier rendered him one of the earlier and most influential economists to formulate the mechanics of fractional reserve banking. According to Phillips: "What is true for the banking system as an aggregate is *not* true for an individual bank that constitutes only one of many units in that aggregate".

Kenyes stated " The relaxation or contraction of credit by the banking system does not operate merely through a change in the rate charged to borrowers; it also functions through a change in the abundance of credit. If the supply of credit were distributed in an absolutely free competitive market, these two conditions, quantity and price would be uniquely correlated with one another and we should not need to consider them separately. But in practice, the conditions of a free competitive market for bank-loans are imperfectly fulfilled. There is a habitual system of rationing in the attitude of banks to borrowers- the amount lent to any individual being governed not solely by the security and rate of interest offered but also by reference to the borrower's purposes and his standing with the bank as a valuable or influential client. Thus, there is normally a fringe of unsatisfied borrowers who are not considered to have the first claims on a bank's favors, but to whom the bank would be quite ready to lend if it were to find itself in a position to lend more. The existence of this unsatisfied fringe allows the banking system aa means of influencing the rate of investment supplementary to the mere changes in the short-term rate of interest.

METHODOLOGY

To achieve the objective of this research, the Ex post facto research design was adopted for this study. The study covered Nigerian, Ghana and Canadian quoted bank performance with time series i.e panel data rather than cross-sectional data being used. Data relating to macroeconomic variables and bank performance of the three countries will be collected for the years 2008-2017. The data on inflation rate of the countries under study, exchange rates of the countries, and interest rates of the countries and return on assets of the banks under study for the various years were extracted from the financial statements of the banks, budget Departments and Agencies in Nigeria, and reports of Federal Inland Revenue Service (FIRS).

Model Specification

In order to examine the impact of macroeconomic variables on Nigerian, Ghana and Canadian quoted banks at national levels, a multiple linear model is built. The model shows the impact of inflation, exchange rate and interest rate to bank performance. This is represented in the following function:

BP=f (I, ER, IR)
BP=f (I, ER, IR)
BP=f (I, ER, IR)
From the above function, the following model is derived

$BP_t=\alpha+ \beta_1 I_t+ \beta_2 ER_t+ \beta_3 IR_t + \varepsilon$

Where BP is the bank performance
I: Inflation
ER: Exchange rate
IR: Interest rate
α is constant
β_1, β_2, β_3,are the coefficient of the parameter estimate
ε is the error term.

The research employs only quantitative method of data analysis and this was done in four folds: firstly, the descriptive analysis was performed using the mean, maximum, minimum, skewness, kurtosis and the probability of jarque-berra statistics. This is with the aim of describing the data set to determine the normality of the series. Thus, p-value of Jarque Berra statistics higher than the acceptable level of

significance of 5% implies that the series is normally distributed. Since normality of series is one of the fundamental assumptions of performing Ordinary Least Square (OLS) regression, all the series were tested, and if not normally distributed, the natural logarithm of the affected series were used in estimating Ordinary Least Square (OLS) regression. Secondly, trend analysis was carried out to determine the trend of each of independent variable on the dependent variable. Thirdly, the study examined the relationship between each of the measures of macroeconomic variables and bank performance through correlation analysis. Lastly, the study employed the simple linear regression analysis which was used to determine the extent to which each of independent variables contributes to the dependent variable and coefficient of determination (R^2) was employed to know the degree to which each of the independent variable explained the effect on bank performance in Nigeria, Ghana and Canada at national level. Furthermore, the adjusted R- square was used to explain the degree to which the independent variables combined affect the variations in capital expenditures for the period of study.

RESULT AND DISCUSSION

Descriptive Statistics

The result of the descriptive statistics is presented in Table 1..

Table 1: Descriptive statistics of the variables

Table 4.1 Descriptive Statistics for Canada

Variable	Obs	Mean	Std. Dev.	Min	Max
years	60	2011.5	3.481184	2006	2017
roa	60	2.45571	3.958134	.003	19.208
interestrate	60	3.325	.9739184	2.5	6.25
inflation	60	1.625	.4840419	.83	2.38
exchangerate	60	1.4425	.0824544	1.28	1.59
crossid	60	3	1.426148	1	5

Table 4.2 Descriptive Statistics for Nigeria

Variable	Obs	Mean	Std. Dev.	Min	Max
years	55	2012	3.191424	2007	2017
roa	55	4.997909	8.71393	.005	32.067
interestrate	55	16.56091	1.085071	14	18.36
inflation	55	11.18545	3.220318	5.38	16.5
exchangerate	55	179.7	67.13543	118.55	359.99
crossid	55	3	1.427248	1	5

Table 4.3 Descriptive Statistics for Ghana

Variable	Obs	Mean	Std. Dev.	Min	Max
years	55	2012	3.191424	2007	2017
roa	55	.0429455	.0939173	-.025	.718
interestrate	55	18	4.492793	12.5	26
inflation	55	13.57	3.557694	8.73	19.25
exchangerate	55	2.480445	1.247178	.9599	4.38
crossid	55	3	1.427248	1	5

The figures in the descriptive statistics above show that fluctuating pattern of the variables studied for the sampled companies in the sampled years. The positivity of the minimum value for Returns on Asset (ROA) in Canada and Nigeria indicates that none of the sampled companies in those countries made a loss during the period studied however, the negative in the minimum value of in Ghana indicates the presence of loss made amongst the companies sampled for the period in Ghana. The lowest interest in Canada for the sampled period is 2.5 while the maximum interest rate for the period covered by this study is 6.5. In Nigeria however, the minimum interest rate for the period cover by this study is 14 while the maximum is 18.36. The lowest interest rate in Ghana for the period is 12.5 and the maximum is 26. As regards inflation, Canada experienced the lowest inflation rate of 0.83 for the period covered by this study while Ghana recorded the highest inflation rate of 16.25 for the period covered by this study. In terms of exchange rate, Ghana has the lowest record of exchange rate of 0.9599 Ghana cedis to a dollar. This can be attributable to the revaluation of currency embarked upon by the Ghana in recent years. The lowest exchange rate for Canada is 1.28 whereas Nigeria's lowest exchange rate is N118 to a dollar. The maximum exchange rate for Ghana is 4.38, and Canada's maximum stood at 1.59 and Nigeria has the overall maximum of N360.

Regression Results and post estimation result

The regression and post estimation result is presented in Table 4.

Table 4.4:Regression and post estimation Results

	INTEREST RATE			INFLATION			EXCHANGE RATE		
	CANADA	NIGERIA	GHANA	CANADA	NIGERIA	GHANA	CANADA	NIGERIA	GHANA
ROA	-0.056 -0.056	-.4222 (0.520)	0.0014 (0.001)	0.476 (0.877)	-0.515 (0.360)	-.003 (.004)	3.355 (6.117)	-0.037 (0.014)	0.017 0.015
Wooldridge autocorrelation test	1.788	2.369	6.058*	1.841	4.173	2.293	1.694	2.638	3.635
Breusch-Pagan / Cook-Weisberg heteroskedasticity Test	5.27*	0.09	5.97*	1.33	5.99*	2.84*	0.26	11.47*	60.35

Source: Author's Computation using STATA13 (2019)

Table 4.4 shows the results of the diagnostic tests carried out to determine the choice and appropriateness of the estimation technique employed for this model as well as the regression output for the model. The Hausman test was carried out to determine whether fixed effect, random effect or pooled ordinary least square estimation technique is appropriate for the model. The hausman specification test has as its null hypothesis that the difference in coefficients of a model is not systematic and hence the random effect estimation technique is appropriate. The result of the hausman test showed that the data set for this model does not satisfy the assumptions of the hausman test hence, the pooled ordinary least square method is most appropriate for this model.

Also, the Breusch-Pagan / Cook-Weisberg test for heteroscedasticity was carried out to determine if the variance of the residual are constant. This test has a null hypothesis of constant variance of the residual, the result of the test showed a probability value greater than the 5% level of significance. This suggest that the study rejects the null hypothesis of constant variance, indicating that the variance of the residual is constant. In testing for autocorrelation in the panel data, the Wooldridge test was conducted. This test has a null hypothesis of no first-order autocorrelation and its result in this model showed a probability value greater than the 5% level of significance. This thus suggests that the study cannot rejects the null hypothesis hence, the absence of autocorrelation in the model. To jointly deal with these combinations of econometrics issues, the model was estimated with the command that gave a robust standard error.

Model 1:

$BP=\alpha+ \beta_1 In_t+ \varepsilon$
$BP = 1.59259 + 0.4760949\ In_t + \varepsilon$ (Canada)
$BP = 10.759 - 0.5151 In_t+ \varepsilon$ (Nigeria)
$BP = 0.0923 - 0.00312 In_t+ \varepsilon$ (Ghana)

The regression analysis estimates on Table 4.4 showed that inflation rate hasanegative effect on Bank Performance of the sampled firms in Ghana and Nigeria and a positive effect for the sampled firms in Canada. This is indicated by the sign of the coefficients, that is β_1 =0.5151<0 and β_1 =0.00312<0 for sampled Nigerian and Ghana firms respectively while β_1 =0.47609>0 for sampled Canada firms. This result is mixed with respect to a priori expectation as it was expected that interest ratewill have positive effect on Bank Performance. The probability of the f-statistics and t-statistics of 0.715, 0.15 and 0.72 for both the three countries respectivelyshow that the model is statistically insignificant at 5% level of significance, hence the model has no predictive value.

Decision: From the result of the regression analysis, inflation rate has an insignificant effect on return on asset in Nigeria, Canada and Ghana, Therefore, the null hypothesis (H_{01}), which says there is no significant relationship between inflation and return on assets (ROA) of Nigerian, Ghana and Canadian quoted banks is hereby accepted

Table 4.4 shows the results of the diagnostic tests carried out to determine the choice and appropriateness of the estimation technique employed for this model as well as the regression output for the model. The Hausman test was carried out to determine whether fixed effect, random effect or pooled ordinary least square estimation technique is appropriate for the model. The hausman specification test has as its null hypothesis that the difference in coefficients of a model is not systematic and hence the random effect estimation technique is appropriate. The result of the hausman test showed that the data set for this model does not satisfy the assumptions of the hausman test hence, the pooled ordinary least square method is most appropriate for this model. Also, the Breusch-Pagan / Cook-Weisberg test for heteroscedasticity was carried out to determine if the variance of the residual are constant. This test has a null hypothesis of constant variance of the residual, the result of the test showed a probability value greater than the 5% level of significance. This suggest that the study rejects the null hypothesis of constant variance, indicating that the variance of the residual is constant. In testing for autocorrelation in the panel data, the Wooldridge test was conducted. This test has a null hypothesis of no first-order autocorrelation and its result in this model showed a probability value greater than the 5% level of significance. This thus suggests that the study cannot rejects the null hypothesis hence, the absence of autocorrelation in the model. To jointly deal with these combination of econometrics issues, the model was estimated with the command that gave a robust standard error.

Model 2:

$BP=\alpha+ \beta_1 E_t+ \varepsilon$
$BP = -2.455 + 3.355E_t + \varepsilon$ (Canada)
$BP = 11.711 – 0.0374E_t+ \varepsilon$ (Nigeria)
$BP = 0.0012+ 0.168E_t+ \varepsilon$ (Ghana)

Findings

The regression analysis estimates on Table 4.4 showed that exchange rate hasapositive effect on Bank Performance of the sampled firms in Ghana and Canada and a negative effect for the sampled firms in Nigeria. This is indicated by the sign of the coefficients, that is β_1 =3.355>0 and β_1 =0.168>0 for sampled Canada and Ghana firms respectively while β_1 =0.0374<0 for sampled Nigeria firms. This result is mixed with respect to a priori expectation as it was expected that interest ratewill have positive effect on Bank Performance. The probability of the f-statistics and t-statistics of 0.86 and 0.28 for both Canada and Ghana respectivelyshow that the model is statistically insignificant at 5% level of significance, hence the

model has no predictive value. However, the probability of the f-statistics and t-statistics of 0.008 for Nigeriashow that the model is statistically significant at 5% level of significance, hence the model has a predictive value.

Decision: From the result of the regression analysis, exchange rate has an insignificant effect on return on asset in Canada and Ghana, Therefore, the null hypothesis (H_{02}), which says there is no significant relationship between exchange rate and return on assets (ROA) of quoted banks is hereby accepted for Canada and Ghana however, exchange rate has a significant effect on return on asset in Nigeria, therefore, the null hypothesis (H_{02}), which says there is no significant relationship between exchange rate and return on assets (ROA) of quoted banks is hereby rejected for Nigeria.

Table 4.4 shows the results of the diagnostic tests carried out to determine the choice and appropriateness of the estimation technique employed for this model as well as the regression output for the model. The Hausman test was carried out to determine whether fixed effect, random effect or pooled ordinary least square estimation technique is appropriate for the model. The hausman specification test has as its null hypothesis that the difference in coefficients of a model is not systematic and hence the random effect estimation technique is appropriate. The result of the hausman test showed that the data set for this model does not satisfy the assumptions of the hausman test hence, the pooled ordinary least square method is most appropriate for this model. Also, the Breusch-Pagan / Cook-Weisberg test for heteroscedasticity was carried out to determine if the variance of the residual are constant. This test has a null hypothesis of constant variance of the residual, the result of the test showed a probability value of 0.00 which is lower than the 5% level of significance. This suggest that the study rejects the null hypothesis of constant variance, indicating that the variance of the residual is not constant. In testing for autocorrelation in the panel data, the Wooldridge test was conducted. This test has a null hypothesis of no first-order autocorrelation and its result in this model showed a probability value greater than the 5% level of significance. This thus suggests that the study cannot reject the null hypothesis hence, the absence of autocorrelation in the model. To jointly deal with these combinations of econometrics issues, the model was estimated with the command that gave a robust standard error.

Model 3:

$BP=\alpha+ \beta_1 I_t+ \varepsilon$
$BP = 2.123069 - 0.0561586 I_t + \varepsilon$ (Canada)
$BP = 12.80015 - 0.4222332 I_t+ \varepsilon$ (Nigeria)
$BP = 0.0168289 + 0.0014509 I_t+ \varepsilon$ (Ghana)

Findings

The regression analysis estimates on Table 4.4 showed that interest rate has anegative effect on Bank Performance of the sampled firms in Canada and Nigeria and a positive effect for the sampled firms in Ghana. This is indicated by the sign of the coefficients, that is $\beta_1 =0.0561<0$ and $\beta_1 =0.4222<0$ for sampled Canadian and Nigerian firms respectively while $\beta_1 =0.0014>0$ for sampled Ghana firms. This result is mixed with respect to a priori expectation as it was expected that interest rate will have positive effect on Bank Performance. The probability of the f-statistics and t-statistics of 0.715, 0.72 and 0.27 for both the three countries respectivelyshow that the model is statistically insignificant at 5% level of significance, hence the model has no predictive value.

Decision: From the result of the regression analysis, interest rate has an insignificant effect on return on asset in Nigeria, Canada and Ghana, Therefore, the null hypothesis (H_{03}), which says there is no significant relationship between interest and return on assets (ROA) of Nigerian, Ghana and Canadian quoted banks is hereby accepted
0.0014

Discussion of Findings

This study was set out to examine the effect of macro economic variable on bank performance in Nigeria ,Canada and Ghana . The first part dealt with descriptive analysis in terms of numerical representation. The summary statistics of all the variables obtained from the sampled countries for the period under study show that ROA has the highest dispersion from its mean because its standard deviation is high compared with the measures of macroeconomic variables which are inflation, interest rate and exchange rate respectively. This implies that the economic values of sampled countries had been fluctuating over the period of time. Also, the negative value of inflation, exchange rate and interest rate of the countries show that the country's economic situation were worst during the period under study, while some sampled countries for the period under review did not decline interest rate and exchange rate as depicted by the negative minimum value of ROA. The second section focused on testing the hypotheses previously stipulated through the use of regression analysis. The regression estimate of model 1 showed that inflation, interest rate and exchange rate have positive effects on return on asset (ROA). This result is consistent with *a priori* expectation as it was expected that inflation, interest rate and exchange rate will have positive effect on return on asset of the selected countries (Nigeria, Canada and Ghana). Furthermore, the probability of the f-statistics of 0.0011 shows that the model is statistically significant at 5% level of significance.

Furthermore, regression analysis was performed to examine the effect of macroeconomic variables on bank performance of the selected countries for the period under study. The error term was derived which represented the portion of variations in bank performance not caused by the macro economic variables under study, Therefore, the null hypotheses that there is no significant different between return on asset and the macro economic variables (inflation, exchange rate and interest rate) of the selected countries are not accepted. Thus, there is significant difference between the economic value and bank performance in Nigeria, Canada and Ghana. This finding does not support the result of C Osundina et al., (2016) who examines the effect of exchange rate on bank performance and concluded that exchange rate has no significant effect on bank performance using ROA as a measure while exchange rates fluctuation had a significant negative effect on bank liquidity using LDR as a measure.

The first part dealt with descriptive analysis in terms of numerical representation. The summary statistics of all the variables obtained from the sampled countries for the period under study show that bank performance has the highest dispersion from its mean because its standard deviation is high compared with the measures of macro-economic variables of inflation, exchange rate and interest rate. This implies that the economic situation of the countries under study had been fluctuating over the period of study. Also, the negative minimum values of the of ROA shows that some financial institution in the countries under study are faced with unbalanced operational system in their respective countries. The second section focused on testing the hypotheses previously stipulated through the use of regression analysis. The regression estimate of model 1 showed that interest rate, exchange rate and inflation have positive effects on bank performance. This result is consistent with *a priori*expectation as it was expected that inflation, interest rate and exchange rate will have positive effect on return on asset of the selected banks in the identified countries. Furthermore, the probability of the f-statistics of 0.0011 shows that the model is statistically significant at 5% level of significance. Therefore, the null hypothesis (H_{01}) has no significant effect on bank performance in Nigeria, Ghana and Canada is hereby rejected. Osundina et al., (2016) examines the effect of exchange rate on bank performance and concluded that exchange rate has no significant effect on bank performance using ROA as a measure while exchange rates fluctuation had a significant negative effect on bank liquidity using LDR as a measure. Therefore, based on the above findings, it is therefore seen that from the statement of the Osundina et al., their study did not correlate with that which have been arrived at in this study.

CONCLUSION AND RECOMMENDATION

This study examined the effect of macroeconomic variables on bank performance in Nigeria, Ghana and Canada. Numerical description of all variables under study was captured to depict the movement of values and determine the fluctuations of each of the independent variables with the dependent variables. Findings of this study therefore provide insight into the effect of macro-economic variables measured by inflation, interest rate and exchange rate on bank performance in Nigeria, Ghana and Canada and also examined the moderating effect of adoption of this macro-economic on return on asset of quoted banks in Nigeria, Ghana and Canada for the period between 2008 and 2017. It

also provides an affirmation of the extent to which the variations in the dependent variable are caused by the independent variables covered in the models as depicted by the R-squared and adjusted R-squared. Thus, the study concluded that the macro economic variables became more value relevant to the bank performance in Nigeria, Ghana and Canada. Based on the findings and conclusions of this study, the following recommendations are made to researchers, the government and the general public which includes individuals, organization and the general public. The study therefore will aid; he future researchers to continue a further study on this broad subject and provide valuable contributions to the existing body of knowledge on this topic and serve as a basis for further research; the government to determine whether there is any significant effect of inflation, exchange rate, interest rate and bank performance and make possible adjustments where necessary; and Individuals, organizations and the general public on the impact and relationship between inflation, exchange rate, interest rate and bank performance of the countries under study.

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Effect of Audit Quality on Earnings Management of Listed Consumer Goods Companies in Nigeria

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Abstract

Financial reporting is a means through which managers communicate companies' economic performance to stakeholders. Over the years, the markets have witnessed several accounting scandals perpetuated through the manipulation of the accounting figures reported in financial statements. This has led to the questioning of the ability of auditors to effectively constrain such practices, especially in developing countries. Given the prominence of this problem and the expected role of the auditor, this study examined the connection between audit quality, as one of the important features of good corporate governance and earnings management among listed consumer goods companies in Nigeria. Specifically, the study focused on audit firm size, audit fees, auditor tenure, auditors' industry specialization and audit engagement partner gender diversity as independent variables and earnings management as dependent variable proxied by discretionary accruals. Descriptive correlational research design is adopted. The population included all the 21 companies in the consumer goods sector, 17 out of which were purposively sampled for the purpose of data collection. The study covered the period 2011-2020 and utilisedsecondary data extracted from the annual accounts of the companies for the period of the study. The study employed the use of multiple regression analysis technique to analyse the data with the aid of STATA version16. From the regression results it was revealed that audit fees, audit firm size and auditor industry specialization have a statistically positive significant effect on earnings management while auditor tenure and audit engagement partner gender diversity was found to have no significant influence on earnings management of listed consumer goods companies in Nigeria. The study concluded that audit quality is an effective corporate governance mechanism for constraining the problem of earnings manipulation in financial report of companies. The study, therefore, recommended that there is need for companies, accounting regulators, Financial Reporting Council of Nigeria and indeed all stakeholders to consider an expanded approach in examining audit quality in Nigeria.

Keywords: Audit quality, Earnings quality, Consumer goods, Nigeria

INTRODUCTION

The global financial tragedies at the start of the 21st century and the global financial crisis that started in 2007 as well as the most recent collapses of companies such as Carillion, Patisserie Valerie and London Capital and Finance in the UK, failings in South Africa's state owned entities Transnet, Eskom, and South African Airways and the 1MDB scandal in Malaysia to name a few have directed political and regulatory attention on the audit profession and have also exposed serious corporate governance failings. Specifically, it has attracted a great deal of attention and scrutiny by investors, regulators and stakeholders on various aspects of accounting, auditing, and financial reporting (Tugman & Leka, 2019). The effectiveness of the corporate governance function, audit qualityand the regulatory framework has also, become a global concern. This is because the global financial crisis resulted in the downfall of many high-profile companies, with many critics blaming the auditors and corporate governance for their failure to prevent such a crisis from happening. As a response to those global events, regulatory institutions had to reassess the foundations of companies' regulations. Furthermore, audit quality codes of best practice have been developed in different countries in order to curb the spate of vicious corporate collapses that pervade the globe in the past decade and to guarantee integrity of auditors' reports in relation to corporate earnings.

Audit quality is referred to as the market-assessed joint probability that a given auditor will discover a breach in the client's accounting system and will report the breach (De Angelo, 1981). Audit quality also depicts the degree to which a set of inherent characteristics of an audit fulfils its requirements. The audit of a company's accounts is a monitoring and control mechanism that diminishes information asymmetry and protects the interests of the principal. Thus, the audit process assesses the probability of material

misstatements and reduces the possibility of undetected misstatement to an appropriate assurance level (Okolie, 2014). Audit quality influences financial reporting and strongly impact on investors' confidence. In Nigerian, to further restore stakeholders' confidence and improve financial reporting quality, the Financial Reporting Council (2020) made several efforts towards improving the audit quality of financial reports of companies such as length of auditor tenure, mandatory auditor rotation, independence as well as auditors' skills and competence. The "code" specifically states that to enhance auditor independence, companies should rotate their audit engagement partners every five years. Since auditor's skills and competence are unobservable and difficult to measure, user's perception of audit quality using audit firm size, audit fees, auditor tenure, industry specialization, engagement partner gender diversity have been used and consistent with (Bashirieddin, 2010). On the other hand, Earnings Management (EM) is a strategy used by company managers to deliberately manipulate company earnings to match a predetermined target. It connotes the planning and execution of certain activities that manipulate or smooth income, achieve high earnings level and sway the company's stock price. EM is primarily achieved by managed actions that make it easier to achieve desired earnings levels through accounting choices inherent in Generally Accepted Accounting Principles (GAAP). This is commonly occasioned by discretionary accruals manipulations that are likely to present some problems for a true and qualitative earnings report in an emerging market such as the Nigerian Stock Exchange (NSE).

Studies on audit quality and earnings quality remain important to policymakers, investors and regulators. This is because the quality of company reported earnings affects investors' confidence and allocation of resources in the financial markets. Company reported earnings are prone to management legitimate manipulations, and the functions of corporate governance and external auditing serve as direct monitoring mechanisms of the company's financial reporting processes. As these two functions also potentially have a direct impact on the degree of earnings management exercised by the companies' management, the importance of their role and effectiveness cannot be over emphasized. The need to ensure high audit quality of financial reports of companies cannot be overemphasized.This is becausehigh-quality external auditing is a central component of a well-functioning capital market. Companies with a reputation for credible financial reporting are likely to change auditors when their audit quality is questioned to avoid capital market consequences of unreliable financial reporting. The performance of independent auditors is deemed fundamental to the functioning of the financial and capital markets based on the assumption that, by issuing an opinion on the reliability of accounting information, it contributes to a business environment characterized by trust and credibility. Bearing in mind that earnings management practices are classified accrualsand real activities manipulations, the combined effectiveness of corporate governance monitoring mechanisms in constraining accruals earnings management has been extensively investigated (Warfield, Wild & Wild 1995; Yeo, Tan, Ho, & Chen, 2002; Wang, 2006; Teshima&Shuto, 2008; Pouraghajan, Tabari, Emamgholipour&Mansourinia, 2013; Hoang Khanh&Khuong 2018, Alzoubi, 2017, Ghosh & Moon, 2005; Gul, Fung &Jaggi, 2009; Krishnan, 2003; Rusmin, 2010; Demers and Wang (2010) and Li (2010).) However, most of these studies are foreign-based and given the disparities in economies, the level of sophistication in the monitoring mechanisms and litigation risks faced by external auditors, studies from Nigeria may produce different results. This gives a considerable justification for the current study. Also, their findings are mixed and inconsistent which makes the area amenable to further research.

Furthermore, 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 generalization of findings concerning the effect of audit quality on earnings management of firms in Nigeria. A study that includes more variables such as auditor industry specialization and audit engagement partner gender diversity is desirable as it provides a better understanding of the effect of audit quality on earnings management of firms in Nigeria. It is important to study auditor industry specialization (one of the proxies for audit quality) to decide empirically the extent which it associates with earnings management in the Nigerian consumer goods sector. This is important because given the complex nature of the non-financial companies and business operations, industry specialist auditors are expected to play a prominent role in mitigating earnings managementof companies operating in the sector due to their specific knowledge of the industry. The motivation for conducting this study andparticularly in the consumer goods sector is based on the obvious gaps in previous empirical literature such as

inconsistent and mixed findings, external validity, timing differences, sectorial peculiarities and variables differences. Also, the fact that consumer goods sector is of utmost concern to a multiplicity of stakeholders given that a significant proportion of income in Nigeria is tailored towards consumption and that the audit quality variables to the best of our knowledge and as extant literature reveals have not been captured much in any research work relating to earnings management in Nigeria. This study will therefore, fill the gaps in literature by empirically, examining the effect of audit firm size, audit fees, auditor tenure, auditor industry specialization and engagement partner diversity on earnings management of listed consumer goods companies in Nigeria. Thus, the general objective of this study is to ascertain the effect of audit quality on earnings management of consumer goods companies in Nigeria.

LITERATURE REVIEW

Audit Quality

There are many attempts to define the concept of audit quality either on professional organisations level, or academic level. On the professional organisations level: for example, International Federation of Accountants (IFAC, 2009) pointed to the concept of audit quality in the international standard on quality control. It stated that "the objective of the audit firm is to establish and maintain a system of quality control to provide it with reasonable assurance that: (a) The firm and its personnel comply with professional standards and applicable legal and regulatory requirements; and (b) Reports issued by the firm or engagement partners are appropriate in the circumstances" (IFAC, 2009; 15). This means that the concept of audit quality from the perspective of (IFAC) lies in the compliance with professional standards and legal and regulatory requirements.

Audit Firm Size

As at date, there appears to be no agreed – upon metric for the measurement of audit quality construct (Gerayli, Yanesari&Ma'atoofi, 2011; Knechel, 2009 and IAASB, 2011). DeAngelo (1981) developed a two-dimensional definition of audit quality that set the standard for addressing the issue. First, a material misstatement must be detected, and second, the material misstatement must be reported. Audit quality is influenced by many other factors as well. Since 1981, accounting studies have attempted to define, measure, and study multiple dimensions of audit quality. DeAngelo (1981) theorizes that larger firms perform better audits because they have a greater reputation at stake. In addition, because larger firms have more resources at their disposal, they can attract more highly skilled employees. Others have theorized that large auditor attract a fee premium because their greater wealth reduces clients' exposures in litigation (the deep pockets theory). Others have theorized that there is no real audit quality difference, but the perception exists because large firms are well known and have gained a reputation for high quality.

Audit Fees

International Standards on Auditing defines Audit fees as the amount that remunerates the financial auditor's activity, the certification of financial statements. The code of ethics for professional accountants stated that audit fees should be calculated in an objective way and the auditor's independence should not be influenced by them. A number of research have been carried out on the determinants of audit fee. Most of the research findings showed that the major determinants of audit fees may include firm size, business complexity, auditor type, audit tenure, company performance, leverage etc. AL-Khaddash, Nawas and Ramadan (2013) defined audit fees as all charges that the companies pay to the external auditors against the audit services and non-audit services, e.g. management advisory and consultants. The Securities and Exchange Commission (SEC) defined audit fee as the fees paid for annual audits and reviews of financial statements for the most recent fiscal year. Chersan (2012) also defined audit fee as the sums payable/paid to the auditor for the audit services offered to the auditee.

Auditor Tenure

Adeyemi, Okpala and Dabor (2012) opined that for effective and quality audit, the audit-firm tenure is also considered because it is of great influence. Audit-firm tenure is the length of the audit-firm-client relationship as of the fiscal year-end covered by the audited financial statements. Following prior research (e.g., Pierre and Anderson 1984; Stice 1991), audit tenure is defined as short when the same auditor has audited the financial statements of a company for two or three years. Audit tenure is defined as long when the same auditor has audited the financial statements of a company for nine or more years. Based on definition of short- and long-term tenure, we define audit tenure as medium when the same auditor has audited the financial statements for four to eight years.

Auditor Industry Specialization

Industry specialist auditors are auditors who have gained great training and experience concentrated in a specific industry. Solomon, Oyerogba and Olaleye (1999) finds that industry specialist auditors have more accurate non-error frequency knowledge than non-industry specialists. Owhoso, Messier, and Lynch (2002) suggests that industry specialists can more effectively detect seeded errors in staff work papers during the audit review process. Low (2004) finds that auditors' industry specialization improves their audit risk assessments. Hammersley (2006) finds that matched specialists (i.e., specialists working in their industry) develop more complete problem representations about the seeded misstatement when they receive partial- or full-cue patterns than when they receive no-cue patterns, whereas mismatched specialists are not able to develop more complete problem representations even when they receive full-cue patterns. These behavioural auditing studies suggest that auditor industry specialization can enhance the effectiveness of auditors' work as a result of their greater industry-specific knowledge.

Engagement Partner Gender Diversity

It has been acknowledged in several studies, in behavioural economics and psychology that gender-based differences exist (e.g., Johnson & Powell, 1994; Byrnes, 1999). Women are significantly more risk averse (Watson & McNaughton, 2007), more conservative and comply more with law and regulation than men. Researchers are motivated to examine the relationship between female executives and earnings management. Srindhi (2011) suggests that a gender-diverse board could improve earnings quality. The research conducted by Peni and Vähämaa (2010) shows that female directors are associated with more conservative earnings management strategies. Additionally, gender research has been done for audit partners in relation to earnings management of their clients. Since previous articles suggest that women in general and in executive functions are more conservative and risk averse, this should consequently be the case for female audit partners. Indeed, the purpose of the article of Ittonen (2013), is to study whether there is a difference between male or female audit partners in the acceptance towards earnings management. Female audit partners are associated with higher levels of discretionary accruals.

Empirical Review

Mehdi, Fahim and Haithem (2021) examines whether gender-diverse engagement partners constrain unethical earnings management behavior in a French mandatory joint audit setting. The study used multiple regression analysis technique to analyse the data and the empirical results show that gender-diverse audit partners are negatively associated with discretionary accruals of client firms. Gender-diverse audit partners are also found to constrain earnings management irrespective of whether clients hire one or two brand-name audit firms. Finally, the research finds that the pervasiveness of earnings management declines when client firms switch from all-male audit partners to gender-diverse audit partners. The findings underline the importance of considering audit partner gender by policy makers in contexts where joint audits are required or in countries that are considering introducing joint audits. Juan and David (2020) examined the effect of audit fees on audit quality, measured by how the level of earnings management, is affected by the type of audit (voluntary vs mandatory), as well as whether the effect of audit fees on audit quality is different depending on the type of audit. Using a sample of Spanish SMEs composed of both voluntarily and mandatorily audited companies, the study found that voluntary audits

have higher quality when audit fees are lower, but the differences in audit quality between voluntary and mandatory audits reverse as audit fees increase, and mandatory audits are more effective at deterring earnings management when audit fees are high. Additional analyses showed that voluntary audits do not directly affect earnings management; instead, voluntary audits are associated with abnormal fees, which in turn negatively affect earnings management. The results also showed that audit fees are only negatively associated with earnings management when accruals are income-increasing, which is related to auditor conservatism. This current study relates to EM as it clearly explains the motivation as to why managers would want to engage in earnings management. Soepriganto, Krisky, Indra and Zudana (2020) examines the association between audit quality and gender of the firm's audit engagement partner in Indonesia. Specifically, prior studies provide evidence that given gender-based difference in diligence, conservatism and risk tolerance, it is plausible that female auditors may improve audit quality. Indonesia provides valuable research setting to investigate the issue, as it is mandatory to disclose the identity of the audit partners in the audit reports. This study employs multivariate regression model to test the hypothesis, which examines the association between audit quality and audit partner's gender. Using a sample of Indonesian publicly listed firms. The study ran a panel of regression of audit quality, measured by abnormal accruals on female auditor variable and firm-specific controls. To triangulate the results, the study also conducts sensitivity analysis using high and low category of abnormal accruals, an alternative measure of accruals quality (i.e.,Beneish's M score) and propensity score matching (PSM). The study finds that firms with female audit engagement partners are not associated with smaller abnormal accruals, thereby implying that female auditors may not constrain effects on earnings management. In other words, gender is not an important predictor for audit quality in Indonesia.

Sitranggang, Karbhan, Matemilola and Ariff (2019) investigated whether audit quality is associated with real earnings management in the UK. The authors apply the panel fixed effects method that controls for heterogeneity across firms to investigate whether audit quality is related to real earnings management for a large sample of UK manufacturing companies for the period 2010–2013. The authors utilized three proxies to measure real earnings management and two proxies to measure audit quality. The results provided evidence that audit fees are negatively related to abnormal operating cash flows. Conversely, audit fees are positively related to abnormal discretionary expenses. Besides, audit quality proxies show insignificant relationship with abnormal production costs and real earnings management index. Overall, the study finds partial evidence of significant relationship between audit quality and real earnings management. These results are important subject to the adequacy of the indicators of real earnings management and audit quality. Like previous research works that mostly focus on upward earnings management, the authors do not address the question of whether and how firms take real actions to manage earnings downwards in certain contexts. Muogbo, Nneka and Ikena (2019) investigated the effect of auditor tenure on earnings management of listed companies in Nigeria. The study adopted ex- post factor research design. The population of the study 170 listed firms on Nigeria Stock exchange as 2017. The sample size was 24 listed firm. The period of research was 2007-2017. In the analysis of the data, the study employed Houseman Specification to test between fixed and random effects. The findings indicated that audit tenure has significant positive effects on earnings management of the Nigerian listed companies. This study covered all listed firms and given the peculiarities in the consumer goods sector, a study that will focus on only the sector is desirable. Onaolapo, Ajulo and Onifade (2017) investigated the effect of auditor attributes on Audit Quality: Evidence from Cement Manufacturing Companies in Nigeria. Audit fees, Audit tenure, client's size, leverage ratio was used as variables. The study employed the use Ordinary Least Square model estimation technique to analyze the combined relationship between the dependent and independent variables. Audit tenure showed a significant relationship with audit quality. Only two variables have been examined in the above reviewed study, however, more variables will be examined in this current study.

Theoretical Framework

Agency Theory

Agency theory recognizes that there is a tug-of-war of interests between owners or principals and managers. The problem of information integrity appears, for which one reason is due to the information asymmetry. Investors possess limited access to sufficient information to make decisions. Beneficial behaviors become the tendency for managers who possess more information than other stakeholders (Jensen and Meckling, 1976). Information,including quality information on earnings, is very much needed by investors as material for making decisions. Auditors as external parties may be the ones to rely on neutralizing conflicts of interests and reducing the information asymmetry, thereby maintaining the information integrity of financial reports (Almutairi et al., 2009; Varici, 2013). Companies may obtain economic and control benefits from auditing activities; one of these is that audits can increase information quality and earnings quality. Audits play an important role in decreasing the information asymmetry and moral hazards in order to provide certainty of information to stakeholders, so that the financial reports that are prepared by managers as agents can be relied upon.

METHODOLOGY

This study adopts ex-post facto research design in achieving its objectives. The design is considered more appropriate because it establishes relationships by first identifying some existing phenomena and then analysing data to establish possible causal factors. The research used data obtained from documented historical data contained in the annual reports and accounts of those listed companies under study, where the variables of study were not controlled since the phenomenon of the study has already occurred. The population of the study consisted of all the twenty-one (21) consumer goods companies listed on the Nigerian Stock Exchange from 2011-2020. The study used purposive sampling technique to obtain a sample size of sixteen (16) firms listed in the consumer goods sector. This number is arrived at after eliminating firms that did not meet the criteria that a company must have complete information for the number of years under consideration and must have not undergone reorganisation or merger within the period.

Table 3.1 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	McnicholsPlc	2009
21	Unilever Nigeria Plc	1973
22	Cadbury Nigeria Plc	1979
23	Nestle Nigeria Plc	1976

Source: Nigerian Stock Exchange website, 2021.

Table 3.2 Sample Size of the Study

S/N	Name
1	Champion Brewery Plc
2	Guinness Nigeria Plc
3	Unilever Plc
4	Nigerian Enamelware Plc
5	Multi-Trex Integrated food plc
6	Vita Foam Nigeria Plc
7	Dangote Sugar Refinery Plc
8	Flour Mills Nigeria Plc
9	Honeywell Flour Mill Plc
10	P. Z. Cussons Nigeria Plc
11	Nascon Allied Industries Plc
12	Northern Nigeria Flour Mills Plc
13	International Breweries Plc
14	McNichols Plc
15	Cadbury Nigeria Plc
16	Nestle Nigeria Plc

Source: Nigerian Stock Exchange website, 2021.

The study employed secondary sources for the purpose of data collection. The data was collected from the annual reports of the sampled companies for a period of ten (10) years 2011-2020.The period of the study chosen reflects the time when code of corporate governance is in effect in the Nigerian capital market. These firms are public limited companies listed on the Nigerian Stock Exchange. By virtue of being public limited companies and as a requirement of being listed, annual financial report has to be made available to the Nigerian Stock Exchange. Secondary data is factual and verifiable thus, validity of inferences from its use in analysis is ensured. Secondary data are useful not only for finding out information to answer research questions, but also for providing a better understanding of and explaining research problems. The data is quantitative and panel in nature. Therefore, the panel dataset comprised 160 firm years' observations which are subjected to different tests for analysis.

Technique for Data Analysis and Model Specification

Multiple regression analysis technique was adopted for the purpose of analysis because it is used to test the changes in the combination of two or more predictors on a dependent variable. Basically, it is used to predict the level of change in the outcome variable. Two step regression was used in determining the level of earnings management of listed consumer goods companies adopting, Dechow, Sloan and Sweeny (1995) model. The residuals for the Dechow et al (1995) model after inserting the sampled firm's data was used in the second model regression model specified for the study. However, the residual determines the accrual quality, the larger the residuals, the higher the earnings management and the higher the earnings quality. STATA version 16 was employed as tool of data analysis. Furthermore, in estimating multiple regression models, researchers usually are challenged with the following: Fixed Effects estimation and Random Effects estimation. The Hausman (1978) test helps to determine the choice between the fixed or random effect models in conducting the regression by calculating the value of Probability chi-square.

Model Specification

The following equation forms the model of the study; this equation is represented as follows.

EM=f (AFZ, AF, AT, AIS, APGD)

Explicitly, the regression model is econometrically represented as:

$EM= \beta_{0it} + \beta_1 AFZ_{it} + \beta_2 AF_{it} + \beta_3 AT_{it} + \beta_4 AIS_{it} + \beta_5 APGD_{it}\ \beta_6 FZ_{it} + e_{it}$

Where:
EM =Earnings Management
β_0 =Constant
AFZ= Audit Firm Size
AF= Audit Fees
AT= Audit Tenure
AIS= Auditor Industry Specialization
APD= Audit engagement Partner Gender Diversity
FZ= Firm Size
LEV=Leverage
e = Error Term
$\beta1$-$\beta7$= are the parameters estimate or coefficients in equation
it= cross-sectional time series

Variable Measurement

Earnings management is proxied by discretionary accruals using Dechow, Sloan and Sweeny (1995) model as stated below:

DACC= TAccit/ATit-1- $\alpha0$+ $\alpha1$ (1/ ATit-1) + $\alpha2$ (Δ REVit / ATit-1) + $\alpha3$ (PPEit / AT it-1) + $\alpha4$ROAit-1+ε_{it}

TAccit=Total Accruals of the company; PPEit = Property, plant and equipment of the company; ΔREVit, t= Change in Revenue of the company; ATit-t= Assets total of the company in year t-1; ROA it-1= Return On Assets of the company in year t-1; ε = random error term

Table 1: Measurement of variables

s/n	Variables	Variables measurement
1	**AFSIZE**	Measured by Dichotomous:1 if company is audited by a Big4, otherwise 0 (DeAngelo, 1981; Khrishan&Schauer, 2000; Khrishan, 2003).
2	**Audit Fee**	Measured as a natural logarithm of the amount of audit fees paid to the auditor by the company. (Effiok, & Eton, 2013)
3	**Auditor Tenure**	The length of time (number of years) spent by the audit in the firm (Jayeola, Taofeekb&Toluwalase, 2017).
4	**AIS**	Measured by dichotomous variable 1 for the companies audited by industry specialist auditors and 0 for non-specialist auditors. Zhou and Elder (2001): Krishnan & Yang 2003).
5	**Audit Partner GenderDiversity**	Measured by dichotomous: 1if audited by a female audit partner, 0 otherwise
6	**Firm Size**	Natural log of Total Assets
7	**Leverage**	Proportion of debt to equity

Researcher's computation (2021)

RESULT AND DISCUSSION

Descriptive Statistics

A descriptive statistic is an analysis of data that helps to describe, show or summarize the behaviour of data in a meaningful way, which allows for simpler interpretation of the data. This section contains the description of the properties of the variables ranging from the mean of each variable, minimum, maximum and standard deviation.

Table 2: Descriptive Statistics

Variables	Obs	Mean	Std. Dev.	Min	Max

EM	170	.0818674	.1133165	-.8124793	.5029503
AFZ	170	.5588235	.4979946	0	1
AF	170	4.304034	1.317712	1.812913	6.623249
AT	170	.6823529	.4669368	0	1
AIS	170	.5823529	.4946283	0	1
APED	170	.8470588	.3609941	0	1
FZ	170	7.672151	1.126939	293848	9.800101
LEV	170	.5627618	.139082	.0548244	.8891875

Source: STATA OUTPUT, 2022

The outcomes in Table 2 indicates that the measure of earnings management (EM), which is the inverse of absolute discretionary accruals of consumer goods firms has an average value of .0818674 with standard deviation of .1133165, and minimum and maximum values of -8124793 and .5029503 respectively. The extent of absolute value of discretionary accruals in the sample firms has a mean of 8% with standard deviation of .11%. This indicates that the deviation between companies is very small. The firms tend to record a relatively high earnings management in some years than in others. The table one show that audit firm size (AFS), has a mean value of .5588235 and a corresponding standard deviation of .4979946. This shows that 55% of the firms under study deploy the use of Big4 auditors for their audit assignments and the value of the standard deviation confirms this assertion. The Table also indicates that the sample firms have an average of log audit fees (AF) of 4.304034 with standard deviation of 1.317712 respectively. This means that the average amount of audit fees paid by the firms within the period of the study is 4.30 million. The figure of the standard deviation shows that there is a high level of variance in the audit fees paid by companies. The minimum and the maximum as shown by the table is 1.812913 and 6.623249. This implies that the least amount spent on audit fees is 1.81 million and the largest is 6.623249%

The descriptive statistics from Table 2 also indicates the mean of the auditor tenure (AT) is .6823529 which signifies that on the average it can be said that approximately 68% of the firms rotate their auditors after three years of engagement. The auditor tenure shows a minimum and maximum of 0 and 1 respectively. The descriptive statistics in Table 2 shows that on average, the auditor industry specialist auditors (AIS) during the period of the study is 58%, from the mean value of .5823529 with standard deviation of .4946283. This shows that on average 58% of the firms used auditors that were specialist in auditing consumer goods companies. The value of the standard deviation which depicts 49% means most of the firms used industry specialist auditors in their audit engagements. The auditor industry specialization shows a minimum of 0 and maximum of 1 respectively. Furthermore, Table 2 also shows that the average value for audit engagement partner gender diversity to be .8470588 with a corresponding standard deviation of .3609941. This imply that 84% of the consumer goods firms have women as audit partners. However, the value of the standard deviation which is 36% shows an enormous disagreement with this submission. This also, mean that mix in respect to gender vary significantly from company to company. The standard deviation suggests that the data is distributed around the mean. The minimum and maximum values of audit engagement partner gender diversity are .0 and 1 respectively.

Table 2 also shows that the average firm size (FSZ) of the sampled consumer goods firms during the period of the study is 7.672151 with a standard deviation of 1.126939. This implies that the size of consumer goods firms in Nigeria vary. The standard deviation suggests that the data is distributed around the mean. The minimum and maximum values of FSIZ are .0 and 1 respectively. The Table also indicates that the sampled consumer goods firms in Nigeria have an average leverage (LEV) of .5627618 during the period of the study, with a standard deviation of 13%. This suggest that the average proportion of debt to equity stood at 56%. However, the value of standard deviation is showing that this may be different across the companies that make up the sector. Meanwhile, the minimum and maximum value stood at 1% and 83% respectively. The standard deviation suggests that the data is spread around the mean.

Correlation Matrix

A correlation matrix is a table showing correlation coefficients between variables. Each cell in the table shows the level of association between two variables. A correlation matrix is used to summarize data, as an input into a more advanced analysis, and as a diagnostic for advanced analyses. The table below shows the correlation between the dependent variable and each of the independent variables as well as among the independent variables.

Table 3: Correlation Matrix

Variables	EM	AFZ	AT	AIS	AF	APGD	FZ	LEV
EM	1.0000							
AFZ	0.1807	1.0000						
AT	-0.0933	0.2844	1.0000					
AIS	0.183	0.4006	0.3701	1.0000				
AF	0.2285	0.1684	0.0727	0.0447	1.0000			
APGD	-0.2216	-0.2459	-0.1846	-0.1279	-0.1320	1.000		
FZ	0.1884	0.1177	0.0140	0.1464	-0.1366	-0.2504	1.000	
LEV	0.0299	-0.0770	0.1768	0.0412	-0.0375	0.2903	-0.0220	1.000

Source: Output from STATA, 2022.

Table 3 shows the correlation between the dependent variable, EM and the independent variables, AFZ, AF, AT, AIS, AEPD, FSZ and LEV on one hand, and among the independent variables themselves on the other hand. Generally, high correlation is expected between dependent and independent variables while 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 3, all the correlation coefficients among the independent variables are below 0.80. This points to the absence of possible Multicollinearity though the value inflation factor (VIF) and tolerance value (TV) test is still required to confirm the assumption. The table reveals a positive correlation between the dependent variable of earning management and the explanatory variables of audit fees, audit firm size and auditor industry specialization with coefficients of 0.1807, 0.2285 and 0.0183 respectively. This implies that the three explanatory variables move in the same direction with earnings management. The table also reveals that audit engagement partner gender diversity and auditor tenure exhibit negative correlations with earnings management, with coefficients of -0.1131and -0.0612 respectively. This means that the two explanatory variables and the outcome variable move in different direction. In addition, the table reveals that the control variable of firm size and leverage have a positive correlation with the predictor variable.

Regression Diagnostics

The following healthiness tests are carried out to find out whether data used for analysis are reliable.

Test for Multicollinearity

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 Multicollinearity test is shown in the table below.

Table 4.3: Tolerance and VIF Values

Variable	VIF	1/VIF
AFZ	1.36	0.705710
AIS	1.34	0.723800

AEPD	1.30	0.763480
AT	1.26	0.800334
LEV	1.17	0.885463
AF	1.10	
FZ	1.14	0.957150
Mean VIF |	1.24	

Source: STATA Output, 2022.

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

Heteroscedasticity arises when the error terms along the regression are not equal. Heteroscedatiscity was tested using Breusch Pagan's Test. Based on the results, it can be concluded that there is no problem of heteroscedasticity as the chi square is 12.67, with a corresponding probability of 0.0004 which is insignificant, implying that there is absence of heteroscedasticity.

Hausman Speciation Test

In panel data analysis (the analysis of data over time), the Hausman Test can help to choose which between 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 preferred model is 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, Hausman test is performed to determine which of the two models is more efficient.

Table 4.4: Hausman Speciation Test

Variables	Fixed effect	Random Effect	Differences
AFZ	.0394544	.0027845	.0020796
AT	.0540668	.0164945	.0001372
AIS	-0.0119128	.0200302	.001483
AF	0.0222204	0.0179527	0.0042677
AEPD	-0.0038902	-0.0347452	0.030855
FZ	0.013331	0.0192284	-0.0058974
LEV	-0.0863029	-0.0004279	-0.085875
chi2(6) =	9.23		
Prob>chi2 =	0.2364		

Source: output from STATA, 2022.

The Hausman Speciation Test is conducted to choose between the fixed and random effect model. The result of the Hausman Test revealed that the value of chi2 is 9.23 and the prob>chi 0.2364. The insignificant value as reported by the probability of chi2 indicates that the Hausman Test is in favour of 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. The result revealed that the chi2 value is 0.00 with prob>chi2 = 0.4725. The result indicated that the best model to be interpreted is the pooled OLS regression model.

Table 4.5 Pooled Independent OLS

REM	Coefficient	T	p-value
AFZ	.0275067	12.90	0.000

AF	.0178775	2.73	0.007
AT	-.0296046	-1.53	0.128
AIS	.0819497	3.89	0.000
AEPD	-.0360208	-1.38	0.169
FZ	.0194296	2.48	0.014
LEV	.00940343	0.15	0.883
R-Squared	0. 6416		
Adjusted R-Squared	0.6216		
Prob > F	43.82		0.0007

Source: output from STATA, 2020.

The R-square value showed the level at which the explanatory variables explain the dependent variable. Table 4.4 reveals that the R-square is 0.6416. This means that the audit quality variables in the study explained the earnings management (EM) to the tune of 64%. The value of F - statistic is 43.82 with probability of chi2 = 0.000. The probability of chi2 is significant at 1%, indicating that the model is fit. This serves as substantial evidence to conclude that the audit quality attributes variables selected for the study are suitable for the study on the effect of audit quality on earnings management of consumer goods firms in Nigeria. Based on the explanatory variables, the result of the study as shown on table 4.4 indicate that audit firm size has a coefficient of .0275067, a t-value of 12.90 and a p-value of 0.000. This suggests that audit firm size has a positive coefficient with EM of consumer goods firms in Nigeria. A unit increase in the use of Big4 companies will lead to a corresponding increase in EM by 3%. Based on this, the study rejects the null hypothesis five (H01) which states audit firm size has no significant effect on earnings management of consumer goods firms in Nigeria. Table 4.4 shows that audit fees have a t-value of 2.73, a coefficient of .0178775 and a p-value of 0.007 which is significant at 5%. This means that audit fees have a significant positive relationship with earnings management of listed consumer goods firms in Nigeria. The 5% significance level reveals that audit fees have a strong statistical influence on EM of consumer goods firms in Nigeria. Based on this, the study rejects the null hypothesis one (H02) which states that, audit fees have no significant effect on earnings management of listed consumer goods firms in Nigeria.

The table also shows that auditor tenure has an insignificant negative effect on the earnings management of listed consumer goods firms in Nigeria, from the coefficient of -.02960 with t-value of -1.53 and a p-value of 0.128 which is statistically insignificant at all levels of significance. Based on this, the study accepts the null hypothesis three (H03) which states that, auditor tenure has no significant effect on earnings management of listed consumer goods firms in Nigeria. Table 4.4 also shows that auditor industry specialization has a significant positive effect on the earnings management of sampled consumer goods firms in Nigeria, from the coefficient of .0819497 with t-value of 3.89 and a p-value of 0.000 which is statistically significant at 5% level of significance. This result suggests that an increase in use of industry specialist auditors decreases the level of earnings management of firms. Based on this, the study rejects the null hypothesis two (H04) which states that, auditor industry specialization has no significant effect on the earnings management of listed consumer goods firms in Nigeria. Table 4.4 indicates that audit engagement partner gender diversity has an insignificant negative effect on the earnings management of sampled consumer goods firms in Nigeria, from the coefficient of -.036032 and p-value 0.0.169 which is statistically insignificant at all levels of significance. This result suggests that the presence of women as engagement partners of consumer goods firms does not lower the practice of earnings management. Table 4.4 also shows that firm size (FSIZ) has significant positive effect on the earnings management of listed consumer goods firms in Nigeria, from the coefficient of .019429 and a p-value 0.014 which is statistically significant at 5% level of significance. This result suggests that an increase in firm size increases the level of earnings management of firms. Furthermore, Table 4.4 indicates that firm leverage (LEV) has an insignificant positive effect on the earnings management of sampled consumer goods firms in Nigeria, from the coefficient of 0.009434 and p-value of 0.883 which is

statistically insignificant at all levels of significance. This result suggests that the higher the level of debts in the capital structure of consumer goods firms, the lower the practice of earnings management.

CONCLUSION AND RECOMMENDATIONS

The overall results of this study suggest that there is a significant positive association between audit quality and earnings management. Particularly, the study reveals that audit firm size positively and significantly influences earnings management of consumer goods firm in Nigeria. From the result, the audit firm size can be a prediction of whether the company tends to perform earnings management. Thus, existence of Big4 audit firms will help mitigate the possibility of accrual manipulation and financial reports misstatements. A bigger audit firm provides higher-quality audits because larger audit firms have fewer incentives to compromise their standards to ensure retention of clients in comparison with smaller firms. Given this finding, the study has statistical evidence to conclude that audit firm size significantly influences earnings management in the area covered by the study. Also, the result from standardized regressions shows that audit fees have a positive significant effect on earnings management. The study, therefore, concludes that audit fees play an important function in limiting the level of earnings management. This is becausea higher level of audit fees is the major driver of enhanced audit quality, in turn is used to reduce managers' flexibility to use earnings management and to manipulate reported earnings. The study further avers that auditor tenure has negative insignificant effect on earnings management of consumer goods firms in Nigeria. Given this outcome, the study lacks statistical evidence to conclude that auditor tenure does play an important role in monitoring managerial opportunistic behaviour of listed consumer goods firms in Nigeria. There is an inverse relationship between auditor tenure and earnings management. This could be based on the assertion that longer audit firm tenure does not compromise auditor independence but in fact improves the audit quality. Again, a long tenure means in-depth knowledge of the client and hence creates a more valuable auditor-client relationship.

The study also resolved that auditor industry specialization has positive and significant effect on earnings management of consumer goods firms in Nigeria. Suggesting that industry specialist auditors are a necessary governance factor in reducing fraudulent financial report, this study, therefore, conclude based on the statistical evidence that AIS exerts significant influence on EM. This assertion is supported because industry specialist auditors have gained great training and experience concentrated in a specific industry and has more accurate non-error frequency knowledge than non-industry specialists. Furthermore, industry specialists' auditors can more effectively detect seeded errors in staff work papers during the audit review process. Finally, the result from standardized regressions shows that audit engagement partner gender diversity has a negative insignificant effect on earnings management. The study, therefore, lack statistical evidence to conclude that audit engagement partner gender diversity plays any important function in limiting the level of earnings management. This is because a higher proportion or inclusion of women in an audit engagement is a major driver of enhanced audit quality, and in turn is used to reduce managers' flexibility to use earnings management and to manipulate reported earnings. From the foregoing, the following recommendations are put forward;

i. Firstly, the study provided empirical evidence to support that larger audit firms possess better attributes to arrest the likelihood of earnings management. The expectation is that Big4 audit firms provides the necessary confidence to the stakeholders that financial reports are credible and reliable. The study therefore recommends that the choice of large audit firms should be highly considered if not made a priority while engaging audit firms.

ii. Secondly, the study provided statistical and empirical evidence to support that audit fees have significant influence on earnings management among listed consumer goods firms in Nigeria. Based on this, the study recommends that firms should pay higher fees commensurate with the type and magnitude of the audit assignment. This is because the possibility of more aggressive earnings management occurs predominantly among firms that pay less than expected for audit services. Although, audit regulations recommend that audit partners

determine fees that would cover for all expenses that maybe incurred in conducting the audit while reserving a considerable amount as profit.

iii. Thirdly, the study findings revealed that that auditor tenure has insignificant negativeeffect on earnings management of listed consumer goods companies in Nigeria. Specifically, the study provides empirical evidence supporting that auditor tenure comes across as a highly significant component that has striking implications on likelihood of audit quality. Given this assertion, the study recommends that, in order to preserve independence, there should be a rotation of the audit engagement partner every five years, although the Nigerian Code of Corporate governance (2018) places such tenure at ten years.

iv. Further, industry specialist auditor possesses greater competence in applying industry-specific earnings recognition standards and has acquired a reputation for providing an audit of superior quality. It is expected that an industry specialist auditor will be better equipped to identify and rein in aggressive earnings manipulation. Hence, it is recommended that given the complex nature of consumer goods companies they should insist on hiring industry specialist auditors. Even, the "Code" stipulates that in order to ensure quality audit outcomes, the engagement partner and audit team should possess the knowledge, relevant skills and experience.

v. Finally, the study finding reveals that audit engagement partner gender diversity has insignificant effect on earnings management of listed consumer goods companies in Nigeria. Hence, literature underlines the importance of considering audit partner gender by policy makers, the study recommends that where audits are required there should be mix of female and male auditors.

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Impact of Human Resource Management on Financial Performance of Deposit Money Banks in Nigeria

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Abstract

This research effort is based on analysis on the impact of human resource management on financial performance of deposit money banks. The major objective of the study is to examine the impact of human capital development on financial performance of deposit money banks. A model was constructed to incorporate return on asset as the dependent variable, government expenditure on education and government expenditure on health, as the independent variables and tested using the ordinary least-squares (OLS) technique. The empirical result shows that capital government expenditure, recurrent government expenditure. a positive relationship between government expenditure on education (0.004500), on the return on asset whereas negative relationship exist between government expenditure on health (-0.002410) on return on asset. It was also revealed that the rate at which the independent variables explain what happens on the dependents is 61.0324% which is believed by the researcher to be relatively high. The researcher recommends that government should adopt the UNESCO recommendation of 26% education budgetary allocation rather than the current 7.02% allocated to education sector in Nigeria, this can be achieved through increase in budgetary allocation to education sector. This will serve as boost to education sector and revive the dilapidating nature of our academic sector

Keywords: Human resource management, Government expenditure, Education, Health

INTRODUCTION

Human Resource Management (HRM) is the function within an organization that focuses on recruitment of, management of, and providing direction for the people who work in the organization. They are the set of individuals who make up the work force of an organization. It encompassed activities designed to provide for and co-ordinates, all human element within the organization. This will ensure its stable continuity and achievement. The human personnel element represents one of the company's largest investments (Susan, 2019). Consequently, organization should prioritize the development of the human element to maximize talents, skills and ability which will automatically reflects on the company's profit. It pre-supposes that we do need people in order to firm a business which that no business can exist entirely without people. Even a computer auto-mental machine factory has to employ some people, though a conventional plant with similar capacity might require more people. There arises the need for proper planning of these people employed otherwise known as "Manpower planning". Human Resources Development is one of the activities of Human Resource Management with special emphasis on training and development. It is concerned with the framework for the expansion of human capital within an organisation. Human Resources Development is a combination of Training and Education that ensures the continual improvement and growth of both the individual and the organization (James, 2020). Financial institutions and indeed many organizations today are increasingly recognizing the importance of developing their human resources. This has become very important following the challenges facing them especially the financial institutions due to hyper-competition, globalization and fast paced technology which have continued to put pressure on creativity, innovations, speed and flexibility. It is this realization that the banks are enhancing the competencies of their personnel by providing them with more and more training and development opportunities, maintaining good interpersonal relationship and also creating an atmosphere of trust and confidence (Lawal, 2020).

The training function, popularly referred to as Human Resources Development (HRD), coordinates the organization's efforts to provide training and development experiences for its employees in order to meet up with the challenges. Although training is often used in conjunction with development, the terms are not synonymous. Employee training can be defined as a planned attempt to facilitate employee learning

of job-related knowledge, skills, and behaviors or helping them correct deficiencies in their performance. In contrast, development is an effort to provide employees with the skills needed for both present and future jobs (Ifebi, 2018). The development of any nation depends to a very large extent on the caliber, organization and motivation of its human resources. In the specific case of Nigeria where diversity exerts tremendous influence on politics and administration, the capacity to increase the benefits and reduce the costs of this diversity constitutes a human resource management challenge of epic proportion in its public sector organizations. Effective human resource management enables employees to contribute effectively and productively to the overall company direction and the accomplishment of the organization's goals and objectives. Human Resource Management is moving away from traditional personnel, administration, and transactional roles, which are increasingly outsourced. It now expected to add value to the strategic utilization of employees and that employee programs impact the business in measurable ways. HRM covers a wide range of activities such as recruitment, selection, training, motivation, compensation, evaluation, discipline, and termination of employees. Each of those tasks demands particular skills. Increasingly, human resource management is being recognized for its strategic importance to organizations and jurisdictions, and is moving beyond its traditional position as a monitor of compliance. Within the public sector, many of the most visible and interesting controversies, such as affirmative action, employee ethics, sexual harassment, drug testing, and labour-management relations, are part of human resource management. Human resources also account for the largest percentage of the operating budget for most public agencies, and public administrators must have both an appreciation for the costs of personnel decisions and the ability to project those costs. In addition, constitutional, statutory and regulatory requirements often constrain personnel decisions and actions in the public sector, and public administrators must have a working knowledge of these legal guidelines. Public administrators must recognize the political aspect of human resource management (Hadir, 2016). Human resource management policies and techniques are developed, implemented and evaluated in a public context. Public sector HRM practices effect the selection and experiences of government employees which, in turn, affects public policy. In order to make and implement effective human resource management policies, administrators need an appreciation of the political and historical context in which the policies have developed to date.

In the current environment, a professional public administrator must be prepared to advocate for the strategic importance of human resources, find ways to be flexible and responsive to change, adapt to changing patterns of employment and inter sectoral relations, utilize technology to more effectively communicate with prospective and existing employees, and develop more sophisticated and effective methods of measuring and rewarding performance (Ingraham and Rubaii-Barrett, 2007). Human Resources Development approach has not taken a planned route in most instances. These days what obtains in most financial institutions is an aberration of the real sector. Following the reduction of banks, many banks are now more interested in pursuing deposits to enable them meet up with the competitive nature of the business and keep abreast with the Central Bank of Nigeria Policy. This craze has further led some of the institutions to move farther away from the issue of human resource development. Employees are most often engaged solely on grounds of mobilizing deposits without proper training. There are cases of poaching from one bank to another. A case of which some banks watch out (poaching)for employee of other banks who are sent on training for a mouth watering offer to such staff. Apart from deposit mobilization issues such as leadership and managerial programs which covered numerous topics such as; Banking Payment Systems, Anti Money Laundering, terrorist financing, International Economy, Mutual Funds, Islamic Banking and Finance, Banking Policies, Financial Markets, Information Technology, Human Resources Development, and Insurance all these are global economic issues which banks are expected to handle with seriousness and educate their staff on. These issues are not just for bank response to global situation, but countries are also assessed based on some of these economic activities. These account for the reason the apex bank in Nigeria has continued to reform the banking industry through the consolidation policy, financial year harmonization policy and constant issue of circulars on sensitive issues such as the terrorist financing and money laundering matter and impose penalty on banks who fail

to comply. Yet it is very unfortunate to note that many employees do not know what these issues are all about due to lack of training or education on the issues (Hallats, 2017).

Some employees continued to be trained in an unplanned manner without strict accordance to the actual requirements. This predictably often results in an imbalance of staff. Apart from imbalance of staff, in many instances, the distribution and availability of staff is uneven with large concentrations in marketing department. The new categories are trained in an ad hoc manner; their numbers, deployment, and duration of training vary widely. This uneven distribution of staff often leave gaps and raises issues of inappropriate and wasteful use of personnel with higher skills. Lack of research on the relevance and utilization of available human resources in relation to the bank needs and their performance characterizes the management of human resources in most financial institutions in Nigeria (Gokal, 2019). Training and educational contents are not systematically and regularly tested for relevance to the changing requirements of the financial situations and services. It has also been observed that most employees make little or no effort to develop themselves and or increase their careers that will help to progress their job and employability. The above-mentioned problems and issues call for a revised and appropriate strategic approach to human resource development with a forward look to fit with the changing global economic situation with changing social, economic and environmental conditions.

LITERATURE REVIEW

Conceptual Clarifications

Human Resource Management

The concept of human resource management has its roots in the traditional thinking in the field of personnel management and administration but represents contemporary sophisticated views and ways of managing people at work in the public sector. Human resource management evolved from personnel management. This never term according to Ikeagwu (2003) assumes a different position and tackles organizational problems from a different direction. It takes into account activities like planning, monitoring and control rather than mediation between employee and management of a public sector organization. Human Resource Management is the organizational function that deals with issues related to people such as compensation, hiring, performance management, organizational development, safety, wellness, benefits, employee motivation, communication, administration, and training. Human Resource Management is also a strategic and comprehensive approach to managing people and the workplace culture and environment. Effective (HRM) enables employees to contribute effectively and productively to the overall company direction and the accomplishment of the organization's goals and objectives. Human Resource Management is moving away from traditional personnel, administration, and transactional roles, which are increasingly outsourced. (HRM) is now expected to add value to the strategic utilization of employees and that employee programs impact the business in measurable ways. The new role of (HRM) involves strategic direction and (HRM) metrics and measurements to demonstrate value.

This means that human resource management involves every aspect of dealing with employee as resources. This view was upheld by Colby and Alkon (1999) and Byars and Rues (1991) in their attempt to come up with a meaningful definition of human resource management. Colby and Alkon's views were more or less in line with personnel functions or human resource functions in that they stated in their text that human resources management involves every aspect of dealing with employee as resources as such as planning, staffing, training and development, performance appraisal and compensation. Their views however differs from those of Byars and Rues conclusion in that the latter sees human resource management in the aspect of wages and salaries and still support the former's view by including recruiting, hiring, and training as the major functions of human resources management. Human resource management can also be seen as that which involves all management decisions and practices that directly affect or influence the people who work for the organization. This definition of human resource

management is broader and more practical oriented than personnel management put by Fillipo (2005). Wikipedia defines Human Resource Management (HRM) as the management of an organization's employees. While human resource management is sometimes referred to as a "soft" management skill, effective practice within an organization requires a strategic focus to ensure that people resources can facilitate the achievement of organizational goals. Human resource management is defined as a strategic and coherent approach to the management of an organization's most valued assets – the people working there who individually and collectively contribute to the achievement of its objectives.

Banking

Banking represent the means and methods through which funds are obtained, controlled, allotted and used (Ciuhureanu, Balteş&Brezai, 2009), a bank can be associated with a financial service conglomerate which is able to provide basic financial services and other functions within the economic, political, legal and international environment that determines its profit and expansion opportunities, interest rates, exchange rates and the particular resources a bank need (Drigă, 2006). The efficiency and effectiveness of the banking system is a key determinant of the economy growth of a nation (Dura &Drigă, 2015). The existence of an effective banking industry is a panacea to growing any nation's economy. The pivot of any economic development is the financial sector through its creditable roles in intermediating funds/capital from the surplus units to deficit units. These two laudable and reliant functions bring the banks face to face and in contact with the public who come to obtain their services. However, the roles of mobilizing deposit (surplus) and directing such deposit to the deficit sectors of the economy makes DMBs to attend to a large number of customers who they may not, most of the time, personally know, or whose identity may not be immediately known to the banks. This shows that banks may not be familiar with the true identity of these customers all of whom either have genuine/honest or fraudulent intentions (Dimejesi, 2014).

Principles of Human Resource Management

Business consultants note that modern human resource management is guided by several overriding principles. Perhaps the paramount principle is a simple recognition that human resources are the most important assets of an organization; a business cannot be successful without effectively managing this resource. Another important principle, articulated by Michael Armstrong in his book A Handbook of Human Resource Management, is that business success "is most likely to be achieved if the personnel policies and procedures of the enterprise are closely linked with, and make a major contribution to, the achievement of corporate objectives and strategic plans." A third guiding principle, similar in scope, holds that it is HR's responsibility to find, secure, guide, and develop employees whose talents and desires are compatible with the operating needs and future goals of the company. Other (HRM) factors that shape corporate culture whether by encouraging integration and cooperation across the company, instituting quantitative performance measurements, or taking some other action—are also commonly cited as key components in business success. (HRM) summarized Armstrong, "is a strategic approach to the acquisition, motivation, development and management of the organization's human resources. It is devoted to shaping an appropriate corporate culture, and introducing programs which reflect and support the core values of the enterprise and ensure its success."

Financial Performance

Financial Performance in broader sense refers to the degree to which financial objectives being or has been accomplished and is an important aspect of finance risk management. It is the process of measuring the results of a firm's policies and operations in monetary terms. It is used to measure firm's overall financial health over a given period of time and can also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. Firms and interested groups such as managers, shareholders, creditors, and tax authorities look to answer important questions such as; what is the financial position of the firm at a given point of time? and;

how is the Financial Performance of the firm over a given period of time?.These questions can be answer ed with the help of a financial analysis of a firm. Financial analysis involves the use of financial statements. A financial statement is a collection of data that is organized according to logical and consistent accounting procedures. Its purpose is to convey an understanding of some financial aspects of a business firm. It may show a position of a period of time as in the case of a Balance Sheet, or may reveal a series of activities over a given period of time, as in the case of an Income Statement. Thus, the term 'financial statements' generally refers to two basic statements: the Balance Sheet and the Income Statement. The Balance Sheet shows the financial position (condition) of the firm at a given point of time. It provides a snapshot that may be regarded as a static picture. "Balance sheet is a summary of a firm's financial position on a given date that shows Total assets = Total liabilities + Owner's equity." The Income Statement (referred to in India as the profit and loss statement) reflects the performance of the firm over a period of time. "Income statement is a summary of a firm's business revenues and expenses over a specified period, ending with net income or loss for the period." However, financial statements do not reveal all the information related to the financial operations of a firm, but they furnish some extremely useful information, which highlights two important factors profitability and financial soundness.

Position and Structure of Human Resource Management

Human resource management department responsibilities can be broadly classified by individual, organizational, and career areas. Individual management entails helping employees identify their strengths and weaknesses; correct their shortcomings; and make their best contribution to the enterprise. These duties are carried out through a variety of activities such as performance reviews, training, and testing. Organizational development, meanwhile, focuses on fostering a successful system that maximizes human (and other) resources as part of larger business strategies. This important duty also includes the creation and maintenance of a change program, which allows the organization to respond to evolving outside and internal influences. The third responsibility, career development, entails matching individuals with the most suitable jobs and career paths within the organization. Human resource management functions are ideally positioned near the theoretic center of the organization, with access to all areas of the business. Since the (HRM) department or manager is charged with managing the productivity and development of workers at all levels, human resource personnel should have access to—and the support of key decision makers. In addition, the (HRM) department should be situated in such a way that it is able to effectively communicate with all areas of the company. (HRM) structures vary widely from business to business, shaped by the type, size, and governing philosophies of the organization that they serve. But most organizations organize (HRM) functions around the clusters of people to be helped—they conduct recruiting, administrative, and other duties in a central location. Different employee development groups for each department are necessary to train and develop employees in specialized areas, such as sales, engineering, marketing, or executive education. In contrast, some (HRM) departments are completely independent and are organized purely by function. The same training department, for example, serves all divisions of the organization.

In recent years, however, observers have cited a decided trend toward fundamental reassessments of human resources structures and positions. "A cascade of changing business conditions, changing organizational structures, and changing leadership has been forcing human resource departments to alter their perspectives on their role and function almost overnight," wrote John Johnston in Business Quarterly. "Previously, companies structured themselves on a centralized and compartmentalized basis—head office, marketing, manufacturing, shipping, etc. They now seek to decentralize and to integrate their operations, developing cross-functional teams. Today, senior management expects (HR) to move beyond its traditional, compartmentalized 'bunker' approach to a more integrated, decentralized support function." Given this change in expectations, Johnston noted that "an increasingly common trend in human resources is to decentralize the (HR) function and make it accountable to specific line management. This increases the likelihood that (HR) is viewed and included as an integral part of the business process,

similar to its marketing, finance, and operations counterparts. However, (HR) will retain a centralized functional relationship in areas where specialized expertise is truly required," such as compensation and recruitment responsibilities.

Need for Human Resources Development

The importance of human resource development in nation development has been extensively discussed and demonstrates by outstanding scholars all over the worlds. Harbison (1993) human resources are not capital, neither income nor material resources constitutes the ultimate basis for the wealth of a nation. Capital and natural resources are passive factors of production; human beings are the active agents who accumulate wealth, exploit material resources, build socio-economic and political organization and carry out national development. Highly skilled human resources is a pre-requisite for overall economic and national development. He states that security of qualified personnel has impeded the economic growth and development in Nigeria. The overriding importance of human resources development without which we overcome the continuing shortage of trained people as we strive to throw off the bonds of economic backwardness and seek to achieve the socio-economic objective of our national development plan.

In all economic activities, human effort is necessary to work machines, milk cows, harvest crops, load a van, sell goods, keep accounts and so on. This human effort which is vital to production is called labour. It can be manual (working with one's hand or it can be mental labour using head or brain). The economists are interested in the quality of labour: where it is good or bad depends on several factors such as education and training, personal health, organization of labour work conditions, attitudes towards the work, relationship between the senior management and the low level worker.

Human Resource Management and Labor Productivity

Recent years have witnessed burgeoning interest in the degree to which human resource systems contribute to organizational effectiveness. Pfeffer (1994), for example, argued that success in today's hypercompetitive markets depends less on advantages associated with economies of scale, technology, patents, and access to capital and more on innovation, speed, and adaptability. Pfeffer further argued that these latter sources of competitive advantage are largely derived from organizations' human resources. On the basis of these and similar arguments, Pfeffer (1994, 1998) and others (Levine, 1995) have strongly advocated greater organization investments in high-performance or high-involvement human resource systems, which are systems of human resource (HR) practices designed to enhance employees' skills, commitment, and productivity. Managers know that people make the critical difference between success and failure. The effectiveness with which organizations manage, develop, motivate, involve and engage the willing contribution of the people who work in them is a key determinant of how well those organizations perform. Yet, there is surprisingly little research demonstrating the causal links between people management and business performance. Management practices and styles lead to more motivated, satisfied, or productive employees. However, demarcated work is done that apply rigorous, comparative analysis over time to the individual elements of management activity and measure the contribution they make to performance.

The performance of organizations has been the focus of intensive research efforts in recent times. How well an organization implements its policies and programs and accomplishes its strategic intent in terms of its mission and vision is of paramount concern. Managers in both private and public organizations are becoming increasingly aware that a critical source of competitive advantage often not come from indigenous product and services, best public relations strategy, state-of-the-art technology but from having an appropriate system of attracting and managing the organization's human resources. Are such progressive people management practices the only route to enhanced business performance? It is a fact of life that some companies are profitable despite making little or no use of such practices. These companies may possibly be in production sectors where jobs require little input from the employee other than sustained effort; or in small service operations competing on price rather than quality. However, where businesses face international competition; where they are committed to excellence and quality standards;

where creativity and innovation are essential to moving the business forward – employee commitment and a positive psychological contract' between employer and employee are fundamental to improving performance.

Although, there are differences across commentators as to what constitutes 'good' HRM practices, many writers (Huselid, 1995) have argued that HRM practices can improve company performance by increasing employee skills and abilities, Promoting positive attitudes and increasing motivation, providing employees with expanded responsibilities so that they can make full use of their skills and abilities. In comparative study, the HRM practices included are Incentive pay, Recruitment and selection, Work teams, Employment security, Flexible job assignment, Skills training and Communication. Some strategic HRM practices: strategic HRM alignment, line management devolvement, training and development, compensation system, career planning system and employee participation are positively related to perceptual measures of organizational effectiveness. They show decisively that people management practices have a powerful impact on performance. Whether performance is measured in terms of productivity, which might be expected to have stronger links with the way in which companies manage their people or profitability, in both cases the effect is substantial. There is now a considerable body of work proposing that high quality people management can provide organizations with a source of competitive advantage that it is difficult for competitors to imitate. It is the management of human capital, rather than physical capital that is seen as the most important determinant of company performance. The more sophisticated the HRM system the more effective is the organization. HRM practices do lead to organizational effectiveness.

Empirical Review

Adenuga (2018) examined the relationship between human resource management and financial performance of deposit money banks using Nigerian data from 1970 to 2013. The independent variables included in the research work are government expenditure in education, government expenditure on health, inflation and interest rate whereas the dependent variable is the national growth rate proxied by real gross domestic product. The researcher applied co-integration analysis incorporating the Error Correction Mechanism and found that investment in human capital through the availability of infrastructural requirements in the education sector accelerate economic growth. This study concludes that there will be no significant economic growth in any economy if there is no human capital development. Wahab (2018), examined the relationship between human resource management and financial performance of deposit money banks. The study captured several independent variables such as unemployment, interest rate, government expenditure on health and education whereas the dependent variable is real gross domestic product. The study stressed that investment in quantity and quality of Education would boost Human capital and bring about growth and sustainable economic development. Ordinary Least Square technique was used to estimate the model of the study. The findings showed that there is direct relationship between investment in education and economic growth in Nigeria. The growth model also indicated that to include more than one economic sector and to consider technology, spillover across sectors. Ogunrinola (2018), examined the relationship between human capital development efforts of the government and economic growth in Nigeria. It seeks to find out the impact of government recurrent and capital expenditures on education and health in Nigeria and their effects on economic growth. The data used for the study are from secondary sources while the augmented Solow model was also adopted. The study adopts OLS regression techniques. The dependent variable in the model is the level of real output while the explanatory variables are government capital and recurrent expenditures on education and health, gross fixed capital formation and the labour force. The result shows that there exists a positive relationship between government recurrent expenditure on human capital development and the level of real output, while capital expenditure is negatively related to the level of real output. The study recommends appropriate channeling of the nation's capital expenditure on education and health to promote economic growth.

Alani (2018), evaluated the contribution of different measures of human capital development to economic growth in Nigeria. It used data from Nigeria and adopted the growth account model which specifies the growth of GDP as a function of labour and capital. The study adopted Ordinary Least Square (OLS) regression techniques. The model also included a measure of policy reforms. Based on the estimated regression and a descriptive statistical analysis of trends of government commitment to human capital development, it was found that though little commitment had been accorded to health compared to education, empirical analysis showed that both education and health components of human capital development are crucial to economic growth in Nigeria. Ibanga (2018), investigated the impact of human capital development and economic empowerment on the socio-economic development of Akwa-Ibom state. The study adopted a historical and descriptive approach in data allocation and applied the maximum likelihood method. The study revealed that from 1999 to 2012, the government being the foremost driver of the economy has made a positive impact on the training and re-training of workers in the public sector. The study also revealed that, aside from training, the government also embarked on elaborate empowerment programs which has helped so many people to become self- employed as well as employers of labours. Based on these findings, the study recommended among others that government should embark on extensive training of domestic engineers in the areas of oil and gas in the state. Adelakun (2018) examined human capital development and the economic growth in Nigeria. The study was anchored on various independent variables such as interest rate, inflation rate, government expenditure and unemployment whereas the dependent variable is national output. The researcher described human capital as an important factor used in converting all resources to mankind's use and benefit. The study evaluates human capital development and economic growth in Nigeria by adopting conceptual analytical framework as well as employing Ordinary Least Square (OLS) to analyse the relationship between human capital development and economic growth. The findings revealed that there is strong relationship between human capital development and economic growth. The policy implication recommends that proper institutional framework should be put in place to look into manpower needs of various sectors and implement policies that can lead to the overall growth of the economy.

Shaari (2017), investigated the impact of human capital development on economic growth in Nigeria during the period 1970 to 2008. Johansen co-integration technique and vector error correction analysis were used to ascertain this relationship. The basic macroeconomic variables of concern derived from the literature review are: Real gross domestic product (RGDP), real capital expenditure (RCE) on education, real recurrent expenditure (RRE) on education, real capital stock (RCS), total school (SCHE) enrolments and labor force (LF) are used to proxy human capital development. The result indicated that human capital development has a significant impact on Nigeria's economic growth. Dauda (2017), using the human capital model of endogenous growth developed by Mankiw, Romer and Weil (1992), examined empirically the role of human capital in Nigeria's economic development. The paper employed a variety of analytical tools, including unit root tests, co-integration tests and error correction mechanism (ECM). Empirical results indicate that there is, indeed a long-run relationship among labour force, physical capital investment proxied by real gross domestic capital formation, human capital formation, proxied by enrollment in educational institutions and economic growth in Nigeria. Findings show that there is a feedback mechanism between human capital formation and economic growth in Nigeria. Thus, the policy implication of the findings is that government should place a high priority on human capital development. Efforts should be intensified to increase investment in human capital to achieve the growth which would engender economic development. Most importantly, education should be given prominence in Nigeria's developmental efforts. This would propel the economy to higher levels of productivity.

Theoretical Framework

Theory of Human Resource Management

Human resource management (HRM) has the key role in the today's competitive work environment. The style and management of human resource systems based on employment policy, comprising a set of

policies designed to maximize organizational integration, employee commitment, elasticity, and quality of work (Alagaraja, 2013). HRM is defined as a strategic and compatible approach to management of an organization's most approached assets – the people working there who one by one and jointly contribute to the accomplishment of its objectives. According to Armstrong, the main aim of human resource management is to provide that the organization can achieve success through people (Armstrong, 2006).The human resource management function can and progressively is making important contributions to building an organization that is staffed by the right human capital to effectively make real the work of the firm and to provide the achievement of business strategy (Mohrman, 2003). Definitions of human resources can be classified under two broad stages: generalist and distinctive. The first category mainly includes concepts proposed by the human resource management perspective, where "human resources" cover all people under employment at a special organization. The second category puts an emphasis on employees' abilities, knowledge, attitudes and experience. Most of definitions show that human resource management is the basic element for organizations. Some definitions focus on the solving problem aspect of human resource management practices, the other of definitions show that role of human resource management practices on organizational performance. Under the today's market conditions, each of organizations must have the department of human resource management to compete. Otherwise, they cannot survive in difficult conditions of the market for a long time. Without understanding effect of HRM the organization cannot take competitive advantages against its competitors.

METHODOLOGY

For this study, the research design adopted is the *Ex-Post Facto.* The *Ex-Post Facto* design was used because the study is a quasi-experimental study examining how independent variables affect a dependent variable. This study is built on a multiple regression model and made use of econometrics procedure in estimating the relationship between the variables under study. The fundamental relationships between the dependent variable and independent variables are specified as follows and the functional form of the model is specified as:

ROA = f (GEXPH, GEXPE)……………………………………….…………….. (3.1)

The mathematical form of the model is specified as:
$ROA_t = \beta_0 + \beta_1 GEXPH_t + \beta_2 GEXPE_t$ ……………………...………………...……. (3.2)

This econometric form of the model is specified as:
$ROA_t = \beta_0 + \beta_1 GEXPH_t + \beta_2 GEXPE_t + \mu_t$...… (3.3)

$\beta_1 > 0, \beta_2 > 0, \beta_3 > 0$

Where:

ROA = Return on Asset (Proxy of financial performance)
f= functional relationship
GEXPH = Government expenditure on health (Proxy of human resource management)
GEXPE = Government expenditure on education (Proxy of human resource management)
β_0 = Constant
$\beta_1, \beta_2, \beta_3$= are the relative slope coefficients and partial elasticity of the parameters.
µt = stochastic error term

RESULT AND DISCUSSION

In this section, we present the regression results and subject them to various economic, statistical and econometric tests. The hypotheses posed earlier in this study are tested based on these empirical results.

Unit Root Test

Table 4.1 Summary of Regression Result

VARIABLES	ADF test Statistics	5% critical Value	Order of Integration
ROA	-2.928847	-1.950117	Level form I(0)
GEXPE	-4.408418	-3.580623	First Order I(1)
GEXPH	-8.287263	-3.540328	First Order I(1)

From the result of the stationarity test conducted through Eviews statistical software, return on asset is stationary at level form whereas government expenditure on education and government expenditure on health are stationary at first difference. Since all the variables are not stationary at level, there is a need to conduct a cointegration test so as to ascertain if there is long run relationship among the variables under study.

Co-integration Test

To test for co-integration among the variables, we carried carry out ADF test on the regression residuals as proposed by Gujarati (2004). The ADF unit root test on the residuals work with the same decision rule as unit root test. Accept the null hypothesis if the Augmented Dickey-Fuller test statistics is lower than the 5% level of significance, otherwise, reject the null the hypothesis.
The co-integration test result is summarized as follows:

Table 4.2: Co-integration Test Result

Null Hypothesis: ECT has a unit root				
Exogenous: Constant, Linear Trend				
Lag Length: 0 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-6.850776	0.0000
Test critical values:	1% level		-4.226815	
	5% level		-3.536601	
	10% level		-3.200320	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(ECT)				
Method: Least Squares				
Date: 03/02/22 Time: 20:54				
Sample (adjusted): 2010 2021				
Included observations: 11 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.

ECT(-1)	-1.158799	0.169149	-6.850776	0.0000
C	-0.258999	0.467072	-0.554516	0.5829
@TREND("1981")	0.012296	0.020625	0.596166	0.5550
R-squared	0.579902	Mean dependent var		-0.027927
Adjusted R-squared	0.555190	S.D. dependent var		2.001280
S.E. of regression	1.334735	Akaike info criterion		3.492947
Sum squared resid	60.57157	Schwarz criterion		3.623562
Log likelihood	-61.61952	Hannan-Quinn criter.		3.538995
F-statistic	23.46674	Durbin-Watson stat		2.020903
Prob(F-statistic)	0.000000			

In the e-views generated co-integration test result above, the ADF test statistics (-6.850776) is greater than the 5% critical value (-3.536601) in absolute terms. This implies that the residuals are stationary (that is, the variables are co-integrated or that the linear influence of the independent variables cancels out) and the variables have long-term relationship.

Error Correction Mechanism Test

Table 4.3: Error Correction Mechanism Test Result

Dependent Variable: RGDPGR				
Method: Least Squares				
Date: 10/02/21 Time: 20:55				
Sample (adjusted): 1983 2019				
Included observations: 37 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.155814	2.732600	-1.154876	0.2576
D(GEXPE)	0.004500	0.009784	3.459885	0.0490
D(GEXPH)	-0.002410	0.010970	-5.219656	0.0277
ECT(-1)	-0.165177	0.194542	-0.849055	0.4028
R-squared	0.610324	Mean dependent var		0.817405
Adjusted R-squared	0.604425	S.D. dependent var		1.379593
S.E. of regression	1.449836	Akaike info criterion		3.769589
Sum squared resid	60.95873	Schwarz criterion		4.117895
Log likelihood	-61.73739	Hannan-Quinn criter.		3.892383
F-statistic	5.513736	Durbin-Watson stat		2.016426
Prob(F-statistic)	0.016633			

Source: Eviews Computations

The e-views generated error correction mechanism result shows the magnitude of the short run disparity to be -0.165177, that is to say the degree of the short run dynamics is 16.5177percent. This shows a very low speed of adjustment to equilibrium after a shock.

Regression Result

In the regression result, the variables under consideration are return on asset (dependent variable), government expenditure on health and government expenditure on education as the independent variables. From the result the estimated coefficient value of b_o, b_1, and b_2, are -3.155814, 0.004500, -0.002410, respectively.

Evaluation of Regression Results

Evaluation Based on Economic Criterion

The regression results is been evaluated based on a priori expectations in this section. The signs and magnitude of each variable coefficient is evaluated against theoretical expectations. The constant term is estimated at -3.155814This means the model passes through the point 3.155814 mechanically and if the independent variables are equal to zero, return on asset would be -3.155814. The estimated coefficient for GEXPE is 0.004500 meaning that if other variables affecting return on asset are held constant, a unit increase in government expenditure on education will bring about a 0.004500 increase in return on asset on the average. Likewise, the estimated coefficient of Government on health is -0.002410, meaning that holding all other variables affecting return on asset constant, a unit increase in GEXPH will bring about a -0.002410 decrease in return on asset.

Evaluation Based On Statistical Criterion

R^2–Result and Interpretation

The coefficient of determination (R^2) is given as 0.610324 this implies that 61.0324% of the variation in return on asset is explained by the variation in GEXPE, and GEXPH,

t–Test Result and Interpretation

To find the tabulated t-value, we use degree of freedom (df) and 5% level of significance: 2/100=0.05/2=0.025

$T_{0.025,}$df: df=n-K. where n=11 and K=3

df=11-3=8. Therefore; df=8

From the t-Test distribution table, the t-tabulated value is equal to $t_{0.025,32}$= 1.960

The result of the t-test of significance is shown in table 4.5 below:

The result of the t-test is presented below and evaluated based on the critical value (1.960) and the value of calculated t-statistics for each variable.

Table 4.5: Result of t-Test of Significance

VARIABLES	t-computed (t*)	t-tabulated ($t_{a/2}$)	Conclusion
GEXPE	3.459885	1.960	Significant
GEXPH	-5.219656	1.960	Significant

Table 4.5 shows that government education expenditure has significant impact on the return on asset in Nigeria, this is because the $t^* > t_{a/2}$ (-3.459885>1.960). Therefor, we reject the null hypothesis (H_o) and accept the alternative hypothesis (H_1) which states that government education expenditure has significant impact on the return on asset. For GEXPH, $t^* > t_{a/2}$(-5.219656>1.960), therefore we accept the null hypothesis (H_0) which states that government expenditure on health has no significant impact on the return on asset.

Result and Interpretation of F–Test of Significance

v_1=3-1=2, V_2=11-3=8, df= (2,8) at 5% level of significance and df= (2,8), $f_{0.05}$= 3.32 and F*= 5.513736. Since f*> $f_{0.05}$, we reject the null hypothesis and conclude that the variables; GEXPE, and GEXPH, have joint inference on return on asset. This implies that the entire regression plain is significant.

Evaluation Based on Econometric Criterion

Result and Interpretation of Autocorrelation Test

Using the durbin-watson statistics, the region of no autocorrelation (positive or negative) is given as follows:

du< d*< (4-du)
du= 1.58
d*= 2.016426
(4-du)= 4 – 1.58= 2.42
By substitution, the region becomes:
1.58<2.016426<2.42
The result shows that there is presence of autocorrelation problem in the model as the computed durbin Watson statistics does not fall within the zero autocorrelation regions.

Normality Test Result and Interpretation

The Normality test was done using the Jaque-Berra test of normality Jaque-Berra test of normality is hinged on the hypothesis that K is close to or exactly 3 and S is close to or exactly o, thus making the JB value close to or equal to O, which is the condition for normal distribution.

Decision rule:

For the residual to be normally distributed, the K value should be drawing close to or exactly three (3) and S should draw close to or exactly zero (0), thus making the JB value close to or equal to zero (0), which is the condition for normal distribution.

Table 4.6 Result of Normality Test

Skewness	Kurtosis	Jarque-berra	Probability	Test
1.787104	10.32862	102.4956	0.000000	ND

ND- Normally distributed

CONCLUSION AND RECOMMENDATIONS

From the normality table, the Jaque-Berra draw close to zero (0) as stated, this implies that the residuals are not normally distributed.

Evaluation of Research Hypotheses

Hypothesis one: based on the decision rule of the t-statistics, government expenditure on education, and government expenditure on health have significant impact on the return on asset in Nigeria. More so, the rate at which the independent variables jointly affect the dependent variable is 61% which is considered to be very high by the researcher. From the regression result government expenditure on education and government expenditure on health have significant impact on the return on asset; this implies that government expenditure on education and government expenditure on health are significant variables to determine economic growth in Nigeria. The study investigates the impact of human resource management on financial performance of deposit money banks. To conduct the analysis, a multiple regression model was built to test for the impact of human resource management on financial performance of deposit money banks.

The finding of the study reveals a positive relationship between government expenditure on education (0.004500), on the return on asset whereas negative relationship exist between government expenditure on health (-0.002410) on return on asset. It was also revealed that the rate at which the independent variables explain what happens on the dependents is 61.0324% which is believed by the researcher to be relatively high. Based on the findings of this study, we conclude that government expenditure on education has positive relationship on the return on investment whereas government expenditure on health has negative relationship on the return on asset within the period under study.
It can be concluded that government expenditure on education and government expenditure on health have significant impact on the economic growth in Nigeria and also that the residuals are not normally distributed as the probability value of the normality test is below the 0.05 criterion mean level. From the findings of this study, the following recommendations are given;

i. The government should adopt the UNESCO recommendation of 26% education budgetary allocation rather than the current 7.02% allocated to education sector in Nigeria, this can be achieved through increase in budgetary allocation to education sector. This will serve as boost to education sector and revive the dilapidating nature of our academic sector.
ii. Budgetary allocation on health should be increased from its present 4.16 percent to 10 percent world health organization recommendation; this will enhance the performance of the health sector, thereby encouraging increase in labour productivity as a result of good health which on the long run will increase the economic growth and development of the nation.
iii. The government and its education and health agencies should as well reach out to rural communities in a bid to provide educational and health facilities for the dwellers of such places through direct intervention and proactive approach, this will increase the human capital development of the country and the economic growth of Nigeria.

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Impact of Non-Performing Loans on Profitability of Deposit Money Banks in Nigeria

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Abstract

This study examines impact of Non-Performing Loans on Profitability of Commercial Banks in Nigeria. The cardinal objective is to investigate the relationship between Non-Performing Loans Ratio (NPLR) and Return on Assets (ROA) from 2011 to 2012. Simple linear regression model and data collected from secondary sources; Audited Annual Reports of listed commercial banks in Nigeria and the Nigerian Exchange Group Plc were used to conduct analysis. The findings reveal the independent variable (NPLR) impacts on the dependent variable (ROA). We recommend the regulatory bodies introduce incentive system to reward the banks that operate within their NPLR threshold. The banks should evolve a mechanism of detecting Non-Performing Loans early, conduct periodic test on collaterised assets against impairments and upgrade accordingly and monitor loans granted from disbursement to the end to ensure the funds are not mis-used.

Keywords: Return on Assets, Non-Performing Loan Ratio, Quoted commercial banks, Agency Theory, Information Asymmetry Theory

INTRODUCTION

Deposit Money Banks (DMBs) otherwise called commercial banks play an indispensable role in the attainment of economic growth and development of nations. Through financial intermediation, banks transform short-term deposits into medium and long-term credits by lending surplus deposits of the community for different investment purposes to develop the economy (Yvonne, 2015). According to Wanjira (2016), lending is the core business of commercial banks and this also contributes significantly to probability of default. Although other sources of default exist through other activities of the banks that undermine intermediation role of banks. In consideration of the fact that Non-Performing Loans (NPLs) are mainly responsible for the occurrence of Credit Risk, banks are therefore expected to adhere strictly to well-defined credit criteria as improper management of loans could lead to bank failure (Wanjira, 2016).

Profit maximation is one of the prime objectives of Commercial banks but rising non-performing loans continue to threaten the profitability of the banking sector. Moreover, the existence of Non-Performing Loans in the operations of commercial banks is not without severe negative implications on the banking system and the economy as a whole.As a consequence, management of commercial banks spends heavily in trying to recover non-performing loans thus worsening already bad situation. The banks continue to incur opportunity costs as the affected funds would have been invested in other income generating areas. Also, the statutory deductions in terms of provisions for Non-Performing Loans against the statement of financial performance may not only reduce profitability but managers could capitalize on the situation to indulge in profits smoothening.Excessive level of Non-performing Loans in the banking sector creates panic in management as their efforts would be mainly geared towards the recovery of bad loans instead of concentrating on strategies to grow the business. Management's lending appetite would equally change as they become risk shy by concentrating on giving out risk free loansonly toprospective loanees toprevent further non-performing loans, an art capable of nose-diving the entire economy.Non-Performing Loans have become a global challenge hampering the financial performance of financial institutions (Talata, 2015). In Nigeria, NPLs have assumed an alarming dimension for recent past decades due to a number of factors that need urgent attention. Non-Performing Loans rose from 3.3% in 2013 to 6.1% in 2020. The CBN's 2020 4th quarter economic report revealed NPL ratio for the month of December 2020 increased from 6.06% in December 2019 to 6.1% In spite of the mechanisms put in place by the relevant authorities to ensure problems loans are curtailed, they have continued to increase uncontrollably. Therefore, considering the unique features of commercial banks in relation to their operations, continuous increase in NPL level requires further investigations among researchers with a view to further addressing the impact on profitability of firms, particularly commercial bank in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Non-Performing Loans

Non-Performing Loans have been defined in different ways and the variation that exists in terms of classification (system, scope and contents) shows there is no generally accepted definition (Awuor, 2015). The World Bank defined NPLs as ratio of nonperforming loans to aggregate amount of loans of which the non-performing loans variable is without provisions for loan losses. The loan value recognized in the statement of financial position represents the non-performing loans not the amount that is simply past due. Also, the International Monetary Fund described NPLs as; the inability of borrowers to pay amount due (principal and interest) for a period of eight weeks and six days upwards; adding a minimum of 8 weeks and 6 days old interest to the outstanding balance; replacing the existing loan with another under different conditions after 8 weeks and 6 days; not making payment as scheduled due to a new arrangement after 8 weeks and 6 days and; existence of the probability that the loan sum will not be completely settled even if the period is below 8 weeks and 6 days.

Hamisu (2011) stated that poor corporate governance practices, lax credit administrative processes and absence or non-adherence to credit risk management practices are responsible for the alarming rate of NPLs. Again, most of the NPLs are due to unprofessional manner Nigerian banks managements disburse loans usually influenced by personal affiliation with their customers. Instead of granting loans to borrowers in accordance with the standard provided by the banks, they gave loans to customers without recourse to the set standards by banks to control such lending thus, turn the loans to non-performing in future (Adebisi, Benjamin & Matthew 2015).Base on the forgoing, NPL could be defined as the deliberate or non-deliberate refusal of loanees to honour the loan repaymentagreement due to pre and post actions or inactions of management. The determinants of Non-Performing Loans includes; Liquidity Ratio(LR), Non-Performing Loans to Total Loan Ratio(NPL Ratio), Cost Efficiency (CE), and Economic Growth (EG) (Dang &Uyen, 2011). Liquidity Ratio measures the ratio of total loan disbursed to the total deposit. Non-Performing Loans (NPL) is a function of the proportion of loans granted to customers of which the possibility of recovery is in doubt. The management of banks continuously evolves strategies to keep NPL ratio at minimal level to boost customers confidence in the safety of their investments thus increase the ability of the banks in generating profits through the use of its assets (Fiola, C.&Ratnawati, K., 2016).

Profitability

Profit maximization is one of the fundamental objectives of commercial banks and operating otherwise could lead to closure of banks. Profitability occurs where revenue generated exceeds expenses incurred in making it for same period of time (Sanni, 2006). According Ahmed (2003), the widely used indicators of profitability includes, Net Interest Margin(NIM), Return on Assets(ROA) and Return on Equity (ROE). Although, the concept of banks profitability has drawn the attention of many scholars to examine its determinants, they are yet to settle the controversy of superiority of one measure of profitability to another. Goudreau and Whitehead (1989) and Uchendu (1995) weighted NIM, ROA and ROE equally. Net Interest Margin is the ratio of the difference between interest receipts and payments to the total sum of interest-earning assets controlled by the bank.Return on Equity measures number of naira in terms of profits generated for each naira of shareholder’s fund; it is a metric of how well the bank uses its equity to maximize profits. The determination of profitability of a financial establishment base on its assets is referred to as Return on Assets (Rahman,Asaduzzaman&Hossin, 2017). The interest earning capacity and profitability of banks are reduced due to the provisions they make on account of non-performing loans. Even though net profit gives a clue of the financial performance of banks, it does not take bank’s size into consideration. Therefore, it will be misleading to compare the results of one bank with another without adjusting for bank’s size.
Although other methods of computing profitability of banks adjusting for size exist, but the most popular one is Return on Assets is a key ratio that indicates the profitability of banks. For instance, how efficient the management is in producing the net profit is determined by ROA. This means an improved ROA signifies efficiency in the utilization of resources by management (Wen, 2010). Therefore, ROA will be used for measurement of profitability in this study.

Empirical Framework

Flola, C. and Ratnawati, K. (2016) examined Impact of Financial Ratios, Operational Efficiency and Non-Performing Loans on Profitability of banks listed in Indonesia Stock Exchange from 2012 to 2014. They employ Return on Assets as observed variable and Capital Adequacy Ratio, Loan to Deposit Ratio, Operational Efficiency

and Non-Performing Loans as independent variables. The econometric analysis was done on the secondary data sourced from the Audited Accounts of 27 commercial banks selected using purposive sampling technique and classified information from BB library using SPSS 20. The findings revealed existence of strong negative relationship between the dependent and independent variables used for the study. They recommended banks should be diligent in lending to ensure they operate below the statutory benchmark to boost profitability and public confidence. Rozina, A. and Jewel, K.R. (2017) worried with the huge amount of Non-Performing Loans in the banking industry of Bangladesh, conducted an empirical study to test the relationship between dependent variable (Net Profit Margin) and independent variables; Classified Loan to total loan, Bad Debt, Net Interest Margin and Loan Deposit Ratio for the period 2008-2013. Using some accounting ratios and multiple linear regression technique to anlayse the secondary data obtained from survey, classified information from BB library and annual reports of sampled 30 commercial banks listed in Dhaka Stock Exchange(DSE), they found significant negative relationship exists between Non-performing Loans and Profitability of commercial banks in DSE. They concluded in addition to management taking proactive actions to curtail Non-Performing Loans, the regulatory authority should create an enabling environment for the banking sector to operate.

Nwosu, C.P., Okedigba, D.O. &Anih, D.O. (2020), investigated the relationship between Non-Performing Loans and Profitability of Commercial Banks in Nigeria using secondary data obtained from 1st quarter 2014 to fourth quarter 2018 and multiple linear regression econometrics model. Non-Performing Loans (independent variables) were measured by Non-Performing Loan Ratio, Liquidity Ratio, Capital Adequacy ratio, bank size and inflation while Profitability (dependent variable) was proxied by Return on Assets. The findings revealed existence of a significant negative relationship between Non-performing Loans Ratio and Return on Assets and other independent variables except Bank Size and Capital Adequacy Ratio. They recommended Commercial Banks to consider providing expert advice to the loanees on the best possible way to invest the borrowed funds to earn the required return on investment. Bishnu, P.B. (2020) sought to know the nature and extent of relationship between Non-Performing Loans and Profitability of Commercial Banks in Nepal for five years (2013-2018) employing multiply regression technique. Using Return on Equity (ROE) as dependent variable and Non-Performing Loans(NPL), Bank Size(BS), Capital Adequacy Ratio(CAR), Inflation(INF) and Loan to Deposit Ratio(LDR) to represent Non-Performing Loans, and the secondary data sourced from Audited Reports of twelve Commercial Banks in Nepal in the analysis, findings showed a significant negative relationship between NPL, CAR, LDR and ROE while a strong positive relationship existed between BS, INF and ROE. Ayrton, P., Jonathan, S. & Simon, G. (2019) investigated whether increase or decrease in Non-Performing Loans level of Commercial Banks listed on the Euro-Mediterranean Area positively or negatively influences Profitability of 35 selected banks from 2013 to 2017. Using descriptive statistics, multiple linear regression approach and secondary data obtained from the selected banks for analysis, the results showed all the independent variables (Non-Performing Loans and Solvency Ratio) impact on the dependent variable (Return on Assets) negatively.

Theoritical Framework

Information Asymmetric Theory

The first work on Information Asymmetric Theory was done by Akerlof in the 70s. The concept described possession of information by parties as a determining factor for success or failure of an economic transaction. The two parties (buyer and seller) to a transaction are expected to have balance information relating to it before they consummate, otherwise, the activities of the party who has greater material knowledge may lead to adverse selection problems. Adverse selection explains the negative implication of poor management decisions on loan administration and cost management (Bad Management hypothesis). Moreover, Information Failure arises where one party engages in risky decisions since is not affected by the outcome.

Stakeholders Theory

Stakeholders Theory came to light in 1984 by Freeman as a decision-making tool. This has metamorphosed overtime into a valuable model used to analyze organizational performance. The thrust of the theory is to establish a balance of interests of parties affected by the actions of an establishment in order to achieve the set objectives. The first consideration of Risk

management was to examine why joblessness and firings is preferred to price modifications/salaries reduction during economic downturns (Implicit Contract Theory). However, Stakeholders' Theory has successfully broadened the Implicit Contract Theory by the incorporation of other contracts such as revenue and funding. There are companies most especially the ones with frontier technology and services that maximize their values significantly as a result of their customers' confidence in their capability to render unceasingly quality services in future. Nevertheless, the benefits derivable from implicit assertions could lead to insolvency problems but managing a company's risk reduces the anticipated costs and consequently increase the corporate value (klimczak, 2005). The introduction of Stakeholders' Theory therefore gives a fresh perspective in the study of risk management of organizations even though the theory has not be tried directly.

Agency Theory

Ross (1973) and Mitnick (1973) were the notable researchers who worked on Agency Theory. Ross (1973) concentrated on economics theory while Mitcnick (1973) worked on institutional theory. Although, the main idea behind the two techniques is the same. Agency Theory is concerned with matters relating to principal and agent relationship. Basically, agency entails the engagement of one party called the agent by another party known as the principal to carry out certain tasks in his absence. To this end, the principal relinquishes decision making power to the agent. In most cases, the shareholders are the principals while the bank managers are the agents. The administrators of banks are seen as agents employed to maximize the value of the owners through effective decision-making process. To achieve this objective, managers are expected to avoid conflict of interest and increase profitability of the organization (Macharia, 2012). Nevertheless, the theory points out that since a number of issues involving the resources of the principal's business are delegated to the agents, conflict of interest and information asymmetry may occur (principal-agent dilemma). Principal-agent problem happens where the agent decides to act in his interests instead of that of his principal (moral hazard). Consequently, the principal incurs agency costs such as the costs suffered; where the agent engages in insider dealing and control measures put in place by the principal to dissuade the agent from pursuing personal interest. Agency costs are necessary evils since they are cheaper than the attendant consequences of allowing management to pursue their personal agenda at the expense of the principal. Hence, Agency Theory underpins this study because the bank managers who are agents in this context could engage in self-satisfying-dealings capable of jeopardizing stockholders' interest.

METHODOLOGY

This study is a Quantitative Research and the sample was selected by using Purposive Sampling Method. The standard employed in this research is that samples must come from listed commercial banks in The Nigerian Exchange Group Plc for the period of 2011 – 2020. These samples must also be publishedin their audited financial statements as of December 31,using the Naira currency. In total there are 10 samples selected through a 10 year observation period hence, the total is 100 observations. The data used for analysis is thus based on secondary data comprising financial statements published by the banks.As a result, a popular model (Ordinary Least Square) applied in most literature will be used. The regression model is expressed by the mathematical function below.

$Y_{it} = \beta o + \beta X_{it} + \varepsilon_{it}$

Where: - Y_{it} is the dependent variable for firm 'i' in year 't', β_0 is the constant term, β is the coefficient of the independent variables of the study, X it is the independent variable for firm 'i' in year 't' and ε_{it} the normal error term.

Dependent variable: Return on Assets (ROA)

Independent Variable: Non-Performing Loans (NPL)

The formulae are as follow:

ROA =Profit After Tax/Total Assets

NPL= Non-Performing Loans/Total Loans

Thus, this study is based on the conceptual model adopted from (Amah, 2017). Accordingly, the estimated models used in this study are modified and presented as follows;

$ROA = B_o + B_1 NPLR + e$

Where,

B_0 = constant
B_1= Beta coefficient
ROA =Return on Assets
NPLR=Non-Performing Loan Ratio
e = error term

RESULT AND DISCUSSION

Table A: Descriptive Statistics

	ROA	NPLR
Mean	1.799800	5.949700
Median	1.300000	4.295000
Maximum	18.00000	52.97000
Minimum	-7.900000	0.047000
Std. Dev.	2.340425	6.589230
Skewness	2.720374	4.446820
Kurtosis	26.86621	28.60115
Jarque-Bera	2496.656	3060.482
Probability	0.000000	0.000000
Sum	179.9800	594.9700
Sum Sq. Dev.	542.2814	4298.378
Observations	100	100

Source: E View

The above table shows Return on Assets(ROA) has a mean of 1.8% and a range of -7.9% to 18%. On the average, this explains that for every N100 invested in total assets, N1.8 profit after tax is generated by the sampled banks. The minimum value indicates that Union Bank loss 7.9% in terms of ROA in the period. On the contrary, Access Bank recorded the highest Return on Assets of 18%. The standard deviation 2.3% indicates volatility in ROA and how far it is from the mean value. Moreover, the results also reveal an average of Non-Performing Loans Ratio (NPLR) 5.9%, standard deviation of 6.6% and minimum and maximum value of 0.05% and 52.97% respectively. This shows some banks on the average, are carrying 5.9% NPLR in the period.

Hausman Test

Table B: 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	1.770597	1	0.1833

Source:E-View
H_o: Accept Radom Effects
H_1: Accept Fixed Effects

From the table above, P value of 0.1833 at confidence level of 95% is significant. Therefore, we accept the null hypothesis (Random effects would be used for the regression).

Random Effect Model

Table C: Regression Analysis

Dependent Variable: ROA
Method: Panel EGLS (Cross-section random effects)
Date: 03/24/22 Time: 15:08
Sample: 2011 2020
Periods included: 10
Cross-sections included: 10
Total panel (balanced) observations: 100
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NPLR	-0.020943	0.033850	-0.618690	0.5376
C	1.924402	0.466007	4.129555	0.0001
	Effects Specification			
			S.D.	Rho
Cross-section random			1.164940	0.2492
Idiosyncratic random			2.022218	0.7508
	Weighted Statistics			
R-squared	0.003860	Mean dependent var		0.866072
Adjusted R-squared	-0.006304	S.D. dependent var		2.023784
S.E. of regression	2.030153	Sum squared resid		403.9090
F-statistic	0.379791	Durbin-Watson stat		1.835067
Prob(F-statistic)	0.539144			
	Unweighted Statistics			
R-squared	0.013382	Mean dependent var		1.799800
Sum squared resid	535.0246	Durbin-Watson stat		1.385357

Source: E-view

From the above table, t-value of NPLR is -0.2669122 and a coefficient of -0.009404 with a P value of 0.7885. This implies NPLR has a significant negative impact on profitability of quoted commercial banks in Nigeria at 0.05 level of significance. The coefficient signifies a N1 increase in NPLR will reduce profitability by N0.009404. The implication of this is that growing Non-Performing Loans level (NPLR) would continue to reduce the profitability of commercial banks in Nigeria. Therefore, this gives ground to reject the alternative hypothesis set earlier that NPLR has significant relationship with ROA of listed commercial banks in Nigeria for the period, 2011 to 2022. The findings is in agreement with the studies conducted by Flola, C. &Ratnawati, K. (2016); Rozina, A. & Jewel, K.R. (2017); Nwosu, C.P., et al (2020);Bishnu, P.B. (2020); Ayrton, P. et al. (2019).

CONCLUSION AND RECOMMENDATIONS

Sustainable economic growth is one of the cardinal macroeconomic objectives of nations and that cannot be achieved without the activities of financial institutions. Through financial intermediation, bank obtain short term funds from surplus section of the economy and lend out in form of medium and long term toloans to the deficit side

to boost economic activities. This means improper management of loans could lead to banking crisis and consequently crumble the entire economy. This study is on impact of Non-Performing Loans on Profitability of Commercial Banks in Nigeria. The findings show clearly the more Non-Performing Loans the banks are carrying in their books, the more losses they would incur. To keep Non-Performing Loans level within the threshold, we recommend as follows;

(i) The banks should evolve a mechanism of detecting Non-Performing Loans early.
(ii) The banks should periodically test collaterised assets against impairments and upgrade accordingly.
(iii) The banks should monitor loans granted from disbursement to the end; this will ensure the facility given is used for the purpose for which it was collected.
(iv) The regulatory authority should develop an incentive system whereby any bank that meets its Non-Performing Loan Ratio and Loan to Deposit ratio standard at the same period is rewarded.

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Moderating Effect of Capital Adequacy on Financial Performance of Deposit Money Banks in Nigeria

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Abstract

This study is aimed at investigating the moderating effect of capital adequacy on financial performance on Deposit Money Banks in Nigeria from 2012-2019. The listed DMBs are 15 as at 31st December, 2019, out of which 12 banks were selected based on the availability of data. Specifically, the study seeks to identify the effect of Liquidity, loan loss provision, Return on Asset and firm size on the capital adequacy of listed deposit money banks in Nigeria. The study adopts Correlational and expost facto Designs and data were analyzed with the aid of multiple regression technique using 96 firm-year panelled observations. Data were extracted from the audited annual reports and accounts of the selected banks. The study reveals that liquidity and loan loss provision are positive and have significant impact on the capital adequacy of listed deposit money banks at 1% and 1% level of significance respectively. The study also found out that return on asset and firm size have no significant impact on the capital adequacy of listed deposit money banks. The study concludes that liquidity and loan loss provision constitute the determinants of capital adequacy of listed deposit money banks. Therefore, it is recommended among others that these variables should be considered in determining the capital adequacy of deposit money banks in Nigeria.

Keywords: Capital Adequacy, Loan loss provision, Liquidity, Deposit Money Banks

INTRODUCTION

Banks occupy an important position in the financial sector and their activities are subject to regulation and supervision for the purpose of preserving financial stability. The banking sector of an economy stimulates the economic competence by mobilizing savings to investment channels. It serves as a bridge between savers and borrowers and to execute all tasks concerned with the profitable and secure channeling of funds (Nyor & Adejuwon, 2013). Beyond the intermediation function, the financial performance of banks has significant implications for economic growth of an economy as sound financial performance rewards the investors and other stakeholders for their investment and encourages additional investment (Boloupremo & Ogege, 2018). The ultimate strength of a bank lies in its capital funds given its significance as a tool for meeting liabilities in financial crises. For a bank to enjoy depositor's confidence it must have a strong capital base as an indication of its strength and a tool for operating profitability so that shareholders' funds can increase through accumulation to statutory and general reserve. In business and finance, capital is seen as "financial capital" which in itself could sometimes mean both tangible and intangible capital. On the other hand, Arogundade defines capital as the owner's stake in business and therefore a commitment to its success. On the other hand, poor banking performance may lead to banks' failure and collapse which could negatively impact on the economic growth of the economy. Banks serve as means of transmitting monetary policy of the federal government at the macroeconomic level. At micro economic level, banks are major source of financing for businesses and individuals. Banks therefore facilitate spending and investment that fuel growth in the economy. Banks are expected to have adequate amount of capital in order to support their business expansion; to serve as a buffer to prevent any unexpected loss that banks might face and also to absorb losses arising from various risks that they face. Banks are also required to have a buffer according to the provisions of the minimum capital requirement set by the regulatory authorities. Bank regulators everywhere in the world are concerned with the safety of depositors' funds. It is for this reason the capital adequacy becomes relevant and important.

Accounting Dictionary defined the financial resources that businesses can use to fund their operations like cash, machinery, equipment and other resources. These are the assets that allow the business to produce a product or service to sell to customers. CBN/NDIC refer capital of a bank to represent shareholders' stake and subsequent funds additions which are used as operating base and remain more or less permanent in the business until it winds off. The CBN & NDIC further stated that the functions of a bank capital include: acquisition of fixed asset; operating base; absorb operating losses which

otherwise cannot ordinarily be absorbed by normal earnings; allay fear of depositors, regulators and the public (public confidence); and show owners confidence in the banking business, the strength of the bank and its lending limits. This paper adopts the definition given by CBN/NDIC (1995) due to the fact that it encompasses the true meaning of capital and its adequacy in corporate existence, this is so because capital does not merely mean the resources or funds supplied by owners but also include commitment to its success until its wind off. Capital adequacy refers to the amount of equity capital and other securities which a bank holds as reserves against risky assets as a hedge against the probability of bank failure (Greuning & Sonja, 2003). It also refers to the extent to which the assets of a bank exceed its liabilities, and is thus a measure of the ability of the bank to withstand a financial loss. Capital adequacy in banking business gives protection against sudden financial losses (Al-Sabbagh, 2004). According to the Capital Adequacy Standard set by Bank for International Settlements (BIS)(2010), banks must have a primary capital base equal at least to eight percent of their assets.

The banking industry has been subjected to extensive regulation and supervision for many years. The Basel Committee on Banking Supervision is a central organ that develops and standardizes banking regulation. The first standardized framework on banking regulation; Basel I, was released in 1988 and the centerpiece of the document was capital adequacy within the banking industry. In 2004, the framework was superseded by the Basel II Accord. The Basel II framework was supposed to be more risk sensitive and it encouraged banks to use internal models to determine capital levels. However, the financial crisis of 2008 demonstrated that the Basel II Accords were not robust enough to assess the risks that banks faced. As a response to the crisis, the Basel Committee released the Basel III framework in December 2010. Basel III framework was as a result of the large number of bank failures in recent years and previous frameworks (Basel I and II) were unable to assess the risks that Banks face. The purpose of the Basel III Accord is to increase the resilience of the financial systemand to create a competitive level playing field worldwide. Basel III is an extension of the previous frameworks. However, the capital requirements are more strict and the Basel Committee has also added other liquidity requirements in the framework. In general, the Basel documents are set of rules for banking regulation and supervision. In particular, they set the global capital adequacy standards. That means, they prescribe globally accepted standards for improving banks' ability to absorb economic and financial shocks, improving risk management practices in banks, strengthening transparency and disclosure requirements for banks and have been adopted by more than 140 countries of the world. They are international agreements that describe the risk sensitive framework for the assessment of regulatory capital and require banks to take adequate precaution. In Nigeria, the capital base of banks was raised up by the CBN from N2 billion to N25 billion minimum with effect from 31st December, 2005. The upward review of the capital base has resulted in bigger, stronger and more resilient financial institutions (Olalekan & Adeyinka, 2013). According to Nwokoji (2013), the average Capital Adequacy Ratio of the banks in the industry was consistently above the stipulated minimum of 10.0 per cent in the first half of 2012. The industry average CAR stood at 17.7 per cent, compared with 17.9 and 5.0 per cent at the end of December 2011 and the corresponding period of 2011 respectively(Olalekan & Adeyinka, 2013). The adoption of Basel capital accord in Nigeria rendered most of the studies in this area outdated because most of the studies carried out in this area did not adopt a risk based approach in calculating their capital adequacy ratio as suggested by the Basel committee on banking supervision. Thus, the aim of this study is to fill the identified gap in the literature by adopting a risk based approach using multiple regression models to examine the bank specific determinants of Capital adequacy of Listed Deposit Money Banks in Nigeria.

LITERATURE REVIEW

Conceptual Clarification

Capital Adequacy

Capital adequacy ratio is an important issue that has drawn the attention of researchers and academics. According to Al-Sabbagh (2004), capital adequacy is an indicator of risk exposure of banks (that is how banks are exposed to risks). Risk in the banking industry is classified into various types including credit risk, market risk, interest rate risk and exchange rate risk that are considered in the CAR

calculation. According to Abdul-Karim (1996), regulatory authorities use capital adequacy ratio to evaluate the soundness of banks and other depository institutions because, to them, capital serves as a cushion to absorb losses. Capital adequacy ratio is the ratio which measures the ability of a bank in terms of meeting liabilities and risks such as credit risk, market risk, operational risk, and exchange rate risks. It is a measure of how much capital is used to support the banks' risk assets. It represents a total amount of funds that a bank should keep and plan to maintain in order to conduct its business in a prudent and orderly manner (Kishore, 2007). It is the minimum amount that is necessary to boost confidence in banks and effectively fulfill the principal task of preventing bank failure by absorbing losses without being strained into costly liquidation and enable banks to take advantage of profitable growth opportunities (Akintoye & Somoye, 2008).

Empirical Review

A number of researchers have provided insights into the capital adequacy. A study conducted by Al-Sabbagh (2004) investigated the impact of 9 bank specific variables affecting CAR of Jodanian Banks by studying the financial statement of 17 sampled banks in two periods. That is 1985-1994 which represent the period before applying the Basel Committee Standards for CAR in Jordanian Banks while the second period covers 1995-2001 which is the period after applying the Basel Committee Standards for CAR. Using correlation coefficient and regression analysis, the study found negative relation between CAR and bank size while CAR was positively affected by ROA, loan to asset ratio, and equity ratio. CAR has a positive relation to risky asset ratio in the period 1985-1994 while the relation is negative in the period 1995-2001. CAR is negatively affected by deposits asset ratio between 1985-1994 and positively affected by a size of bank deposits in a period 1995-2001. CAR is negatively affected by loan provision ratio and positively affected by dividend pay-out ratio in the period 1995-2001. Asarkaya and Ozcan (2007) examined the determinants of capital structure in the Turkish banking sector covering 2002-2006 periods. The study proposed an empirical model in order to find out the factors that explain the reason why banks hold capital beyond the amount required by the regulators. They used a panel data set that employs bank-level data from the Turkish banking sector and estimated the model with generalized method of moments. The findings of their study suggested that lagged capital, portfolio risk, economic growth, average capital level of the sector and return on equity are positively correlated with capital adequacy ratio and share of deposits are negatively correlated with capital adequacy ratio.

Almazari (2013) investigated relationship between capital adequacy ratio and the profitability of the Saudi Arabia commercial Banks. The study measures efficiency with the Capital Adequacy Ratio (CAR) and the Cost income Ratio (CIR) while the profitability is measured by return on asset and return on equity. The study revealed that there is a positive relationship between capital adequacy and profitability and negative relationship between cost income ratio and profitability. The study also finds a positive relationship between banks size and profitability and negative relationship between capital indicators and profitability in the Saudi banks. In a similar study conducted by Dreca (2013), he examined the factors influencing CAR in selected Bosnian banks for the period of 2005-2010. Using a sample of 10 banks, pooled OLS was adopted to analyze the relationship between dependent and independent variables, the result indicates that size, and liquidity have significant effect on CAR. On the other hand, loan loss reserve did not appear to have significant effect on CAR. Al-tamimi and Fakkhri (2013) examined the determinants of CAR in commercial banks of Jordan during the period of 2000-2008 using annual report and account of 12 sampled banks. Using Multiple Linear Regression Analysis and the Correlation Coefficient (Pearson Correlation), the study shows that there is a statistically significant positive correlation between the degree of capital adequacy in commercial banks and the following independent variables: liquidity risk, and the rate of return on assets. On the other hand, there is an inverse relationship with statistical significance between the degree of capital adequacy of commercial banks and loan loss provision

Abusharba, Triyuwono, Ismail and Rahman (2013) examined the determinants of the capital adequacy ratio in the Indonesian Islamic banking industry. Secondary data were obtained from Islamic banks annual reports and Islamic banking statistics that derived from Bank Indonesia covering the period of 2009 until the end of 2011. Multiple linear regression analysis and pair-wise correlation matrix are

used to explain the effect of explanatory variables on a proxy variable which is the capital adequacy ratio (CAR). The study found that profitability and liquidity are positively related to the capital adequacy requirements. Meanwhile, uncollectable funds measured by non performing financing (NPF) is significant but negatively related to the capital adequacy ratio. On the other hand, depositor's funds and operational efficiency have no significant effect on capital adequacy of Indonesian Islamic banks. Moreover, this study revealed that all selected Islamic commercial banks in Indonesia are committed over than 8 percent minimum of capital requirements during the period of global financial crises. Finally, it was found that Indonesian Islamic banks have an excessive fund to meet their obligations and protect the owners of capital. Shingjergji and Hyseni (2015) examined the determinants of CAR of Albanian banking System for the period of 2007-2014. The study used ordinary least square to test the relationship between dependent and independent variable using quarterly data from the first trimester of 2007 until the third trimester of 2014. The result indicates that profitability indicators such as ROA and ROE do not have any influence on CAR while non performing loans, loan to deposit ratio and equity multiplier have negative and significant impact on CAR. In this study, only bank size was found to have positive impact on CAR. A study conducted by Aktas, Acikalin and Celik (2015) aims to evaluate the impact of bank-dimensional and environmental factors on bank's capital adequacy ratio in South Eastern European region. Annual data from 71 commercial banks from 10 different countries in South East European region for the period of 2007-2012 is used. The result of the study shows that among the bank-dimensional explanatory Variables: bank sizes, return on asset and liquidity have statistically significant effect in determining CAR for the region. Among all the environmental factors: (economic growth rate, eurozone stock market volatility index, deposit insurance coverage and governance) have statistically significant effect on capital adequacy ratio for the banks in South East European region.

The objectives of the study conducted by Meconnen (2015) were to examine whether bank specific variables have effect on CAR of Ethiopian commercial Banks. The study period was 2004-2013 and the sample size was 8 banks. The study used secondary data which was gathered from the annual reports of the banks under study. Panel data regression was used and the result revealed that return on asset, deposit ratio, and size have positive effect on capital adequacy while return on equity and net interest margin have a negative effect on capital adequacy. However, liquidity, loan asset and leverage were not found to have any significant impact on capital adequacy. Furthermore, a similar study conducted in Nigeria by William (2011) investigated the impact of banks characteristics, financial structure and macroeconomic indicators on banks' capital base using an error correction model during 1980-2008 in Nigeria. The author concludes that the money supply is a very important determinant of the capital adequacy base in Nigeria having a high and very strong level of significance. The real interest rate is negatively related to capital adequacy base which could mean that an increase of real interest rate dampen the capital adequacy base. The real exchange rate is a significant determinant but its coefficient is not as expected while the deposit liabilities and liquidity risk are not statistically significant. Furthermore, in another study conducted by Buyuksalvarci and Abdioglu (2011) which empirically analyzed determinants of CAR of Turkish Banks for the period of 2006-2010. Specifically, the study sought to find if bank specific variables proxied by bank size, Deposit asset ratio, loan asset ratio, loan loss reserve, liquidity, profitability, net interest margin and leverage have any impact on CAR of Turkish Banks. The study adopted multiple regression technique and data were collected from secondary source through the annual reports and accounts of the 24 sampled Banks. The findings revealed that loan asset ratio is negatively and strongly influencing CAR of Turkish Banks. The results of the study indicated that loan asset ratio, return on equity and leverage have a negative effect on CAR, while loan loss reserve and return on assets positively influenced CAR. On the other hand, size, deposit asset ratio, liquidity and net interest margin do not appear to have any significant effect on CAR. In the same vein, Bateni, Vakilifard and Asghari (2014) examined the various influential factors on Capital Adequacy Ratio of Iranian Banks such as Loan asset ratio, return on equity, return on asset, equity ratio, risk asset ratio, Deposit asset ratio and size. Hypotheses were tested using regression analysis on a sample of 6 Iranian Banks for the period of 2006-2012. The results obtained indicate negative relationship between bank size and CAR and positive relationship between loan asset ratio, return on equity, return on asset, equity ratio and CAR. Risk asset ratio and deposit asset ratio do not have any impact on CAR.

Aspal and Nazneen (2014) investigated the determinants CAR of Indian Private sector Banks during the period of 2008-2012. Secondary data of 20 sampled banks were analyzed using multiple regression to explain the effect of explanatory variables on the dependent variable which is capital adequacy ratio. The results highlighted that capital adequacy ratio is negatively correlated with proxy variables of lending (loans), asset quality and management efficiency. However, liquidity and sensitivity are positively correlated. The regression results have revealed that Loans, Management Efficiency, Liquidity and Sensitivity have statistically significant influence on the capital adequacy of private sector banks. However, the independent variable asset quality has negligible influence on capital adequacy of Indian private sector banks. Moreover the study reveals that the Indian private sector banks maintain a higher level of capital requirement than prescribed by Reserve Bank of India. Massod and Ansari(2016) analysed the bank specific factors which had an impact on the determination of Capital Adequacy Ratio (CAR) of Pakistani commercial banks during the period of 2008-20014 using annual report and account of 14 Pakistani banks which were included in Karachi Stock Exchange. The results revealed that the LAT and ownership concentration had a significant but a negative impact on the CAR. The EAR, DAR, LLR had a significant and positive impact on the determination of CAR, whereas the Size of the Bank, ROA, ROE and NPL had no impact on CAR. Olarenwaju and Akande (2016) carried out an empirical analysis of capital adequacy determinants in Nigerian banking sector during the period of 2005-2014. Secondary data of 15 quoted banks were analysed using multiple regression to explain the effect of explanatory variables on the dependent variable which is capital adequacy ratio. The result highlighted that capital adequacy is positively correlated with return on asset and bank size and negatively liquidity. Gabriel (2015) empirically examined the impact of micro-prudential indices on capital adequacy ratio of deposit money banks in Nigeria. Multiple regression model was adopted as the tool of analysis using data from 12 sampled banks over a ten year period from 2005-2014. Four independent variables were included in the model after which three (including deposit asset ratio, return on asset and asset quality ratio) were found to have significant impact on capital adequacy ratio. The study found out that capital adequacy ratio of Nigerian Banks is well above the regulatory minimum. Also, Nigerian banks loans to deposit ratio is within the regulatory limit. The study recommends that Nigerian deposit money banks should adopt a more robust data management system and also ensure strict compliance with various capital regulations.

Theoretical Framework

Capital Buffer Theory

The theoretical framework adopted for this study is capital buffer theory. It predicts that banks hold safety cushions above the regulatory capital requirement. Stolz (2007) define capital buffer as the capital that banks hold in excess of the regulatory minimum capital requirement. It is due to the fact that the banks may not be able to adjust capital and risk instantaneously due to adjustment costs or illiquid markets. Furthermore, under asymmetric information, raising equity capital could be interpreted as a negative signal with regard to a bank’s value (Myers & Majluf 1984), rendering it unable or reluctant to react to negative capital shocks instantaneously. However, to breach regulations trigger costly supervisory actions that can possibly lead to a bank’s closure. Consequently banks have an incentive to hold more capital than required (a capital buffer) as an insurance against violation of the regulatory minimum capital requirement (Milne & Whalley 2001). This theory will specifically guide us to understand the capital ratio requirement advised by the BIS through the regulatory agent.

METHODOLOGY

The study uses correlational research design. The population of the study comprises all the listed Deposit Money Banks (DMBs) in Nigeria as at 31st December 2019. There were fifteen (15) listed banks on the Nigeria stock exchange as at that date. Of the fifteen listed deposit money banks, three banks have been filtered out and a sample of twelve banks have been selected on the basis of availability of data. Therefore, the sample of the study is 14 listed deposit money banks in Nigerian Stock Exchange.. Therefore, the sample size is also 12. The secondary data are collected from the published annual reports and accounts of the sampled banks. The annual reports were retrieved from the websites of the banks as well as the Nigerian Stock Exchange Fact Book.

Model Specification

The model for this study is:
CAR = F (LIQ, LLP, ROA, FSIZE,)

That is:

$CARit= \beta 0 + \beta 1LLPit + \beta 2LIQit + \beta 3ROAit + \beta 4FSIZEit + \varepsilon it$

Where;

CARit = Capital Adequacy Ratio for firm i in time t.
LIQit = Liquidity for firm i in time t.
LLPit = Loan Loss Provision for firm i in time t.
ROAit = Return on Asset for firm i in time t.
FSIZEit = Firm Size for firm i in time t.
$\alpha 0$ =Intercept.
$\alpha 1$, $\alpha 2$, $\alpha 3$, $\alpha 4$ = Model coefficients.
Eit =Error term.

The major tool of data analysis used is multiple regression analysis which was carried out with the aid of STATA statistical software. Robustness tests for Colinearity, normality and Heteroskedasticity were conducted to ensure reliability of the study results. To address panel effect of the data, fixed effect and random effect options were explored. Hausman specification test was used to provide direction as whether fixed effect or random effect would be used. The essence of these analyses is to improve the validity of all the statistical inferences that would be made.

RESULTS AND DISCUSSIONS

Here a presentation and discussion of the summary of descriptive statistics, correlation matrix and regression results are made. The overall aim is to examine whether liquidity, loan loss provision, return on asset and firm size affect capital adequacy ratio of listed Deposit Money Banks in Nigeria. The section contains analysis of descriptive statistics, correlation matrix, robustness test, Hausman specification test, regression results, test of hypotheses, discussion of findings and policy implications.

Descriptive Statistics

The various descriptive statistics are displayed in table 1 below. The essence of the table is to provide understanding on the nature of data used.

Table 1: Summary of Descriptive Statistics

Variables	Min	Max	Mean	Std Dev	N
CAR	-154.75	23.75	9.61	23.74	96
LIQ	0	33.58	5.66	6.79	96
LLP	-494.02	2.18	-7.64	50.28	96
ROA	1.65	46.22	11.73	8.32	96

Source: Stat output of Descriptive Statistics (Appendix)

Table 1 reveals that the mean value of CAR is 9.61. The minimum value of CAR for the firms is about -154.75. This implies that the lowest level of capital adequacy ratio of the firmsis -154.75. The maximum value of CAR is about 23.75. This implies that the maximum level of CAR of the firms is about 23.75. The standard deviation of CAR is 23.74, which implies that there is low variability in the level of capital adequacy ratio by the studied firms. LIQ has mean value of about 5.66, minimum value of about 0, maximum value of about 33.58, with a standard deviation of about 6.79. The standard deviation of 6.79 suggests low variability in the level of liquidity of the studied firms over the period of study. LLP has minimum value of about -494.02, maximum value of 2.18, with a

standard deviation of 50.28. The standard deviation of 50.28 implies that there is high variability in loan loss provision of DMBs in Nigeria over the period of study.

The mean of ROA is 11.73, which means that on average, DMBs in Nigeria have about 11.73 % as return on asset. High return on Assets signifies high profitability while low return on assets signifies low profitability The minimum number of ROA is 1.65, which suggests the lowest return on asset is about 1.65%. However, the maximum value is 46.22 suggests that the highest return on asset is 46.22%. The standard deviation is 8.33, which indicates variability in the level of ROA among DMBs in Nigeria. FSIZE has mean value of 9.17 which shows that on average, the size of the DMBs in Nigeria is about 9.17. The minimum value is 8.19 while the maximum value is 9.85. The standard deviation is about 0.39 which means that there is variability in the size of the DMBs in Nigeria.

Correlation Matrix

The correlation matrix reveals the correlation between the dependent variable and each of the independent variables as well as among the independent variables.

Table 2: Correlation Matrix of Dependent and Independent Variables.

Variables	CAR	LIQ	LLP	ROA	FSIZE
CAR	1.0000				
LIQ	0.1462	1.0000			
LLP	0.7226	0.0443	1.0000		
ROA	-0.0071	0.1289	0.0136	1.0000	
FSIZE	0.3897	-0.0421	0.2724	0.0031	1.0000

Source: Stata output of Correlation Matrix (Appendix)

The above table shows that liquidity, Loan Loss Provision Ratio and firm size are positively correlated with capital adequacy ratio of the listed deposit money banks in Nigeria with a coefficient of 0.1462, 0.7226 and 0.3897 respectively. The implication is that the above variables move in the same direction with the CAR of Deposit Money Banks in Nigeria. On the other hand, return on asset is negatively correlated with capital adequacy ratio of listed deposit money banks in Nigeria with a coefficient of -0.0071 implying that they move in opposite direction with CAR.

Fixed and Random Effect Tests

In order to decide between fixed and random effect models output, Hausman specification test is conducted. The Hausman test is designed to detect violation of the random effects modelling assumption that the explanatory variables are orthorgonal to the unit effects. If there is no correlation between the independent variables and the unit effects, then the estimates of β in the fixed effects model should be similar to estimates of β in the random effects model. The Hausman test statistic H is a measure of the differences between the two estimates. Under the null hypothesis of orthogonality, H is distributed chi-square with degrees of freedom equal to the number of regressors in the model. A finding that ($p < 0.05$) is considered an evidence that at conventional levels of significance, the two models are different enough to allow us reject the null hypothesis, and thus to reject the random effects model in favour of the fixed effects model. Where the Hausman test does not depict a clear difference ($p > 0.05$), however, it does not necessarily emphasize that random effects estimator is 'safely' free from bias, and thus to be preferred over the fixed effects estimator. Therefore, the result obtained from Hausman specification test conducted in this study indicates that ($p < 0.05$) and as such the fixed effect is chosen over the random effects model.

Fixed Effect Regression Results

The result of the fixed effect is presented in table 3 below:

Table 3: Fixed Effect Regression Result

VAR	COEFF	T-value	P-value

LIQ	1.3348	4.92	0.0000
LLP	0.2369	7.53	0.0000
ROA	0.2328	1.15	0.252
FSIZE	5.7468	0.49	0.629
C	46.13642	107.6323	0.66

Source: Output from *STATA* (2022)

In table 3, it can be observed that the R2 is 0.4680 which means that 46.80% of variation in CAR of Deposit Money Banks in Nigeria is explained jointly by the independent variables captured in the model.

Liquidity and Capital Adequacy Ratio

Liquidity measured as the ratio of liquid assets to total debt & borrowings was found to be negative and significantly associated with Capital Adequacy Ratio at 1% level of significance (p-value of 0.000). This means that Liquidity positively and significantly influences the Capital adequacy of Listed Deposit Money Banks in Nigeria. Therefore, Liquidity has significantly influenced the capital adequacy ratio of Listed Deposits Money Banks in Nigeria. Therefore, the result reported provides an evidence to reject the null hypothesis of the study. The regression result as depicted in Table 3 shows that Liquidity has a T-value of 4.92 and a coefficient value of 1.3348 with a p-value of 0.000 which is significant at 1% level of significance. This reveals that liquidity is positive and significantly affects the capital adequacy of listed deposit money banks in Nigeria. This implies that for every one (1%) increase in the liquidity level of Listed Deposit Money Banks in Nigeria, their capital adequacy will increase by 1.3348. The findings of this study are in line with earlier studies conducted by Altamimi and Fakkhari (2013), Aktas, Acikalin and Celik (2015) and Aspal and Nazneen (2014) and contradicts that of Meconnen (2015) and Buyuksalvarci and Abdioglu (2011) where liquidity was not found to have any significant impact on the capital adequacy.

Loan Loss Provision and Capital Adequacy Ratio

Loan loss provision ratio which was measured as the ratio of loans loss provision to total loans was found to be positive and statistically significant at 1% level which signifies that it is associated with the capital adequacy ratio of listed deposit money banks in Nigeria. This therefore means that loan loss provision positively and significantly affects the capital adequacy of listed deposit money banks in Nigeria. As a corollary to the result reported with respect to loan loss provision ratio depicting that it is strongly influential in determining the capital adequacy ratio of listed deposit money banks in Nigeria, the result provides an evidence for rejecting the null hypothesis which says that loan loss provision has no significant impact on CAR of listed deposit money banks in Nigeria.

Table 3 reveals that loan loss provision has a T-value of 7.53, coefficient value of 0.2369 and a p-value of 0.000. This implies that loan loss provision significantly influences capital adequacy ratio of listed deposit money banks in Nigeria at 1% level of significance. This means that 1% increase in loan loss provision will lead to an increase in capital adequacy of listed deposit money banks in Nigeria by 0.2369. The finding of this study is in line with earlier studies conducted by Dreca (2013), and the study contradicts the findings of Buyuksalvarci and Abdioglu (2011) in which loan loss reserve was not found to have any significant impact on Capital Adequacy of Deposit Money Banks.

Return on Asset and Capital Adequacy Ratio

Return on Asset measured as the ratio of net income to total asset is found to be statistically insignificant at all levels. That is, it is not significantly associated with the capital adequacy ratio of listed deposit money banks in Nigeria. Hence, Return on Asset does not significantly influence the capital adequacy ratio of listed deposit money banks in Nigeria. Therefore, the result reported

provides evidence for the failure to reject the null hypothesis of the study. Hence, the study fails to reject the null hypothesis.
From table 3, it can be seen that the T-value for return on asset is 1.15 and the coefficient value of 0.2328 with a p-value of 0.252. This signifies that return on asset does not significantly influence capital adequacy of listed deposit money banks in Nigeria. This implies that increase in return on asset may not necessarily lead to any decrease in the capital adequacy of listed deposit money banks in Nigeria since it is not significant at all levels. The result is surprising because it is not in line with our apriori expectation that the more the listed deposit money banks make profit, the higher will be their capital adequacy ratio. The findings of this study is in line with earlier studies conducted by Shingjergji and Hyseni (2015) and the findings contradict that of Aktas, Acikalin and Celik(2015).

Firm Size and Capital Adequacy Ratio

FSIZE has positive relationship with CAR, with its coefficient of 5.7468 which means a unit increase in FSIZE will lead to about 5.7468 increase in CAR of DMBs in Nigeria. However, this relationship is not significant even at all levels of significance.

Policy Implication of the Findings

Several policy implications can be gleaned from the findings of the study. The analysis shows that liquidity is positively and significantly influencing capital adequacy of Listed Deposit Money Banks in Nigeria. This implies that liquidity plays an important role in capital adequacy of Listed Deposit Money Banks in Nigeria. The result reveals that the higher the investment in short-term liquid asset, the higer the capital adequacy. The implication of this result is that stakeholders should consider liquidity as an indication that a bank is well capitalized.Moreover, the analysis conducted in the study reveals that loan loss provision has a positive and significant impact on the capital adequacy of listed deposit money banks in Nigeria. This implies that an increase in loan loss provision would lead to an increase in the capital adequacy of listed deposit money banks in Nigeria. The analysis reveals that return on asset which is used as profitability proxy was found to be statistically insignificant in influencing capital adequacy of Listed Deposit Money Banks in Nigeria. This implies that return on asset does not have any significant impact on capital adequacy of Listed Deposit Money Banks in Nigeria. Thus, change in return on asset may not lead to any change in the capital adequacy especially in a period of economic recession. Thus, regulatory authorities and other stakeholders should not use profitability in trying to determine the capital adequacy of banks.

CONCLUSION AND RECOMMENDATIONS

Arising from the result of the analysis that was carried out, the following conclusions can be made; The study found a positive and significant association between liquidity and capital adequacy of Listed Deposit Money Banks in Nigeria. Thus, the study concludes that liquidity is one of the determinants of capital adequacy of listed deposit money banks in Nigeria. The study also found a positive and significant association between loan loss provision and capital adequacy ratio of listed deposit money banks in Nigeria. Thus, the study concluded that loan loss provision is among the determinants of capital adequacy as it plays a crucial role in predicting the capital adequacy of listed deposit money banks in Nigeria. In addition, the study found a positive and insignificant association between return on asset and capital adequacy ratio. It is therefore concluded that return on asset does not influence the capital adequacy of listed deposit money banks in Nigeria during the period under study and is not one of the determinants of capital adequacy of listed deposit money banks in Nigeria. The following recommendations have become necessary in view of the findings of the study:

i. The CBN should ensure that the liquidity of Listed Deposit Money Banks in Nigeria is always at optimum level by regulating their deposit – liquidity - loans nexus, as it has been empirically found that liquidity is one of the factors that determine the capital adequacy.

ii. The management of listed deposit banks should increase the amount of their provision for loan loss as it was found to have positive impact on the capital adequacy

iii. The CBN and management of listed deposit money banks should not consider profitability as an important indicator of capital adequacy of banks especially during this period when the Nigerian economy is facing a lot of crisis.

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Work Life Balance and Performance of Women Entrepreneurs: Evidence from Nasarawa State

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Abstract

This paper investigated the relationship between work life balance and performance of women entrepreneurs in Nasarawa State. The study adopted a cross-sectional approach; primary data was collected through structured questionnaire. The population of the study was 120 women entrepreneurs drawn from various local government of Nasarawa State. The hypotheses were tested using multiple regressions. The finding revealed that there is a significant relationship between work life balance and performance of women entrepreneurs in nasarawa State. This implies that women entrepreneurs who experience greater levels of flexible work arrangements tend to have higher performance. This would not only help the women entrepreneurs to reduce work-related stress but would also be motivated them to perform better at their various endeavors. Work life balance has been a growing concern for women entrepreneurs especially in Nasarawa State,Nigeria. This incessant demand on their time for work and family as well as the effort to meet ends needs has affects the balance in the lives of women entrepreneurs in Nasarawa state. Inadequate attention to work demands, family workload, wellbeing and spousal support have created a major problem and pressure causing unbalance between work life and family life. Thus, the main objective of the study was to determine the effect of work life balance on the performance of women entrepreneurs in Nasarawa state, while the specific objectives were: to determine the relationship between work-life balance and business growth; determine the effect of work-life balance on job satisfaction among women entreprenuers; and examine the extent to which work-life balance affects service delivery of women entrepreneurs in Nasarawa state, Nigeria.The study adopted a cross sectional survey using a combination of qualitative and quantitative approaches to deliver a detailed understanding and deeper insights of the variables. The thematic analysis of the interviews revealed that work life balance have a positive effect on performance of women entrepreneurs. Other components of Work life balance like healthy living, family, community networks and support were also identified from the thematic analysis to improve performance of women entrepreneurs. The study concluded that balancing business roles with other necessities of life have significant effect on business growth and performance of women entrepreneurs in the in Nasarawa State. Therefore, the study recommended that women entrepreneurs should adopt effective work life balance strategies by planning, organizing and implementing time management to enable them achieve optimum performance.

Keywords: Flexible Working Arrangements, Family Responsibilities, Work Life Balance and Performance

INTRODUCTION

Over the years, women entrepreneurs have been recognised as essential contributors to economic growth and national development, identifying opportunities in the environment, gathering resources and utilising opportunities. In developing countries, entrepreneurship largely operates in the informal sector where the economy is driven by skills.Women entrepreneurship has become an essential force in many countries, it has received much scholarly attention ranging from academics, governments, decision makers alongside the society and in all areas of work. As many women set up their businesses, take risks and ensure performance, countries of the world now consider their activities as economic drivers. In fact, it has become a second way through which women generate more income. As such, certain matrimonial and social obligations expected from women are drastically affected. This is because the energy to use in meeting these responsibilities is spent on meeting customers' demands and expectations. Despite the active roles of these women in businesses, and entrepreneurship, their responsibilities as wives, mothers, sisters, daughters as well as home-keepers are expected to be maintained. Work-life balance is not equivalent to equilibrium between one's career life and personal life; These pursuits include family affairs, leisure time, social responsibilities, one's health and spiritual upliftments, among others. How to balance work with life is a very challenging aspect which affects women in this present time. Most times, women entrepreneurship is perceived as an alternative especially for women who want to leave paid employment either due to work pressures or family demands. There is an increasing concern for

managing work and family demands for women both in paid employment and entrepreneurship. For those in paid employment, government policies have been deployed to bridge work-life balance of their workers. These initiatives include education programs, policies of leave, child care, work schedules as well as other actions that contribute to employees' work-life balance. Policies of government also ensure that employment guidelines and regulations are followed by companiesso as to promote work-life balance.Consequently, quality of life of most women entrepreneurs have been compromised because of long hours they spend at work place and the necessity to carry work home. Women are not exempted from the routine demands that society places on them and at the same time, they are responsible for driving the success and performance of their businesses. When women entrepreneurs are financially sustainable, personally satisfied and capable of balancing work and non-work responsibilities, business success is always recorded, thus, there is an increasing women's participation in entrepreneurship.

As the work environment becomes more dynamic day by day, it is important that employers both in private and public sector to ensure a better work life balance in order to ensure entrepreneurial performance. Evans, Pucik and Barsoux (2002) urged firms to focus on work life balance initiatives to enhance performance. Employees are important resource in any organisation; hence, it is prudent for human resource managers to ensure their wellbeing in order to optimize their contribution to the goals and objectives of the organization (Afshan, Sobia, Kamran & Nasir 2012). It is noteworthy that research on work life balance has been burgeoning. A Research by the UK government revealed that inflexible and working long hours leads to poor health, poor family life, and lower employee's productivity (Arrow smith& Sisson, 2001). Developed countries like the UK have gradually embraced work life balance initiatives, but most developing countries, especially in Africa are yet to fully embrace them despite evidence of a statistical positive correlation between work life balance and employees' performance. In Nasarawa State the Government has established work life balance facilities to reduce the work-family conflicts that may negatively affect the employee's performance. Some of the facilities include day care facilities, health facilities for men and women, and flex time for breast feeding mothers. These are crucial for performance in the modern competitive business environment. Frese and Fay (2001) observed that organizations are interested in the performance of their employees in order to meet their goals and attain a competitive advantage. Therefore, the concept work-life balance is commonly used in a comprehensive way to describe policies that were previously known as family friendly, though they have been extended beyond thescope of the family (Orogbu, Unyeizube, &Chukwuemeke, 2015).

The female entrepreneur's role has shown tremendous growth leadership, management, innovation, research and development effectiveness, job creation, competitiveness, productivity and the formation of new industries (Nxopo, 2014). Van der Merwe (2008) asserts that female entrepreneurs are taking control of their personal and professional lives. Nxopo (2014) emphasised the role these women entrepreneurs play to reduce poverty and unemployment cannot be overemphasized and there is a need for research on the ways women entrepreneurs' balance between family and work life. Meyer (2009) pointed that women entrepreneurs increasingly are considered important for economic development and they not only contribute to employment creation. Whether they are involved in small or medium scale production activities, or in the informal or formal sectors, women's entrepreneurial activities are not only a means for economic survival but also have positive social repercussions for the women themselves and their social environment (United Nations Industrial Development Organization [UNIDO], 2001). Nasarawa State is a state in the Middle Belt region of Nigeria, The state has thirteen local government areas and its capital is Lafia, Nasarawa State is inhabited by various ethnic groups, including the Koro and Yeskwa in the far northwest; the Kofyar in the far northeast; the Eggon, Gwandara, Mada, Ninzo, and Nungu in the north; the Alago, Goemai, and Megili in the east; Eloyi in the south; the Tiv in the southeast; the Idoma in southwest; and the Gade and Gbagyi in the west while the Hausa and Fulani live throughout the state. Nasarawa is also religiously diverse as about 60% of the state's population are Muslim with around 30% being Christian and the remaining 10% following traditional ethnic religions.Nasarawa State had a total population of 1,869,377 residents as of 2006, making the state the second least populated state in Nigeria. Their culture andreligion to some extent restricts women movement and participation in business. This

study responds to this missing knowledge through the following questions: What is the relationship between Flexible working arrangements and performance of women entrepreneurs in Nasarawa State? And what is the relationship between Family Responsibilities and performance of women entrepreneurs in Nasarawa State?

LITERATURE REVIEW

Conceptual Review

Work-life Balance Practices

Work-life Balance Practices Initially, the concept of work-life balance was conceived to refer to the conflict between family and work (Bloom, Kretshmer & Van Reenen, 2006) and work family enhancement (Grzywacz & Marks, 2000). Researchers have evaluated work-life balance differently using diverse dimensions (Poulose&Sudarsan, 2017). According to Greenhaus, Collins, and Shaw (2003), work life balance is the absence of workfamily conflict or the intensity or rate of recurrence with which family interferes with work and work interferes with family. Similarly, Greenhaus and Powell (2006), work–life balance is the degree to which an individual's satisfaction and effectiveness in the roles of work and family domain are well matched with the individual's life priorities. Work-life balance practices include flexible work arrangements such as, flexibility in choosing the place of work, scheduling time of arrival and departure from work, leave in lieu of family reasons such as par leave, direct financial assistance for child care and information services such as finding a childcare center for a new employee. An inclusive idea of a workplace is in the same time, chooses and lives a variety of lifestyles in different stages of life like during childrearing, middle and old ages as a member of a family and a community" (Report on Health, Labour and Welfare, 2011). In countries like India, interventions to protect one from workplace exploitations, workplace terms and conditions are made by employers. Work-life balance practices regarding working hours include flexi time which allows employees to determine the start and end times of their working day provided a certain number of hours have been worked. This can allow staff to meet family personally commitments/emergencies during the day or reduce their commuting time by starting and ending work before or after the rush hours). While work-life balance practices enable entrepreneurs to manage work and care giving, they can increase work intensification and perpetuate stereotypes of ideal workers (Kossek, Lewis &Hammer, 2010). Studies have revealed that entrepreneurs do not always take advantage of the work-life benefits offered by their organisation (Thomson, Beauvais &Lyness, 1999).

Flexible Working Arrangements (FWAs)

Flexible working arrangement is an arrangement where employees work a full day but they can vary their working hours. These arrangements may include specific guidelines so that a "core" working day exists. Flex time is usually arranged in advance with the employee and employer or supervisor and a set range of start and finish times are established. The total hours of work are not usually affected by this arrangement.According to Estes and Michael (2005), FWAs are schedules such as telecommuting, flextime, part-time job, job-sharing, and compressed work week. The technological advancement, market volatility, increased competition, changing family demographics characterized by increased women engaging in formal employment. FWAs (Bond, Thompson, Galinsky & Prottas, 2002).Although FWAs has not been adopted by manyorganisations, Lambert, Marler and Gueutal (2008) noted that employers are increasingly granting their staff significant level of independence and FWAs to manage and control themselves as to when and where they work from. Empirical studies by Stravrou (2005), Brewster, Mayhofer and Morley (2004); Glass andFinley (2002); reveal that some flexible options result to positive outcomes while others results to negative outcomes. According to Batt and Valcour (2003), FWAs are positively related to job satisfaction which leads to employee performance. Peters, Tijdens, and Wetzel's (2004) opined that FWAs affect the mobility of employees since they have to reschedule their daily responsibilities while reconciling the two domains of their jobs, personal needs, household requirements,

and organizational demands. According to Kelly et al. (2008), the mechanisms used to design anorganization’s work flexibility to minimize the incidence of time conflicts for staff might affect the employees' performance.

Family Responsibilities

Family Responsibilities (FR) Currently, more women are searching for formal employment than before; there is more dual -earners, elder care and single parenting by employees (Lazăr, Osoian&Raþiu, 2010). An employee who have parental roles and other caring roles to play has multiple family responsibilities, which in turn makes it difficult to manage work and family responsibilities. This may cause either positive or negative effect since the two domains have flexible and permeable boundaries (Moon &Roh, 2010). In support of this Bruck, Allen and Spector (2002) opined that multiple roles performed by employees have an effect on the well-being both at work and at home. This may result in a work family conflict which causes negative effect from work to family and vice versa (Agarwala, 2007). To counter this, organisations have to come up with a means for connecting the two domains. According to Cayer (2003), organizations achieve this by establishing policies such as crèches, employee counseling, recreational facilities, or family leave to employees. Empirical evidence shows mixed findings concerning the effects of family responsibilities on employee's performance. A study conducted on Canadian private sectoremployees by Higgins, Duxbury, and Lee, (2000) showed that the conflict between family and work responsibilities lower the perceived quality not only in work life but also in family life. This, in turn, has a negative effect on organisational outcomes such as performance, turnover and absenteeism. The outcome of this study implies a positive impact of family responsibilities on employees performance. An experimental study conducted by Butler and Skattebo (2004) showed that the experience of family-work conflict caused by more family roles had no effect on performance ratings given to female workers. However, men with such work-family conflicts were found toperform poorly. Patel, Govender, Paruk, and Ramgoon (2006) conducted a study on “Working Mothers: Family-Work Conflict, Job Performance, and Family/Work Variables.”The findings of this study contradicted the one carried out by Butler and Skattebo (2004). It showed that there is a positive relationship between work life conflict caused by numerous family responsibilities and employees' performance. An empirical study by Pleck (1977) found that there is an agreement that family and work affect each other either negatively or positively. However, there exist other variables such as task, stress, time, attitude, and behavior which affect work life balance.

Women Entrepreneurs Performance (WEP)

In this review, the word “entrepreneur” is a common term for the person who is innovative. The entrepreneur a person who sets up a business or businesses, taking on financial risks in the hope of profit.. Women are fast becomingcrucial to the growing economic cluster, which ensures a quick achievement in the economic development. Women entrepreneurs contribute to the developing countries and facilitate enterprise development in transition economies (Lerner, Brush, &Hisrich, 1997). However, women enterprise speaks to an immense undiscovered wellspring of innovation, work creation and economic growth in the developing world (Niethammer, 2013). Vinesh (2014) Women entrepreneurs may be defined as a woman or a group of women who initiate, organise and run a business concern. Women entrepreneurs are those women who think of a business enterprise, initiate it, organise and combine factors of production, operate the enterprise and undertake risks and handle economic uncertainty involved in running it. The quantity of women entrepreneurs in Nigeria expanded over the most recent three decades because of the accentuation on industrialization, and a developing enthusiasm for privatization, independent work and business-arranged business. The performance of women entrepreneurs has become an important agenda in recent policy and academic debates, especially in Nigeria. Business performance is evaluated based on different concepts (Srinivasan, Woo, & Cooper, 1994).

The performance also characterized as a mindboggling marvel of various measurements that are hard to control without utilizing a blend of objective and subjective measures (Dharmaratne, 2013). Performance

is the strategic outcomes that organisations use to realize its goals, success or not. According to Terziovski and Samson (2000), there are three levels of performance within organisations. They are distinguished as financial performance, business (firm) performance and organisation effectiveness. Many empirical studies tend to employ tangible variables in measuring firm performance because they are easier to operationalize (Brown & Caylor, 2009; Watts, 2003). Likewise, within the theme of business management, small firms and entrepreneurship development, researchers argued that financial measures of small firms seem to be commonly and widely used. Murphy, Trailer, and Hill (1996); Watts (2003) argued that in the academic field of entrepreneurship, financial indicators seem to gain the upper hand when discussing performance. This may be due to the ease with which it can be used in positioning and judging how a firm is performing in its business operations or activities. Indeed, the financial measure is the primary measure of a firm performance.

Empirical Discussion

Empirical studies show mixed findings on whether the Flexible Working Arrangements is associated with employee performance. Bloom and Van Reenen, (2006) found that FWAs are not directly related with organizationalperformance, but a study by Menezes and Kelliher (2011) showed that there exist a positive correlation between FWAs and individual employee performance. 31% showed that there was a correlation while 69% indicated that there was no correlation between FWAs and individual employees' performance. It was found that working from home have positive effects on employees' performancesince there is a reduced cost (Menezes&Kelliher, 2011). Further, MenezesandKelliher (2011) found that there was no causality between flexible and non-flexible working arrangements among employees. It is worth noting that the study used respondents from single occupation and the data used were from a specific organization. Astudy conducted in Australia and the USAby Golden (2007) indicated that 45% of the employees are not able to influence their working schedule and a mere 15% felt that they could freely determine their working flexibility. 43%had the freedom of determining within certain limits the flexibility of the FWAs.

Theoretical Foundation

This study attempts to clarify how individuals navigate and negotiate the worlds of work and family, and the boundaries between them to achieve equilibrium. It plays a central role in understanding women entrepreneurship because women entrepreneurs are faced with the conflict of managing home chores and business. The theory states that the role of each person takes place within a specific domain of life, and these realms are divided by boundaries that may be physical, temporal, or psychological. The theory discusses the problem between realms of life, in home and at work. This theory therefore indicates that a good balance should be struck between work and non-work activities. Work-life balance refers to striking equilibrium between job commitments, family commitments as well as personal interests with minimal role conflict. Problems arise when work domain issues interfere with family welfare especially if women put more effort to fulfill job demands at the expense of other demands. The increasing work demand on women entrepreneurs to enhance performance may create pressure that can cause imbalance between work-life and family life. Spending much time at work and bringing unfinished tasks home compromise the quality of one’s life which could cause stress and spur negative behaviours that could interfere with their performance.

METHODOLOGY

The study adopted a cross-sectional survey in its investigation of the variables on a sample of women entrepreneurs that benefit from DEC. Primary data was gathered through structured questionnaire adapted from validated measures on a five point Likert scale. Questionnaires were administered by the researchers with the help of research assistants. The population of the study was 120 women entrepreneurs across the State registered with DEC inLafia which is the state capital, and a sample size of 97 was obtained

(Krejcie& Morgan, 1970).Simple random sampling was used to administer questionnaires to women entrepreneurs. A total of 120 questionnaires were administered and 112 were retrieved. For missing values and wrongly filled responses, 8 questionnaires were found not usable and had to be removed from further analysis.

Hypothesis Development

Work Life Balance and Women Entrepreneurial Performance

Family life and working life are two roles that affect one other simultaneously and can sometimes result in conflicts. Managing the responsibillities of both family and work is a continuous challenge for women entrepreneurs most especially in Nasarawa State, as many women entrepreneurs have to assume multiple roles in their family and businesses (Boz, Martínez-Corts, &Munduate, 2016; Lee & Ling, 2001). These multiple roles can either take up their time thus reducing the time and efforts the women spend on making their businesses successful. The needed time and efforts commitment might be difficult to come from women entrepreneurs as they often view their business not merely as a separate economic system but also as a mutually connected system with the family (Lee & Ling, 2001). Consequently, a female entrepreneur as a working woman and mother assumes multiple roles in the family and in the business. In developing world, thedivision between productive and reproductive labour is often based on an unequal division of labor, mostly characterized by sex-based division, with women predominantly associated with unproductive labour (Sullivan & Meek, 2012). Generally, productive labor is associated with the development of goods/services with a monetary value while reproductive labor is associated with the private work that people do for themselves and their families (Vogel, 2013). While both forms of labor are necessary, the distribution of work varies across certain aspects of identity, which is why advances prompted by the early Marxist feminists suggest that domestic work should be included within the wage capitalist economy as the conditions of women will improve once their work is located, acknowledged and valued in the public domain (Ferguson & Hennessy, 2016). Nonetheless, in spite of these advances, the structures of work and family consist of a cycle of vulnerability that shapes the lives and choices of women, as women entrepreneurs still face many business challenges that come about because of multiple tasks at home and work (Richardson & Finnegan, 2004; Sullivan & Meek, 2012). Researchers (Waithaka, Wegulo&Mokua, 2016; Richardson & Finnegan, 2004) pointed out that many women are confronted with the burden of family and domestic responsibilities and these responsibilities have a negative impact on the performance of their business and thus limits their ability to generate income.

Leaptrott (2009) highlights that FWC imposes time pressures that reduce the available hours that women have in managing their business and thus has a negative influence on the of the financial health of the business as well as the business owner's satisfaction on how they perform their roles. Family-related role conflict has also been shown to have a negative impact on the income of small businesses owners (Loscocco, Robinson, Hall & Allen, 1991). The study therefore hypothesized thus:

> **Ho_1**: There is no significant relationship between Flexible workingarrangements and performance of women entrepreneurs in Nasarawa State.
>
> **Ho_2**: There is no significant relationship 2 between Family Responsibilities and performance of women entrepreneurs in Nasarawa State.

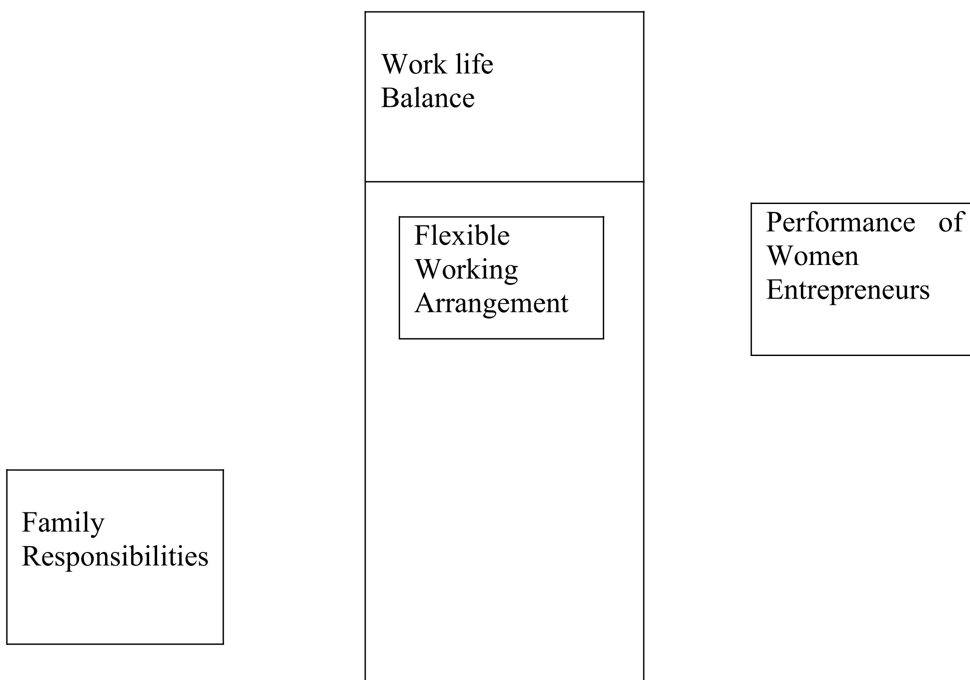

Fig. 1 Research Model (2022)

RESULT AND DISCUSSION

Primary data analysis was carried out using regression for test of hypotheses. Specifically the tests cover hypotheses that were bivariate and declared in the null form. The study used multiple regression analysis to test the hypothesis. Two things were done in trying to proof the existing relationships. First, we have a scatter 2 plot graph that shows at R linear value of (0.951) there is a relationship between the two constructs. That is, an increase in work life balance brings about an increase in the level of performance of women entrepreneurs. The scatter diagram has provided clear evaluation of the closeness of the relationship among the pairs of variables through the nature of their concentration. Secondly, correlation analysis revealed that there is a significant level of association among the variables. The correlation coefficient (r) shows that there is a significant and positive relationship between Flexible working arrangements and performance of women entrepreneurs. The rho value 0.739 indicates this relationship and it is significant at p 0.000<0.05The correlation coefficient represents a high correlation indicating a very strong relationship. The correlation coefficient (r) shows that there is a significant and positive relationship between Family Responsibilities and performance of women entrepreneurs. The rho value 0.885 indicates this relationship and it is significant at p 0.000<0.05 The correlation coefficient represents a high correlation indicating a strong relationship.

Table 1 correlation coefficient

Variables 1	**2**	**3**	
1 Performance of women entrepreneur	**1.000**		

2 Flexible working Arrangments	**.739**	**1.000**	
3 Family Responsibilities	**.885**	**.483**	**1.000**

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

Table 2 Model Summary

a. Predictors: (Constant), Performance of Women Entrepreneurs, Flexible working arrangements, Family Responsibilities

Model 1	Sources	Df	Mean Source	F	Sig.F
Regression	54626	3	18.209	35.900	0.000
Residual	63.908	126	0.507		
Total	**118.533**	**129**			

a .Dependent Variable: Performance of Women Entrepreneurs
b. Predictors: (Constant), Flexible working arrangements, Family Responsibilities

	Unstandardized Coefficient		StandardizeDecision Coefficient		
Model 1 β	Std Error	Beta	T	Size	
Constant	1.729	0.2806.181	0.000		
Flexible workingarrangement	0.132	0.060	0.165	2.199	0.030
Family Responsibilities	0.779	0.090	0.739	8.609	0.000

A .Dependent Variable: Performance of Women Entrepreneurs

In testing the hypothesis the variables employed were the performance women Entrepreneurs (PWE) as the dependent variable while Flexible Working Arrangements (FWA), and Family Responsibility (FR), were the independent variables. The standard regression model used is given as:

$Y = a + b_1x_1 + b_2x_2$
where:
Y is the dependent variable,a is the intercept
X_1, X_2 etc. are the, independent variables,
and b_1 , b_2 , etc. are the coefficients of the independent variable.

The regression model is therefore:

$WE = a + b_1\ FWA + b_2\ FR + error$
$Y = 1.729 + 0.132 + 0.779$

The equation revealed the SPSS output in table 2 showing the coefficient of determination i.e. the 2 adjusted R is 0.448; which shows that about44.8% of the variation in the data on performance of women entrepreneurs can be explained by these factors- flexible working arrangements and family responsibility. In addition, the ANOVA statistics revealed that linear combination of the two independent factors being significantly related to changes in dependent factor, $F(3, 126) = 35.900$, $p < 0.0001 \leq 0.05$ alpha. The regression equation emerges is very useful for making predictions. Hence at 0.05 (5%) significance and 95% confidence, the result provides evidence to conclude that the slope of the population regression line

is not 0 and, FWA, and FR are useful as a predictor of the performance of women entrepreneurs. Since p-value < 0.0001 ≤ 0.05, the null hypothesis is rejected while the alternative hypothesis is accepted. By implication, there is significant relationship between Flexible working arrangements and performance of women entrepreneurs inNasarawa State and there is also a significant relationship between Family Responsibilities and performance of women entrepreneurs in Nasarawa State. Similar analysis of individual contribution of the variables in explaining the variation in the model was done based on the standardised coefficient results in table 4, for example, one (1) of the independent variables made significant contribution i.e. FR with beta = 0.779, p=0.000 at 0.05á (77.9%) made statistically significant contribution to the prediction of change in performance of women entrepreneurs. On the other hand, FWA with beta =0.132, p=0.030 at 0.05á (13.2%) made little contributions to the model.

Discussion OF Findings

Hypothesis One

Hypothesis one empirically examined the relationship between work life balance and performance of women entrepreneurs in NasarawaState. The results of the analysis show significant relations between the variables. The results of the analysis revealed that work life balance is significantly associated withperformance of women entrepreneurs; this implies that work life balance is considerably important in enhancing performance of women entrepreneurs. This argument shares a similar view with Bloom and Van Reenen (2006) findings that FWAs are not directly related to organisational performance, but is in agreement with a longitudinal study by Menezes and Kelliher (2011) who found that there exists a positive correlation between FWAs and individual employee performance. Therefore, based on this study, once flexible work arrangement is increased, employees' performance would increase.

Hypothesis Two

Hypothesis two revealed that there is a positive correlation between employee performance and family responsibilities. Higgins et.al (2000) their result showed that the conflict between family and work responsibilities lower the perceived quality not only in work life but also in family life, which, in turn, has a negative effect on organisational outcomes. 50% of the respondents show that their performance was better when they had no parental role than when they do. Patel et al. (2006) had also found that there is a positive relationship between work-life conflict caused by numerous family responsibilities and employees' performance.

Implication of Findings

It is necessary that the women entrepreneur should understand the advantages and disadvantages of setting and controlling their own venture. Women should be able to balance work life and family responsibilities to enable them perform better in various aspects such as, spending enough time with family, Child care arrangement and the ordinary challenge of becoming the entrepreneur and homemaker. The study discovered that Flexible working arrangements and Family Responsibilities impacted positively on performance of women entrepreneurs. The practical implication of this research is that women entrepreneurs who experience greater levels of flexible working arrangements tend to have higher performance. Study revealed that women entrepreneurs tend to have a fulfilled work life balance as long as there is leave and creating more time for personal matters.

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