Effect of Environmental Disclosure on Financial Performance of Quoted Oil and Gas Companies in Nigeria

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Abstract

This study examines the effect of Environmental Disclosure on Financial Performance of quoted oil and gas companies in Nigeria, using panel series data and regression analysis approach. The focus variables of this study are Environmental Disclosure for Independent Variable and Financial Performance for Dependent Variable. The Independent Variable is proxied by Research and Development Cost and Estimated Future Expenditure while Dependent Variable is proxied by Net Profit Margin and Return on Asset. The secondary data obtained from the annual reports of 12 oil and gas companies quoted on the floor of the Nigeria Stock Exchange (NSE) for 10 years ranging from year 2010- 2019 were used. The study adopted the E-view as a statistical tool for analysis with focus on Ordinary Least Square (OLS) regression method. The study found that Environmental Disclosure has positive and statistically significant effect on Financial Performance of quoted oil and gas companies in Nigeria during the period under review. The study concludes that Environmental Disclosurescontribute immensely to Nigeria's Oil and Gas firms to increase financial performance and profitability, as well as provide a springboard that can enable the country at large to emerge as an environmental-friendly nation. It is recommended, amongst others that, since Nigerian economy is highly dependent on the oil and gas resources, the continued insistence on full compliance to every form of best practice in the oil and gas sector (including full environment disclosures), is of great and immerse benefit to the industry players, oil and gas firms, the economy at large and to the citizenry of the country.

Keywords: Environmental Disclosure, Financial Performance, Research and Development, Net Profit Margin.

INTRODUCTION

According to Mishra and Siddiqui (2014), Climate change and Global warming is described to be an environmental challenge in the face of the world. This challenge is mostly caused by companies' operations. Emission from companies' operation is a major source of global warming and climate change. Companies do incur cost for environmental management and abatement of these challenges. Hence, the need for companies to account for environmental expenditure received great attention years ago. The laws of the Federal Republic of Nigeria 1992 Decree No.82 on Environmental Impact Assessment require that companies before embarking on any activity that has effect on environment, to submit Environmental Impact Assessment Report. The policy includes among others the following information; the description of the activities, description of the potentially affected environment, assessment of potential environmental impacts on proposed activity. The alternatives include cumulative, short term and long-term effect, an identification and description of measures available to mitigate adverse environmental impacts of companies' activity and assessment of those measures. All companies whose activities have effect on the environment do incur environmental management cost. The Environmental agencies in Nigeria include: Federal Environmental Protection Agency (FEPA),Forestry Research Institute of Nigeria (FRIN), National Biosafety Management Agency (NBMA), National Environmental Standards and Regulations Enforcement Agency (NESREA), National Oil Spill Detection and Response Agency (NOSDRA), Abuja Environmental Protection Board (AEPB), etc.

Environmental reporting practices have emerged among economic players as a result of various influencing factors such as stakeholders' benefit, pressures from various interest groups, and political and cultural conditions. At the macro level, responding to voluntary environmental disclosures offers economic benefits such as being able to develop stronger business relationships with suppliers, attracting ethical investors and even penetrating new markets due to improved environmental performance (Sumiani, Haslinda & Lehman 2016). Corporate environmental disclosure is a new concept used to describe various means by which companies disclose information on their environmental activities to users of financial statements (Alok, Nikhil & Bhagaban, 2018). In literature, environmental disclosure is commonly described as the vehicle for providing environmental data designed to satisfy the accountability relationships and to indicate corporate consciousness through a moral disclosure on environmental issues. It is important to disclose environmental activities in order to expose pollution prone companies to a wider spectrum of stakeholders on their role to achieve a cleaner and greener environment. In the mid-1960s, the environmental movement gained momentum. This popularity prompted many companies to create a new green image through advertising. Jerry Mander, a former Madison Avenue advertising executive, called this new form of advertising "eco-pornography." The first Earth Day was held on April 22, 1970. This encouraged many industries to advertise themselves as being friendly to the environment. Public utilities spent 300 million dollars advertising themselves as clean green companies. This was eight times more than the money they spent on pollution reduction research. In 1985, the Chevron Corporation launched one of the most famous green-washing campaigns in history. Chevron's "People Do" advertisements were aimed at a "hostile audience" of "societally conscious" people. Two years after the launch of the campaign, surveys found people in California trusted Chevron more than other oil companies to protect the environment, (Mirian&Sneirson 2012). In the late 1980s The American Chemistry Council started a program called Responsible Care, which shone light on the environmental performances and precautions of the group's members. The loose guidelines of responsible care caused industries to adopt self-regulation over government regulation (King & Lenox; 2011)

In Nigeria, studies on environmental disclosures have sought to establish a relationship between environmental disclosures and financial performance, measured through profitability (Collins, 2015; Uwuigbe, 2012). This study aims to provide further empirical evidence on the linkage between environmental disclosures and financial performance of quoted oil and gas companies in Nigeria. The problem of lack of adequate or non-environmental disclosures among pollution prone companies in Nigeria in their annual reports today is a thing of concern to concerned stakeholders. International Finance Corporation (IFC) published in 2013 that businesses face growing pressure from outside investors, customers, trading partners, shareholders, governments, NGOs and the public to identify and report on social and environmental performance. Environmental disclosures help firms to disclose to the outside world through their annual reports their ability to be environmentally friendly. Environmental accounting and reporting include: identification of environmental cost and expenses, capitalization of cost, identification of environmental liabilities, measurement of liabilities (Pramanik, Shil & Das, 2017). The study has the following objectives;

i. Investigate the effect of environmental disclosures on Net Profit Margin of quoted oil and gas companies in Nigeria.
ii. Ascertain the effect of environmental disclosures on Return on Asset of quoted oil and gas companies in Nigeria.

In line with the objectives of the study, the following null hypotheses are hereby formulated;

Ho$_1$: There is no significant effect between environmental disclosures and Net Profit Margin of quoted oil and gas's companies in Nigeria.

Ho$_2$: There is no significant effect between environmental disclosures and Return on Asset of quoted oil and gas companies in Nigeria.

LITERATURE REVIEW

Concept of Environmental Disclosure

According to (Crowther 2016), the primary purpose of environmental disclosure is to examine and incorporate in the firm annual reports issues that bother on environmental hazard that are not taken cognizance of in traditional or conventional accounting function that stakeholders can use for decision making. Disclosure of corporate environmental activities stressed the necessity for a close monitoring of natural resources and the corporation's harmful effect on the society it operate. Environmental effects caused by activities of firms especially those in the manufacturing, oil and gas and banking include pollutions like noise, waste, hazardous emission, spillages, degradation (Parmigiani, Klassen & Russo 2015). In recent years, then, a belief has arisen in businesses and in society that reporting has a wider role than that expressed in the traditional 'stockholder/shareholder' perspective. Importantly, one need not hold to the 'deep green' end of the argument to hold these views: there are strategic reasons why a wider view of accountability may be held and, accordingly, why initiatives such as environmental reporting may be supported; environmental consequences of an organisation's inputs and outputs. Inputs include the measurement of key environmental resources such as energy, water, inventories (especially if any of these are scarce or threatened), land use, etc. Outputs include the efficiency of internal processes (possibly including a 'mass balance' or 'yield' calculation) and the impact of outputs. These might include the proportion of product recyclability, tonnes of carbon or other gases produced by company activities, any waste or pollution (Lint, 2009).

These measures can apply directly (narrowly) or indirectly (more broadly). A direct environmental accounting measures those within the reporting entity whereas an indirect measure will also report on the forward and backward supply chains which the company has incurred in bringing the products from their origins to the market. For example, a company can directly report on the environmental impact of its own company: its branches and main office. But to produce a full environmental report, a company would also need to include the environmental consequences of those activities it facilitates through its business loans. Where a company claims to report on its environmental impacts, it rarely includes these indirect measures because it is hard to measure environmental impacts outside the reporting company and there is a dispute about whether such measures should be included in the company's report (the company may say it is for the other company to report on its own impacts).

Environmental Future Expenditures

An environmental liability is a legal obligation to make a future expenditure due to the past or ongoing manufacture, use, release, or threatened release of a particular substance, or other activities that adversely affect the environment also environmental liabilities" is used to refer to the potential for fines, penalties, and jail terms for violations of environmental laws. "Environmental liabilities" also frequently serves as short-hand to refer to the clean-up obligations under the federal Superfund and state counterpart laws for contaminated sites. Another common usage is to label the costs involved in complying with regulations as "environmental liabilities, (Kathleen & Tom 2010). Environmental liabilities arise from a variety of sources. Federal, state, and local environmental statutes, regulations, and ordinances, whether enforced by public agencies or through private citizens' suits, give rise to many types of environmental liabilities. Another legal source of these liabilities is "common law" (i.e., judge-made law) that can vary from state to state. A detailed list of environmental liabilities would be very lengthy. Thus, this report distinguishes the following broad categories of environmental liabilities: Compliance obligations related to laws and regulations that apply to the manufacture, use, disposal, and release of chemical substances and to other activities that adversely affect the environment, remediation obligations (existing and future) related to contaminated realproperty obligations to pay civil and criminal fines and penalties for statutory or regulatory non-compliance, obligations to compensate private parties for personal injury, property damage, and economic loss, obligations to pay punitive damages for grossly negligent conduct and obligation to pay for natural resources damages.

Businesses can incur environmental expenditures during the course of their operations. Linking these types of costs to specific KPIs provides a financial context to those stakeholders that are interested, especially institutional investors. Some expenditure may be attributable to a specific KPI, for example waste, in which case it should be described alongside the information disclosed on each KPI. Other fines and expenditures may be harder to attribute to one specific KPI, in which case they should be reported separately. Environmental expenditures are classified as types of costs aimed at directly preventing, reducing or ceasing pollution and nuisances created by a company's activities, including accumulated liabilities, provisions, public funding or other grants, and capital expenditures related to environmental issues. Where these expenditures can be separated from mainstream operational costs businesses should consider reporting them.

Research and Development

Environmental pollution is one the greatest challenges that the world is facing today. It began since industrial revolution, increasing day by day and causing irreparable damage to Mother Earth. Environmental pollution has its own causes, effects and solutions. Looking into these will help you identify the causes and what steps to be taken to mitigate those effects. To ensure that land and infrastructure development takes place in an environmentally responsible and sustainable manner, the Players will ensure that there are adequate instruments to improve efficiency and effectiveness of environmental impact assessment system across the country. Investment in the institutions and other corporate bodies whose activities or outcome will improve the environmental standard of living is encouraged by the concerned Players that engage in the activities that cause environmental degradation (Ketlhatlogile, 2016).

Financial Performance

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). Revenue development can be seen as a growth indicator of the firm and also as a competitive strategy for consecutive firms. A firm can, by being environmentally sustainable, differentiate its products and thus increase its revenue. Similarly, a firm can save costs on resources, regulatory costs, capital and labour and therewith increase its profits. In this study, financial performance will be measured by, Net Profit Margin (NPM), Return on Assets (ROA) and Return on Equity (ROE).

Net Profit Margin (NPM)

According to Bastian and Suhardjono (2006), Net Profit Margin (NPM) is basically one of the ratios used to demonstrate a company's ability to generate net income. Net profit margin is the ratio between net income and sales. This ratio is one of the important ratios for operational managers, because this ratio is able to reflect the sales pricing strategy that the company will apply. This ratio is also able to control the operating expenses. To calculate your net profit margin, divide your netincome by your total sales revenue. The result is your **net** profit margin. You can multiply this number by 100 to get a percentage.

Net Profit Margin (NPM) = (Net Profits ÷ Net Sales) x 100

Return on Asset (ROA)

Lyn and Aileen (2008) stated that return on assets (ROA) is a ratio that describes the assets measured by sales volume. The greater this ratio will be better for the company. This means that the rate of return will be greater. The greater the ROA, the higher the profits generated by the company, so that investors will buy more shares of the company. It was stated that return on assets shows the number of profits earned relative to the level of investment in total assets. To calculate ROA the following formula can be used.

Return on Assets = Net Income ÷ Total Assets

The higher this ratio means the company is more effective in utilizing the assets to generate net income. Thus the higher ROA means the company's performance more effective because the rate of return will be greater. This will further increase the company's attractiveness to investors. Increased attractiveness of the company causes the company increasingly in demand by investors because it can provide great benefits (return) for investors. In other words, ROA will have an effect on stock returns that will be accepted by investors.

Environmental Disclosure and Financial Performance

The link between the concept of Environmental Disclosure and Concept of Financial Performance connotes incorporation or non-incorporation of the environmental information in the annual reports of the companies whose activities are prone to causing environmental degradations which in turn informs the decisions of the stakeholders either positively or negatively. Hai (1998) used a sample of potentially polluting publicly listed companies in Singapore and the accounting-based variables of ROA and ROE to measure the relationship between the variables and reporting. The study concluded that firms which produce environmental disclosure have better financial performance than those that do not. In addition, Stanwick and Stanwick (2000) examined US firms, and used the value of net income/total assets as their performance proxy. They found that high performance firms had higher disclosure of environmental policies and/or descriptions of environmental commitment compared to poor performing firms.

Empirical Review

Saman (2019) conducted research on the Environmental Accounting and Financial Performance of Oil and Gas Companies in Nigeria. The secondary data were made use in the study for the periods 2015, 2016 and 2017 with the total sampled 11 companies selected based on environmental information available in the annual reports. The data were analyzed using multiple regression analysis through the use of econometric model. The amount spent by each Oil company as their environmental costs (on air pollution, water pollution, staff welfare (medical expenses), community welfare and externalities were used as proxies for environmental accounting reporting while ROCE, NPM, DPS, and EPS were used as proxies for corporate performance. The result revealed that the explanatory variables, ROCE, NPM, EPS, and DPS have an insignificant relationship with ENVC with coefficients of .252, .011,.152 and .114 and P-values of .175, .950, .423 and .542 respectively. The 30.6% Adjusted R^2 indicates the variation in ENVC margin and could be explained by variability in explanatory variables as well as control variables in the model. Durbin Watson value of 1.683 affirmed that there is no first-order autocorrelation among the residuals in the model. The result is in agreement with the findings of Ruslaina (2010), who found that financial performance has no significant relationship with environmental reporting. However, the result is contrary to the discoveries of Turban and Greening (2012) that found a significant relationship between environmental reporting and firm performance. The findings suggested that lack of environmental reporting and disclosure standards significantly affected the reporting and disclosure uniformity of environmental related information in financial statements, annual reports and accounts. it was discovered that environmentally friendly organizations' who voluntary disclosed their environmental activities enjoyed high level of competitiveness.It was concluded that, issues related to financial performance, managerial accounting, external and internal auditing, tax and financial accounting need to be studied further in order to deal with other environmental issues effectively. This study thereby gave some recommendations among others that Government Environmental Agency should make environmental reporting in annual reports compulsory since most organizations hardly report their environmental activities in their reports and also Oil and Gas companies on their part should ensure that they comply with the environmental laws of the nation as it will go a long way in enhancing their performances.

Nguyen and Tran (2019) assessed the relationship between disclosure levels of environmental accounting information and financial performance. Data were collected from the firms listed in Vietnam Stock Exchange from 2013 to 2017, including the firms disclosed and the ones did not disclose the environmental accounting information. The study used two regression models to investigate the relationship between environmental accounting information and return on assets. The results indicated that there was a close relationship between disclosure level of environmental accounting information and financial performance. In addition, there was a difference in terms of financial performance between the firms that had not disclosed environmental accounting information and the ones that disclosed the environmental accounting information. Conclusively, based on the quantitative and qualitative research methodology, the team assessed the impact of the level of disclosure of environmental accounting information on the financial performance of the business. The results indicate that the level of disclosure of environmental accounting information affects the financial performance of businesses both now and in the future. At the same time, the study also found the relative difference in financial performance between two groups of enterprises disclosing environmental accounting information and not disclosing environmental accounting information. However, it was recommended that the Environmental Regulatory of Vietnam needs to raise awareness of corporate environmental responsibility and the benefits of disclosing detailed environmental accounting information to the financial performance of the business.
Tafadzwa and Fortune (2019), examined the relationship between corporate sustainability disclosure and return on investment. The sample of the study consisted of ten Johannesburg Stock Exchange (JSE)-listed mining companies, and the data was extracted from sustainability reports for a period of five years from 2010 to 2014. In this regard, data collection was undertaken by the adoption of a content analysis approach. A multi-regression analysis was used to analyze the relationship between environmental disclosure and return on investment. The same statistical mechanism was employed to determine the association involving social disclosure and return on investment. Results showed that there is a negative relationship between environmental disclosure and return on investment. On the other hand, the research revealed that there is also a positive association between social disclosure and return on investment. In conclusion, this implied that an increase in corporate reporting of social issues results in heightened financial performance through an increase in return on investment. The study recommended the adoption of corporate social disclosure as it would encourage firms to be socially responsible, while also generating financial benefits.

Zamil and Hassan (2019), examined the Impact of Environmental Reporting on the Financial Performance of Fortune 500 firms from 2013 to 2017. It appraised financial performance by measuring three independent variables: reduction in greenhouse gas emissions, reduction in waste, and reduction in water consumption. While the target population comprised the top 100 CSR-reputed companies listed on Fortune 500, the sample size was determined to be 50 based on observations of 250 companies. The collected data were analyzed using descriptive statistics, correlation, and regression analysis. Findings indicated that reduction in nominated variables such as greenhouse gas emissions and water consumption had a positive and significant impact on financial performance, whereas that in another variable, i.e., waste, had a negative and significant impact on financial performance. It was concluded that the multinational organization should involve in very many environmental or sustainability activities as this kind of events improve and increase the customer base that will eventually escalate the number of profits, thence firm's financial performance also improves. In addition, environmental reporting or sustainability report increase the organization’s visibility and publicity. Through practicing the resources to be environmentally friendly organizations are in a position to contribute to the community at large. Moreover, the positive relationship between environmental reporting and financial performance recommends that global companies' managers can use the environmental reporting to enhance the customer trust (stakeholder's positive attention), lessen reputational risks, and as such create long term shareholder value. Thereby, this study recommended that firms should adopt environment-friendly resources to attract stakeholders as well as save the planet. It also suggests that firms need to accord dedicated focus to environmental reporting to improve profitability.

Oyedokun, Egberioyinemi and Tonademukaila (2019), examined the effect of environmental accounting disclosure on firm value of listed industrial goods companies in Nigeria from 2007- 2016. The ex-post facto research design was adopted in this study while the data were gathered through the individual sample company annual financial statement. Multiple regression was used to analyze the effect of environmental accounting disclosure on firm value. Environmental accounting disclosure was measured by non- financial indicators, financial indicators and performance indicators while the firm value was measured by Tobin's Q. From the result, it is evident that non-financial indicators have a positive significant effect on firm value while performance indicators have a negative significant effect on firm value and the financial indicator has no significant effect on firm value of industrial goods companies in Nigeria. It was concluded that, the information content requirement by stakeholders helps in disclosing information about organizational financial performance and report on environmental accounting. Therefore, there is a need for corporate entities to improve on their environmental responsibility practices and disclose comprehensively their environmental risks, liabilities and impact on the environment. The study suggested that sanctions be put in place to encourage disclosures most especially non-financial indicators because it has a direct influence on the firm value of the industrial goods companies in Nigeria. Ahmad, Waseer, Hussain and Ammara (2018), investigated the relationship between environmental accounting and non-financial firm's performance listed in Pakistan stock exchange, Pakistan. Present study used regression analysis technique, using companies' annual data from 2006-2016. The empirical analysis showed a significant positive relationship between environmental accounting and firm's size. While earning per share and return on capital employed statistically turned out to be insignificant. Therefore, those companies, which have huge size, spend more resources for social welfare in term of environment pollution protection. On the Contrary, the limitation of this research is small sample size of listed companies in Pakistan stock exchange. Hence, outcomes cannot be generalized for entire population. Based on the results, it is suggested that government must give some tax relief to those firms, which work for the environment protection and environmental reporting should be compulsory in Pakistan to have clean homeland.

In Summary, various studies on environmental disclosures were reviewed with different results, though some have similarities in their conclusions that environmental disclosure has effect on financial performance while some were entirely different. Over several years, a variety of papers have examined the relationship between environmental disclosure and the financial performance or profitability of the firm. Studies have produced mixed results. Some have found a positive correlation between the two variables (Nguyen and Tran, 2019; Zamil and Hassan (2019); while some have found no correlation between environmental disclosure and profits (Saman, 2019; Tafadzwa & Fortune,2019). Given the inconclusive results found to date, this study aims to further examine the effect ofenvironmental disclosure on financial performance of quoted Oil and Gas companies in Nigeria by using E-view Econometric tool with focus on Ordinary Least Square to analyze the panel data extracted from the annual reports of the companies Oil and Gas in Nigeria for period of 10 years, covering 2010-2019

Theoretical Framework

Stakeholder Theory

Stakeholder theory has infiltrated the academic dialogue in management and a wide array of disciplines such as health care, law, and public policy (Freeman, Harrison, Wicks, Parmar & De Colle, 2014). Much attention has been paid to some basic themes that are now familiar in the literature that firms have stakeholders and should proactively pay attention to them, that stakeholder theory exists in tension (at least) with shareholder theory, that stakeholder theory provides a vehicle for connecting ethics and strategy (Philips, 2015), and that firms that diligently seek to serve the interests of a broad group of stakeholders will create more value over time. Nevertheless, there are so many different interpretations of basic stakeholder ideas that theory development has been difficult (Scherer& Patzer, 2011).

The Slack Resources Theory

The slack resources theory contends that high performance firms would have a large pool of resources available for investment in socially responsible programmes. Implicit in this theory is that availability of slack resources for allocation to social programmes is contingent on good financial performance; hence a positive relationship should exist. Although Barnard (2011) had discussed the role of slack in his early work, the specific label of 'slack' had not been coined until March and Simon published their seminal book. Cyert and March (1963) defined slack as ''the difference between total resources and total necessary payments". It was added that "slack is that cushion of actual or potential resources which allows an organization to adapt successfully to internal pressures for adjustment or to external pressures for change in policy, as well as to initiate changes in strategy with respect to the external environment".

Legitimacy Theory

The concept of legitimacy is important in analysing the relationships between companies and their environment. Parsons (2000) defines legitimacy as "the appraisal of action in terms of shared or common values in the context of the involvement of the action in the social society" This book contains a collection of ten essays. It provides a theory of formal organization. Central constructs of legitimacy research are provided. For example, it distinguishes "authority" from "legitimation" and "authorization. Maurer (2012) points out that legitimacy is the process whereby an organisation justifies to a peer or super ordinate system its right to exist; that is to continue, import, transform, and export energy material or information. Legitimacy theory is derived from the concept of organisational legitimacy, which has been defined as "a condition or status, which exists when an entity's value system is congruent with the value system of the large social system of which the entity is a part." When a disparity, actual or potential, exists between the two value systems, there is a threat to the entity's legitimacy" (Dowling & Pfeffer, 2015). It was pointedout that legitimacy is conceived as congruence between institutional actions and social values, and legitimization as actions that institutions take either to signal value congruency or to change socialvalue.

In summary, Legitimacy Theory underpins this study because it argues that organisations seek to ensure that they operate within the bounds and norms of society, although the stakeholder theory, legitimacy theory, the slack resources theory and the theory of virtuous cycle theories have been reviewed. These theories explain the phenomenon of voluntary social and environmental disclosures in corporate communication. Consistent with the notion of legitimacy theory, companies seek to gain, maintain, or repair their legitimacy by using social and environmental reporting. Legitimacy theory provides useful insights for corporate social and environmental disclosures, (Gehan& Naser, 2015).

METHODOLOGY

This study employs ex-post facto research design, with specific focus on the longitudinal Panel Series design which is a quasi-experimental study examining how an independent variable, present prior to the study in the participants affects a dependent variable. The ex-post facto research design was employed because this study relies mainly on already established secondary data on the environmental activities, which are extracted from annual financial statements. Also, this method entails the use of quantitative, statistical or regression techniques in evaluating the research issues and problems. In addition, the choice of this research design is informed by the effectiveness of the method in investigating the relationships among theoretically related variables. The data collected from the various sources is Panel in nature as it entails both the time series data and encompasses the cross-sectional approach since data were gathered from different oil and gas companies listed on the Nigeria Stock Exchange, for the period 10 years ranging from 2010 to 2019. A total of twelve (12) oil and gas companies are listed on the Nigeria Stock Exchange as at December 31st 2019 and their data were sourced from secondary source for the purpose of this study. The secondary source of data collection was employed because there is the availability of these data in the annual financial reports of the sample of this study. Multiple regression analysis was also employed in this study and it was used because it is known as the best unbiased and efficient estimator, and it also minimizes the error term with a view to finding the model or regression equation that explains the data.

Procedure for Data Analysis and Model Specification

The data collected is analyzed using multiple regression method and this method was employed because it is useful for estimation. Statistical and econometric tests were also used to evaluate the regression and these include; Multiple R, which is the correlation coefficient and it measures the extent of relationship between variables, R – squares, which is the coefficient of determination measures the percentage (proportion) of variation in the dependent variable that can attribute to the independent variables. The F statistics, The Beta coefficient measures the relative significance of each of the independent variable, "t" statistics and Durbin Watson test. The models are stated below;

Model 1: Based on Hypothesis one, the explicit form of the model in equation is expressed as:

$NPM = \beta_O+\beta_1 ERD + \beta_2 EFE + \epsilon_{it}$…………………………………………………………….. i

Where:

NPM = Net Profit Margin
β_O = Intercept
β_1= coefficient of ERD
ERD = Environmental Research & Development Cost
EFE = Estimate of Future Expenditure
ϵ = stochastic error term

Model 2: Based on Hypothesis two, the explicit form of the model in equation is expressed as:
$ROA = \beta_O+\beta_1 ERD + \beta_2 EFE + \epsilon_{it}$……………………………………………………………… ii

Where:

ROA = Return on Assets
β_O = Intercept
β_1= coefficient of ERD
ERD = Environmental Research & Development Cost
EFE = Estimate of Future Expenditure
ϵ = stochastic error term

RESULTS AND DISCUSSION

The result of regression analysis on the Effect of Environmental Disclosure on Financial Performance of Quoted Oil and Gas Companies in Nigeria, using the Ordinary Least Square technique is presented. In addition, the results of other statistical estimations such as correlation, R^2, Adjusted R^2, t-statistic and F-statistic are also presented, as the importance of data and empirical evidence in any research effort cannot be overemphasized. The estimation technique and procedure capture the objectives of the research as stated in chapter one. The estimation processes in analyzing the Effect of Environmental Disclosure on Financial Performance of Quoted Oil and Gas Companies in Nigeria.

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.

Table 1: Descriptive Statistics

	ROA	NPM	ERD	EFE
Mean	1.558311	27.22307	42022.03	31331696

Median	2.751976	1.355	5593.2	439140
Maximum	173.509	5640.101	364814	1.06E+09
Minimum	-144.38	-714.894	100	150
Std. Dev.	23.93955	529.002	78296.3	1.38E+08
Skewness	0.877487	10.01151	2.458276	5.620165
Kurtosis	35.37215	107.4928	8.388292	36.14177
Jarque-Bera	5255.179	56598.34	266.0309	6123.61
Probability	0.000000	0.000000	0.000000	0.000000
Sum	186.9973	3266.768	5042643	3.76E+09
Sum Sq.Dev.	68199.15	33301327	7.30E+11	2.26E+18
Observations	120	120	120	120

Source: E-View 10 Output (2021)

Table 1 presents the descriptive statistics of the Environmental Disclosure on Financial Performance of Quoted Oil and Gas Companies in Nigeria during the period of 2010 to 2019. The table shows that NPM has a mean of 27.22307 with a standard deviation of 529.002 and the minimum and maximum values of -714.894 and 5640.101 respectively. Although the range between the minimum and maximum is wide, it implies a stable performance as the standard deviation indicated that there is no wide dispersion of the data from the mean value. For the other measure of Financial Performance, Return on Asset (ROA) the table shows a mean of 1.558311 with standard deviation of 23.93955 and the minimum and maximum values of -144.38 and 173.509 respectively. This implies that the Financial performance in terms of Return on Asset witnessed some fluctuations during the study period, as the standard deviation is large compared to the mean, together with the wide range between the minimum and maximum values. Also, the mean values for Environmental Research and Development cost and Environmental Future Expenditure are 42022.03 and 31331696 respectively.

The standard deviation values shown on table 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 Environmental Research and Development cost. Skewness which measures the shape of the distribution and equally shows the measure of the symmetry of the data set, indicated that NPM, ERD and EFE are all positively skewed and have values greater than zero which suggest that the distribution tails to the right-hand side of the mean, except for ROA, which though is not negatively skewed, but has a value less than one. Hence, the distributions of three of the variables (NPM, ERD and EFE) are positively skewed, considering that their values are greater than zero, in addition to the fact that their mean are greater than their median, while the case is the reverse for ROA.

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 no variable of the study qualified for this during the study period. On the other hand, variables whose kurtosis values are greater than three are called leptokurtic (slim or long tailed) and all variable qualified 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. NPM has the highest Jarque-Bera value of

56598.34, while ERD has the lowest Jarque-Bera value of 266.0309. The Jarque-Bera for ROA and EFE are 5255.179and 6123.61 respectively.

Decision Rule: The decision rule for accepting or rejecting the null hypothesis for any of these tests would 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 Hypothesis One

Ho_1: There is no significant effect between environmental disclosures and Net Profit Margin of quoted oil and gas companies in Nigeria.

Table 2: Random Effect Regression Result (Hypothesis One)

Dependent Variable: NPM
Method: Panel EGLS (Cross-section random effects)
Date: 12/03/20 Time: 12:35
Sample (adjusted): 2010- 2019
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	-6.912033	8.368000	-0.826008	0.4109
ERD	4.60E-05	9.15E-05	0.503248	0.6160
EFE	0.988365	0.011046	89.47830	0.0000

	Effects Specification		S.D.	Rho
Cross-section random			0.000000	0.0000
Idiosyncratic random			70.49580	1.0000

	Weighted Statistics		
R-squared	0.988441	Mean dependent var	58.77692
Adjusted R-squared	0.988193	S.D. dependent var	651.6958
S.E. of regression	70.81447	Sum squared resid	466366.1
F-statistic	3976.401	Durbin-Watson stat	2.041131
Prob(F-statistic)	0.000000		

	Unweighted Statistics		
R-squared	0.988441	Mean dependent var	58.77692
Sum squared resid	466366.1	Durbin-Watson stat	2.041131

Source: E-View 10 Output (2021)

Table 2 above, the coefficient of multiple determinations (R^2) is 0.988441. This indicates that about 98% of the total variations in Net Profit Margin is explained by the variations in the independent variable (ERD and EFE), while the remaining 2% 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 ERD is not statistically significant, given that the individual probability is 0.6160 which is greater than 5%, while that of EFE is statistically significant, given that the individual probability is 0.00000 which is greater than 5%. However, when taken collectively the value of F-statistic is 3976.401 and the value of the probability of F-statistic is 0.000000. This result implies that the overall regression is positive and statistically significant at 5%.

Test of Hypothesis Two

There is no significant effect between environmental disclosures and Return on Asset of quoted oil and gas companies in Nigeria.

Table 3: Random Effect Regression Result (Hypothesis Two)

Dependent Variable: ROA
Method: Panel EGLS (Cross-section random effects)
Date: 12/03/20 Time: 12:38
Sample (adjusted): 2010- 2019
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	0.060146	2.315941	0.025971	0.9793
ERD	1.17E-05	1.74E-05	0.671307	0.5037
EFE	0.030869	0.001352	22.83676	0.0000

	Effects Specification		
		S.D.	Rho
Cross-section random		6.943744	0.4171
Idiosyncratic random		8.209201	0.5829

	Weighted Statistics		
R-squared	0.832359	Mean dependent var	0.995140
Adjusted R-squared	0.828754	S.D. dependent var	21.08337
S.E. of regression	8.724704	Sum squared resid	7079.202
F-statistic	230.8783	Durbin-Watson stat	1.292875
Prob(F-statistic)	0.000000		

	Unweighted Statistics		
R-squared	0.656461	Mean dependent var	2.580404
Sum squared resid	15780.46	Durbin-Watson stat	0.579991

Source: E-View 10 Output (2021)

In the estimated regression line as indicated in Table 3, the coefficient of multiple determinations (R^2) is 0.656461. This indicates that about 65% of the total variations in Return on Asset (ROA) is explained by the variations in the independent variable (ERD and EFE), while the remaining percentages 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 and it can be concluded that the estimate is statistically significant. The value of F-statistic is 230.8783 and the value of the probability of F-statistic is 0.000000. This result implies that the overall regression is positive and statistically significant at 5% level of significance.

Discussion of Findings

The result for the first hypothesis (which is a direct consequence of the first objective of the study) showed that when taken collectively, Environmental Research and Development (ERD) and Environmental Future Expenses (EFE) has a positive and significant effect on Net Profit Margin and this implies that Environmental Disclosure is a significantly and independent predictor of Net Profit Margin. That is to say there are empirical evidences to suggest that more transparency and increase in Environmental Disclosure will lead to an increase in the Net Profit Margin profile of quoted oil and gas companies in Nigeria. This finding is in agreement with the research efforts of Turban and Greening (2012) who found out that there is a positive and significant relationship between environmental reporting and firm performance. The findings of Turban and Greening (2012) study, confirmed that lack of environmental reporting and disclosure standards significantly affected the reporting and disclosure uniformity of environmental related information in financial statements, annual reports and accounts. They discovered that environmentally friendly organizations' who voluntary disclosed their environmental activities enjoyed high level of competitiveness, thus issues related to financial performance, managerial accounting, external and internal auditing, tax and financial accounting need to be studied further in order to deal with other environmental issues effectively. This finding of this study is however in contrast to the results of Ruslaina (2010), who established in his own research effort that financial performance has no significant relationship with environmental reporting.

With respect to the second hypothesis (which is a direct consequence of the second objective of the study), the findings also revealed that the Environmental Research and Development (ERD) and Environmental Future Expenses (EFE) has a positive and significant effect on the Return on Assets of oil and gas companies in Nigeria. This also implies that Environmental Disclosure is a significant and independent predictor of Return on Asset. The empirical evidences therefore suggest that the more there are efficient and effective disclosure in the Environmental activities of quoted oil and gas companies in Nigeria, there is likely to be a corresponding increase in the Return on Asset position of the firms. This finding is in agreement with the result of the research work of Zamil and Hassan (2019), who examined the Impact of Environmental Reporting on the Financial Performance of multinational companies. They established a positive and significant relationship between environmental reporting (sustainability report) and return on asset, which they equally confirmed is capable of increasing an organization's visibility and publicity. Through practice of environmental disclosure, they posited that environmentally friendly organizations are in a position to contribute to the community at large. Moreover, the positive relationship between environmental reporting and financial performance recommends that global companies' managers can use the environmental reporting to enhance the customer trust (stakeholder's positive attention), lessen reputational risks, and as such create long term shareholder value. This finding is however contrary to the research carried out by Saman (2019), who established that there is no positive and significant relationship between Environmental Accounting and Return on Asset (Financial Performance) of Oil and Gas Companies in Nigeria. In addition, the finding is also in contrast to the works of Tafadzwa and Fortune (2019), which examined the relationship between corporate sustainability disclosure and return on investment and established that there is a negative relationship between environmental disclosure and return on investment.

CONCLUSION AND RECOMMENDATION

In the Accounting and Financial literature several studies have investigated the link between Environmental Disclosure and Financial Performance. This paper contributes to the strands of literature by investigating the effect of Environmental Disclosure on Financial Performance of quoted oil and gas companies in Nigeria. A positive and statistically significant relationship exists between Environmental Disclosure and Financial Performance. These results support the findings of Turban and Greening (2012), Zamil and Hassan (2019), Oyedokun, Egberioyinemi and Tonademukaila (2019). The study concludes that Environmental Disclosure can contribute immensely and to spur Nigeria's Oil and Gas firms to increased financial performance and profitability, as well asprovide a spring board that can enable the country at large to emerge as an environmental-friendly nation, with its attendant positive multiplier effects on the overall economy. This revelation is instructive, given that Nigeria generates huge revenue from oil and gas resources every year. Based on the findings of the study and its implication on the overall activities of the oil and gas firms in Nigeria, the following recommendations are made:

i Right policies that will enhance the Environmental Disclosure should be put in place by the Environmental Management Sectors of Nigeria.

ii. High level of interest must be exerted on Environmental Disclosure by relevant regulatory authorities and requisite legislations put in place

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Effects of Foreign Ownership and Ownership Concentration on Accounting Conservatism of Listed Industrial Firms in Nigeria

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Abstract

The study determined the effect of ownership structure on accounting conservatism of listed industrial firms in Nigeria from 2009 to 2018. Ownership structure is measured by foreign ownership and ownership concentration while accounting conservatism is measured by accrual-based conservatism. Ex-post facto research design was adopted in the study while panel multiple regression was used for the analysis. From the findings, it was discovered that foreign ownership has positive but insignificant effect on accounting conservatism while ownership concentration has positive significant effect on accounting conservatism. The study concludes that foreign ownership has no statistical effect on accounting conservatism while increase in ownership concentration will increase accounting conservatism of industrial firms in Nigeria. Therefore, the study recommends that industrial firms should encourage ownership concentration because it will improve recognition of expenses over earnings hence reducing opportunistic behaviour and conflict of interest in the company because the presence of controlling shareholders reduces the possibility that managers will have effective control of the company due to the reduced power of individual shareholders on account of the small ownership group.

Keywords: Ownership structure, Accounting conservatism, Foreign ownership, Ownership Concentration

INTRODUCTION

The fast development of modern corporate theory, the inconsistency of interests of shareholders and management began to increase, leading to more and more skirmishes between the shareholders and managers. The agency problem stalled the company and shareholders to maximize their value. A reasonable ownership structure and comprehensive accounting information can improve the problems caused by the agency conflict. The 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 is an equity stake state formed by nature of the shareholders and the corresponding shares, it represents the ownership arrangements and determines the control structure of a corporation which is the property foundation of corporate governance. The ownership structure of listed companies usually has an impact on financial reporting, the same as the accounting conservatism. 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. 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).

Furthermore, 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 (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 unfavourable information; using private information to violate debt contracts; to receive extra compensation; and to overstate the financial figures (LaFond & Watts, 2008). According to the Agency theory, the contractual relationships among the agent (director of the firm) and the principal (shareholders of the firm), 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).

The existing literatures on the effect of ownership structure on accounting conservatism used panel data of developed countries such as Alkurdi, Al-nimer and Dabaghia (2017), Bach (2018), An (2015), Le, Pavelko, Nhan Do and Ngo (2017), Yunos, Smith and Ismail (2010), Nekounam, Sefiddashti, Goodarzi and Khademi (2012), Amos, Ibrahim, Nasidi and Ibrahim (2016) but in developing countries, little efforts have been made to analyze this effect most especially in listed industrial firms in Nigeria. 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. Furthermore, most of the period considered by literatures are not up to the recent period which makes generalization of finding difficult hence, this study considered a recent period from 2009 to 2018. Based on the existing gap in literature most especially in the industrial firms in Nigeria, this study determined the effect of ownership structure on accounting conservatism of industrial firms in Nigeria. The following hypotheses were tested;

Ho$_1$: Foreign ownership has no significant effect on accounting conservatism of listed industrial firms in Nigeria.
Ho$_2$: Ownership concentration has no significant effect on accounting conservatism of listed industrial firms in Nigeria.

LITERATURE REVIEW

Conceptual Clarifications

Concept of Ownership Structure

Ownership structure is 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 foreign ownership and ownership concentration. Foreign ownership in a ownership by individuals who are not citizens of that country or by companies whose headquarters outside that country. 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 (Fan & Wong, 2002). In addition, they have better incentives and expertise to independently observe companies. Therefore, the higher ratios of foreign ownership induced companies to improve their transparency and to reduce opportunistic managerial accounting choices and decisions (An, 2015).

Foreign institutional investors as well are demanding in terms of information quality. To attract them, the company must ensure high quality information. Generally, they claim a level of information that brings up the risks incurred by the firm and its critical success factors (Bushee & Noe, 2000). Since they have invested in the firm, these foreign investors have all the power to influence the managerial decision making (Carleton, Nelson & Weisbach, 1998). It is beneficial to be vigilant and effectively control the managers. Hence, this study intends to ascertain the level of foreign ownership on accounting conservatism in Industrial goods companies in Nigeria. According to Shleifer and Vishny (1997), the presence of controlling shareholders reduces the possibility that managers will have effective control of the company due to the reduced power of individual shareholders on account of the small ownership group. However, according to Demsetz and Lehn (1985), it is possible for firms in the same country to have different levels of ownership concentration, given the intrinsic characteristics of the firms or industries. Concentration of ownership 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).

Concept of Accounting Conservatism

Conservatism is defined as a concept that delays the recognition of future cash inflows and as a conservative accounting which states accountant report the lowest accounting information of several possible values for assets and revenues, and the highest for liability and burden (Kothari, 2012). 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). According to International Accounting Standard Board (1989), conservatism is a degree of restraint in the exercise of the judgements needed in making the estimates required under conditions of uncertainty, such that assets or incomes are not overstated and liabilities or expenses are not understated. Beaver and Ryan (2005) defined accounting conservatism as the average understatement of the book value of net assets relative to their market value. According to Ahmed and Duellman (2011), firms with more conservative accounting have higher future profitability and lower likelihood and magnitude of special items charges.

Conservatism entails timely recognition of losses than earnings and avoids over estimation of firm's 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 tried 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.

According to Watts (2003), conditional conservatism is the practice of a different standard of verifiability with regard to the recognition of revenue/profit and expense/loss in reaction to the occurrence of economic news. Thus, when applying conditional conservatism, a stricter standard of verifiability is applied when recognizing good news as accounting revenue/profit than that applied when recognizing bad news as accounting expense/loss. Based on this, under conditional conservatism, there is a tendency to emphasize bad news rather than good news in accounting earnings (Basu, 1997). Conditional conservatism can therefore be described as having asymmetric timeliness in relation to the recognition of economic news. Conditional accounting conservatism is referred to as news dependent income conservatism because it requires immediate recognition of economic losses and deferral of economic gains contingent on the news event involved (Chandra, 2011). Unconditional conservatism can be defined as ex ante or news-independent conservatism (Beaver & Ryan, 2005). Unlike conditional conservatism, which records accounting expense/loss when asset values actually depreciate, unconditional conservatism recognizes accounting expense/loss ahead of the occurrence of economic news (Beaver & Ryan, 2005).

Empirical Review

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. The study could have been extent to 2016 since it was carried out 2017 to make more recent. 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 show 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.

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. Nekounam, Sefiddashti, Goodarzi and Khademi (2012) studied the relationship between ownership concentration and accounting conservatism in companies accepted in Tehran Stock Exchange using a sample of 74 companies from 2006-2010. Linear regression was used to test the relationship between ownership concentration and accounting conservatism using SPSS and Excel software. The results showed that there is negative (reverse) relationship between ownership concentration and accounting conservatism. The package used for the analysis cannot give accurate findings for reliability therefore, a better package for the analysis such as E-View and Stata could have been better. The study carried out only Kolmogorov-Smirnov Test while diagnostics such as variance multicollinearity test were not indicated. Hence, the result may be misleading because some of the independent may have multicollinearity problem.

Siyaparani and Kashani (2014) investigated the association between ownership structure measured by type of ownership and rank of ownership concentration and accounting conservatism based on operating and book approaches of 100 listed companies on Tehran Stock Exchange of two years from 2008 to 2009. Multiple panel regression was used for the analysis and it was discovered that there was a significant positive linear relationship between type of ownership and operating conservatism. Also, there was no significant linear relationship between rank of ownership concentration and operating conservatism. Furthermore, it was also proved that type of ownership did not have any significant effects on book conservatism. In addition, there was no significant linear relationship between rank of ownership concentration and book conservatism. The study does not carry out diagnostic test on the independent variables therefore, the result may be misleading. Also, the period covered in the study is too short and the study did not give a justification for such hence, the period could have been extended to 2013.

Alkurdi, Al-nimer and Dabaghia (2017) investigated 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. The study could have been extend to 2016 since it was carry out 2017 to make more recent. Baba (2015) studied ownership structure effects on earnings quality of quoted Nigeria insurance companies. Generalized Least Squared (GLS) Techniques is use to analyze the association among earnings quality and institutional ownership, managerial ownership and ownership concentration of Insurance Companies. Data were gathered via annual accounts of the Insurance Companies over the duration of 2008-2013. Kothari and Abir (2005) performance adjusted discretionary accrual technique was employed to determine earnings quality. The data analysis technique was regression using STATA version 11. The study found that: Institutional ownership negatively influences earnings quality, Managerial ownership negatively influences earnings quality and ownership concentration negatively impacts on earnings quality but not significant.

Theoretical Discussion

Positive Accounting Theory

The positive accounting theory according to Watts and Zimmerman (1986) perspective considers conservatism as an effective accounting tool that can be employed to gain the benefits in case of contracts. Positive accounting theory is based on agency theory, which is used to explain and predict accounting choices by managers. Opportunities for the contracting parties can influence accounting choices, because accounting numbers are a control mechanism in the agency relationship. Watts and Zimmerman (1986) applied agency theory to explain and predict the behavior of management related to the selection of accounting procedures.

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 explain the effect of ownership structure on accounting conservatism of industrial firms in Nigeria from 2009 to 2018. The population comprised of all the thirteen (13) listed industrial firm in Nigeria as at 2018. The data for the study were collected from the individual firm annual report for the period of the study while panel multiple regression model was used for the analysis. The study carried out the test of descriptive statistics, diagnostics test of heteroskedasticity test, Variance inflation factor, Normality test, Panel fixed effect model, panel random model and Hausman specification.

The model for the study is

$ACCR_{it} = \alpha + \beta_1 FO_{it} + \beta_2 OC_{it} + \mu_{it}$

Where:

$ACCR_{it}$ = Accrual based for firm I at time t
FO_{it} = Foreign ownership of firm I at time t
OC_{it} = Ownership concentration of firm I at time t
β_1- β_2 = 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).
Foreign ownership (FO)	Foreign ownership is measured by shares held by foreign investors to total shares of the company.
Ownership concentration (OC)	Proportion of 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	FO	OC
Mean	0.066588	0.438616	0.260234
Median	0.076793	0.491255	0.161663
Maximum	0.321233	0.976570	0.930640
Minimum	-0.206181	0.000228	0.040265
Std. Dev.	0.100928	0.327695	0.215057
Skewness	-0.204495	0.062071	1.395213
Kurtosis	2.581834	1.505616	4.522459
Jarque-Bera	1.853234	12.17989	54.73192
Probability	0.395891	0.002266	0.000000
Observations	130	130	130

Source: Generated from Eview, 2019

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 0.066588 while the median is 0.076793. In like manner, the maximum accrual based by industrial firm in Nigeria is 0.321233 with minimum of -206181 hence, the result shows the company engaged less on accounting conservatism. Also, from the mean value of foreign ownership in industrial firms in Nigeria, it shows that the foreign investors has a maximum ownership of 0.976570 and the minimum ownership of 0.000228. The skewness and kurtosis are 0.062071 and 1.505616 accordingly. Furthermore, ownership concentration has a mean and median of 0.260234 and 0.161663 while their maximum is 0.0.930640 and a minimum of 0.040265 respectively. From the probability of foreign ownership and ownership concentration, it shows that they are not normally distributed because they have probability less than 5% however, the result of the residual from the histogram normality test shows that the residual of the variables are normally distributed because the probability is greater than 5% level of significance.

Table 2: Correlation Result

	ACCR	FO	OC
ACCR	1.000000		
FO	0.031903	1.000000	
OC	0.267952	-0.058624	1.000000

Source: Generated from Eview, 2019

The correlation between the variables shows that all the independent variables has a positive correlation with accrual-based measure of accounting conservatism with foreign ownership having a correlation of 0.031903 with accrual based. Also, ownership concentration has positive correlation with accounting based to the extent of 0.267952.

Table 3: Variance Inflation Factor

Variance Inflation Factors
Date: 02/19/20 Time: 22:55
Sample: 1 130
Included observations: 130

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
FO	0.000694	2.815115	1.003449
OC	0.001611	2.484161	1.003449
C	0.000330	4.484414	NA

Source: Generated from Eview, 2019

The multicollinearity result indicates that the independent variables has no collinearity problem with each other because their centered VIF is between 1 and 10 hence, there is strongly evidence that each one of the independent variables affect accounting conservatism.

Table 4: Heteroskedasticity Test

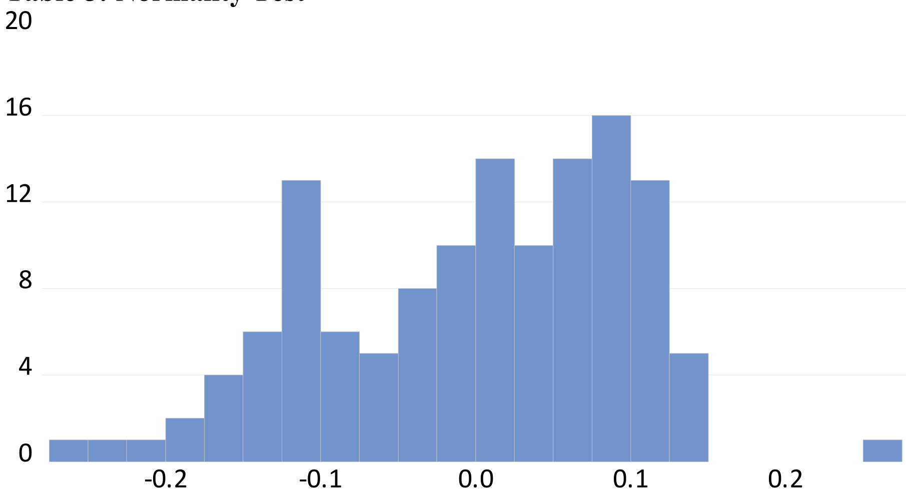
Heteroskedasticity Test: Breusch-Pagan-Godfrey
Null hypothesis: Homoskedasticity

F-statistic	0.661328	Prob. F(2,127)	0.5179
Obs*R-squared	1.339945	Prob. Chi-Square(2)	0.5117
Scaled explained SS	0.976508	Prob. Chi-Square(2)	0.6137

Source: Generated from Eview, 2019

The result shows that the residuals of the variables have no heteroskedasticity problem because it has an Obs. R-square of 1.339945 and prob. of 0.5179 which are all greater than 5% level of confidence.

Table 5: Normality Test



Series: Standardized Residuals	
Sample 2009 2018	
Observations 130	
Mean	-8.22e-18
Median	0.011278
Maximum	0.254437
Minimum	-0.250240
Std. Dev.	0.097122
Skewness	-0.387485
Kurtosis	2.530884
Jarque-Bera	4.445183
Probability	0.108328

Source: Generated from Eview, 2019

The normality test is used to test the normality of the variables and it was gathered that the variables are normally distributed because the Jarque-bera probability is greater than 5% level of confidence.

Table 6: Panel Multiple Regression Result

Variables	Coefficient	t- statistics	P-Value
FO	0.016878	0.660331	0.5102
OC	0.124741	3.180587	0.0018
C	0.026723	1.360765	0.1760
R^2	0.075751		
F-statistics	5.204408		
F-significance	0.006724		
Hausman p-value	0.4832		

Source: Generated from Eview, 2019

The study used the finding from random model to analyze the effect of ownership structure on accounting conservatism because the p-value of Hausman is greater than 5% hence, the finding indicates that foreign ownership has a positive but insignificant effect on accounting conservatism. Thus, any increase nor decrease in foreign ownership will affect accounting conservatism based on the statistical evidence. Based on the finding, the hypothesis which states that foreign ownership has no significant effect on accounting conservatism is accepted. Furthermore, the result indicates that ownership concentration has positive significant effect on accounting conservatism of industrial firms in Nigeria because it has a p-value less than 5% level of confidence. Therefore, the null hypothesis is rejected that ownership concentration has no significant effect on accounting conservatism thus, the alternate hypothesis is accepted that ownership concentration has significant effect on accounting conservatism.

CONCLUSION AND RECOMMENDATIONS

Based on the finding, the study concludes that increase in foreign ownership will not affect accounting conservatism of industrial firms based on the statistical evidence while changes in ownership concentration have statistical influence on accounting conservatism of industrial firms. This means that ownership concentration is strong enough to influence accounting conservatism in Nigeria industrial firms. The following recommendations were made:

i. Foreign ownership has better incentives and expertise to independently observe companies. Therefore, the higher ratios of foreign ownership induced companies to improve their transparency and to reduce opportunistic managerial accounting choices and decisions thus, industrial firms should encourage foreign ownership in order to achieve this set objective despite that the fact that it has no significant effect on accounting conservatism, it will improve reduce opportunistic managerial accounting choice.

ii. The presence of controlling shareholders reduces the possibility that managers will have effective control of the company due to the reduced power of individual shareholders on account of the small ownership group. When ownership is concentrated, shareholders owning the major part of the firm's shares get to control the voting privileges. Based on this, industrial firms should encourage ownership concentration because it will improve recognition of expenses over earnings hence reducing opportunistic behaviour and conflict of interest in the company.

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Effect of Public Debt on Interest Rate in Nigeria

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Abstract

This study investigates the effects of public debt on interest rate in Nigeria for the period 1985–2020. The study proxied public debt using domestic and external debst, while monetary policy rate, was used to proxy interest rate. The study employed ex post facto research design, secondary data were extracted from Debt Management Office and Central bank of Nigeria. Unit root tests were carried out and it was found that all the variables were stationary at first difference. The Johansen co-integration was applied to examine the co-movement of the variables. It was found that the variables were not co-integrated, hence the need to employ Vector Autoregression estimation technique with Variance Decomposition and Impulse Response Function to analyse the data. Findings suggest that domestic debt has insignificant negative effect on interest rate while external debt has significant negative effect on interest rate in Nigeria. The study concludes that shock from domestic debt reduces interest rate, also, shock from external debt reduces interest rate, although, shock from external debt has more explanatory power on interest rate in Nigeria.It was recommended thatGovernment should design policies to expand exports opportunities instead of lowering nominal interest rate. Government should increase external debt sources instead of taking loans from domestic sources to ensure control of rise in real interest rate

Keywords: Public Debt, Domestic Debt, External Debt, Interest Rate, Vector Auto regression

INTRODUCTION

Governments often have to borrow in order to finance their budget deficits.Public debt enables the delivery of essential services to a country's citizens. There have been debates on the effects of public debt on interest rates occasioned by resurgence in government budget deficits. The expanding debt may cause the reduction in the available investments which may cause the interest rate to increase (Cecchetti, Mohanty & Zampolli, 2011). Concern has been raised as to whether the use of public debt by developing countries like Nigeria has been a load for future generations to shoulder as they would settle these debts in the future. These borrowing would also cause a crowding out of investments by the private sector. Additionally, for creditors to safeguard against increased risk, they would demand higher interest rates. Contrarily, there is the possibility of neutrality of debt which is explained by the Ricardian equivalence theorem which considers government debt being equivalent to future taxes. Ricardian (1978) noted that with the assumption that consumers being both prospective and rational, the current deficit is equivalent to the discounted value of the future taxes. Hence, there is no wealth effect created by the substitution of taxes by deficits and also consumption is not affected. If at present, a rational consumer faces deficits then he decides to save for future taxes, then the total savings would be unchanged. The existence of high government debt plays important role on interest rate and overall on the economy.When government borrows from the public to finance public spending; the resources must come from somewhere. In mainstream theory, theresources come from the nation's pool of saving, which pushes up interest rates for simple supplyand demand reasons. As a result, the deficit “crowds out” private investment that was competingwith government borrowing for the same pool of national saving(Engen & Hubbard, 2004).

Analysis of the effects of government debt on interest rateshas been ongoing for more than two decades, there is little empiricalconsensus about the magnitude of the effect, and the difference inviews held on this issue is clear. While some economists believethere is a significant positive effect of government debton interest rates (Gale & Orzag, 2004; Saleh &Harvie, 2005; Wang & Rettenmair, 2008; Hsing, 2010; Checherita & Rother, 2011; Turner & Spinell, 2013) Others found negative influence of public debt on interest rate (Harmon, 2012; Perveen & Munir, 2017). Though, the overall evidence is by farnot unanimous in this respect. The disparity in findings has also opened this area of study to further empirical investigation. Others interpret the evidence as suggesting that thereis no effect of public debt on interest rates (Baro, 1987; Findley, 1990; Kalulumia, 2002; Darrat, 2006). Limited work is available to examine theimpact of public debt on interest rate in Nigeria, based on literature search, the only study found is the study of Essien, Agboegbulem, Mba and Onumonu (2016), their study covered the periods of 1970 to 2014, this current study ended in 2020, this makes this study up to date and recent. Also, the study used prime lending rates to measure interest rate while this study proxy interest rate with Monetary Policy Rate. The study attempts to fill the gap byanalyzing impact of public debt disaggregated into external and domestic on interest rate inNigeria. Most studies from literature search indicate that they focused on cross-country studies such as the work of Kumu (2002); Kululumia (2002); Paesani, Strauch and Kremer (2006); Turner and Spinelli (2013). The ones that focused on country specific studies are the work of Engen and Hubbard (2004) which concentrated on USA, Harmon (2012) focused on Kenya, Kundu and Munim (2016) was carried out in Bangladesh, Perveen and Munir (2017) which focused on Pakistan, while David and Emmauel (2017) was carried out in Ghana

The differences in prior findings are as a result of differences in econometricmodels, definitions of public debt and interest rates as well as data sources,which make a comparison across studies difficult. Empirical studies often use singleequation approaches, which do not account for the interaction of variables derived intheoretical macro models. Instead this study is based on a VAR usingan identification methodology to check for the impulse response of interest rates to domestic and external debt in Nigeria. The main objective of this study is to examine the effect of public debt on interest rate in Nigeria. Other specific objectives are to assess the effect of domesticand external debt on interest rate in Nigeria. The following hypotheses are formulated to achieve the objectives of this study;

H_{01}: Domestic debt has no significant effect on interest rate in Nigeria.
H_{02}: External debt has no significant effect on interest rate in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Public Debt

Public debt occurs when a government borrows to offset its deficits or for the development of its economy. Public debt is an obligation of a government and is also referred to as sovereign or government debt. It is a term for all the money owed at any given time by any branch of the government. Makau (2008) defines Public debt as a nation’s total debt comprising of national and local government debt, which is a portion of public spending financed by borrowing in place of the collection of taxes. Rosen and Gayer (2014) submit that public debt can be defined as transfer of money between future taxpayers and today’s bond holders. Even if the debt is re-financed, future generations will have to pay interest related to borrowing. Thus, it seems that borrowing burden is inevitable to future generations. Mohammed (2010) submits that public debt encompasses debt owed by the federal government, the State government, and even the municipal and local government. While Okoro (2013) made the remarks that public debt may include all the outstanding amount of loans borrowed and the bonds issued directly by the federal government and the loans guaranteed by it, as well as the loans and bonds borrowed or issued by parastatals, States and the central government.

Domestic Debt

Domestic debt is generated through borrowing from the domestic markets and it refers to the amount of debt held by domestic holders and is comprised of treasury bills, government bonds, corporate loans. Oshandami (2006) defines domestic debt as debt instrument issued by the federal government and dominated in local currency. In principles, state and local government areas can issue debt instrument, but their ability to issue such debt instrument must consist with the treasury certificates, federal government development stock and treasury bonds. Out of these, treasury bills, treasury certificate and development stocks are marketable and negotiable while treasury bonds ways and advances are not marketable but held solely by the Central Bank of Nigeria.

External Debt

External debt is the outstanding loan that one country owes to another country or institutions within that country. External debt also includes payments due to international organizations such as the International Monetary Fund. External debt is generated through borrowing from the international markets and is referred to the amount held by foreign holders and is made up of three categories of creditors; Bilateral, Multilaterals and commercials. External debt is that portion of a country's debt that is acquired from foreign sources such as foreign corporations, government or financial institutions. External debt is that part of the total debt of a country that is owed to creditors outside the country. The debtors can be the government, corporations or private households. External debt is the amount, at any given time, of disbursed and outstanding contractual liabilities of residents of a country to nonresidents to repay principal, with or without interest, or to pay interest, with or without principal. From the point of view of the creditors, external debts can be classified into two broad categories, that is, official creditors and private creditors. Official creditors include international organizations, such as, the World Bank Group, while the private creditor includes the Euro-Dollar market and other international capital markets. Loans from these two sources usually come on "soft" and concessionary terms and have relatively longer maturity term and low rates of interest (Anyanwu, 1988).

Interest Rate

Interest rate is an amount paid by the government on public debt or payment made by debtors to creditors for debt or it is also it is defined a definite addition to cash remunerated or received is recognized as the rate of interest, in order to achieve the positive development the interest rate is considered as a major economic factor.Crowley (2007) defines interest rate as the cost of borrowing. The policy environment and financial sector market microstructure define the spread of the interest rate. Interest rate is also affected by demand for loans or money by borrowers. Interest rates operate like other prices as market clearing mechanism; they ration the amount of credit available. Interest rates are determined in the credit markets, or the debt markets just the same way as stock prices are determined in the Stock Exchange (Kasemo, 2015).

Empirical Review

The study of David and Emmanuel (2017) examined the relationship between interest rate and domestic debts using linear regression method. The study covered the period of 2007-2011. Secondary data were taken from bank of Ghana. A simple linear regression model was used. The results revealed that a significant variation in interest rate is explained by domestic debt. The study showed that there is a significant relationship between domestic debts and interest rates. Perveen and Munir (2017) examined the impact of total, internal and external government debt on nominal interest rate in Pakistan from 1973 to 2016. The study used ARDL bound testing approach. The results of the study found negative relation between total government debt, external debt and nominal interest rate in long run, while the study found no evidence of long run relation between internal government debt and nominal interest rate. In short run, positive relation exists between total government debt and nominal interest rate, while negative relation exists between external government debt and nominal interest rate. Kumu (2002) examined the impact of government debt on interest rates in the United States, Germany, the United Kingdom and Canada, using the sequential causality test procedures suggested by Toda and Phillips (1994) in the Johansen ECM. The general portfolio balance model, which allows for both direct and indirect tests of the link between public debt and interest rates, is used as the economic framework. Indirect tests in this model consist of investigating the debt impact on interest rates through the effects of debt on the exchange rate and money demand.

In a cross-country study, Kalulumia (2002) analysed the impact of government debt on interest rates of United States, Germany, the United Kingdom and Canada using the Johansen ECM and the general portfolio balance model. The variables used were exchange rate, real GDP, interest rate and stock of domestic assets. The evidence generally indicated the absence of causality in the long-run, between government debt and interest-rate related variables for all the four countries, which indicated that government debt had no lasting positive effects on any of the variables of interest, such as interest rates, money demand and the exchange rate. Engen and Hubbard (2004) assessed the effect of government debt on the real interest rate in US and found that an increase in government debt equivalent to one percent would be predicted to increase the real interest rate by about two to three basis points. The study used vector autoregression analysis. The study results suggested that an increase in federal government debt would increase the long-term real rate of interest by about three basis points. The study of Paesani, Strauch and Kremer (2006) analysed the financial and macroeconomic consequences of government debt accumulation. The study focused on the USA, Germany and Italy over the 1983 to 2003. The analysis was based on a small, multivariate econometric model. Empirical evidence showed that in all cases a more sustained debt accumulation leads at least temporarily to higher long-term interest rates. This transitory impact also spills-over into other countries, mainly from the US to the two European countries.

Harmon (2012) examined the impact of public debt on three major economic indicators such as Inflation, GDP growth and Interest rates in Kenya for the period of 1996 to 2011. The study found that there is a weak positive relationship on the public debt-inflation, GDP growth link with the public debt-GDP growth link being the highest. A negative strong relationship is observed along the public dept-interest rates link. The study concludes that the Public Debt-Inflation-GDP growth. Turner and Spinelli (2013) investigated the effect of external debt on the interest-rate-growth differential in 22 OECD countries for the periods of 1980 to 2012.The study employed Panel regression and the resultsrevealed that the inclusion of net external debt was found to be significant. The results implied that the interest-rate effect of marginal increases in external debt or government debt is non-linear and dependent on the initial levels of debt, with the interest rate effect rising sharply in the post-crisis period for Euro countries which have a combination of both high external debt and high government debt. Kundu and Munim (2016) investigated the long-run effects of government debt on long-term nominal interest rate and explored the short-run dynamics in the context of capital market in Bangladesh. Using time-series data on Bangladesh and applying VECM, the study found a single co-integrating equation depicting long-run stable relationship between long-term nominal interest rate and the explanatory variables in the model. The study also found convergence of short-run dynamics of government debt towards statistically significant long-run equilibrium and concludes that government debt has a positive impact on the long-term nominal interest rate in the capital market of Bangladesh.

Essien, Agboegbulem, Mbaand Onumonu(2016) examined the impact of public sector borrowings on prices, interest rates, and output in Nigeria. It utilized VAR framework, the impulse response and variance decomposition. It found that shock to external debt stock increases prime lending rate. However, the level of external and domestic debt over the period of this study had no significant impact on the general price level and output. Sumbi (2016) established the effect of public debt on interest rates in Kenya for the period of 2005 to 2015. The data used was sourced from the Central Bank of Kenya and Kenya National Bureau of Statistics. The findings revealed positive relationship between public debt and interest rates. The study established that the interest rate had a strong positive co-relation with public debt and exchange rates. Afonso and Ibraimo (2018) assessed the macroeconomic effects of public debt in

Mozambique over the period of 2000 to 2016. The study used VAR model. The study concluded that debt service variables have negative effects on the economy than debt variables. Debt variables over the period of the study had no significant impact on the real output and the debt service component depressed the real output, increased the general price level and accounted for the depreciation on the domestic currency. The empirical work of Gamber and Seliski (2019) examined the relationship between federal debt and interest rates. The results suggested that the average long-run effect of debt on interest rates, increase in debt as a percentage of GDP. Conversely, the results suggested that a fiscal policy that contains few or no incentives for households and firms to invest in additional private capital or supply additional labour elicits a larger interest rate response than that suggested by the reduced-form estimates.

Theoretical Framework

Loanable Funds Theory

The loanable funds theory was formulated in the 1930 by British Economist Dennis Robertson and Swedish Economist Bertil Ohlin. Loanable funds theory is a reformulation of the classical saving and investment theory of rate of interest. It incorporates monetary factors with the non-monetary factors of saving and investments. This theory is an improvement over old classical theory of interest According to this theory, the rate of interest is determined by the demand for andsupply of loanable funds. Classical theory of interest considered only saving out of currentincome in the supply of saving while neo-classical economists considered not only saving butalso bank credit, dishoarding and disinvestment. In classical theory, only saving wasavailable for investment while in loanable funds theory of interest of neo-classical economistsnot only savings, but also hoarded wealth, bank loans, disinvestment wealth are anothersources of funds available for investment to the borrowers. Since loanable funds theory ofinterest considered both savings of classical theory of interest and bank loans, dishoarding,and disinvestment; it is often referred as real as well as monetary theory of interest, thus, it is both real and monetary theory of interest.

METHODOLOGY

This study adopted the ex post facto research design, in which data presented and analyzed have been published before by the original collector, the Debt Management Office and Central Bank of Nigeria. The population of the study consists of the stochastic variables; the data generating process that generated these variables for Nigeria. The independent variables are domestic debt and external debt which serve as proxy for public debt while the dependent variable is interest rate.This study employs Vector Autoregression (VAR) as the estimation technique since it was established that there is no long run relationship among the variables. Based on the co-integration test result that reveals that the variables have no long-run equilibrium relationship, then, it is a sufficient condition for VAR. If variables are stationary at first difference, and not co-integrated, their dynamic relationship is specified correctly by VAR model (Granger & Engle, 1987).

The model of this study is specified as;

$logINTR_t = \beta_0 + \beta_1 logDODT_t + \beta_2 logEXTD_t + \mu_t$...................(1)

Where;

logINTR= log value of Interest Rate
logDODT= log value of Domestic Debt
logEXTD= log value of External Debt
β_0 = Constant term
β_1- β_2 = coefficient of the explanatory variable

The VAR model is estimated thus;

$$\log INTR_t = \alpha + \sum_{i=1}^{k} \beta_1 \log INTR_{t-i} + \sum_{j=1}^{k} \varphi_j \log DODT_{t-j} + \sum_{m=1}^{k} \varphi_m \log EXTD_{t-m} + \mu_{1t} \text{------------------------} 2$$

$$\log DODT_t = \sigma + \sum_{i=1}^{k} \beta_1 \log INTR_{t-i} + \sum_{j=1}^{k} \varphi_j \log DODT_{t-j} + \sum_{m=1}^{k} \varphi_m \log EXTD_{t-m} + \mu_{2t} \text{------------------} 3$$

$$\log EXDT_t = \vartheta + \sum_{i=1}^{k} \beta_1 \log INTR_{t-i} + \sum_{j=1}^{k} \varphi_j \log DODT_{t-j} + \sum_{m=1}^{k} \varphi_m \log EXTD_{t-m} + \mu_{3t} \text{------------------} 4$$

4. RESULT AND DISCUSSION

Descriptive Statistics

Table 1: Descriptive Statistics

	INTR	DODT	EXTD
Mean	13.56111	3544.643	5120.665
Median	13.50000	1247.870	334.1450
Maximum	26.00000	16023.89	33348.08
Minimum	6.100000	27.95000	189.0400
Std. Dev.	3.609118	4698.694	8447.484
Jarque-Bera	15.55124	11.18350	43.03578
Probability	0.000420	0.003729	0.000000
Observations	36	36	36

Source: Eview 10 Output, 2021.

Table 1 shows the mean of Interest Rate (INTR), Domestic Debt (DODT) and External Debt (EXTD) for the period under study. The mean of Interest Rate is 13.56111; Domestic Debt is 3544.643 while that of External Debt is 5120.665. The maximum value of INTR, DODTand EXTD are 26, 16023.89 and 33348.08 respectively. The minimum value of INTR, DODTand EXTD are 6.1, 27.95 and 189.04 respectively.

Correlation Analysis

Table 2: Correlation Analysis

	LOG(INTR)	LOG(DODT)	LOG(EXTD)
LOG(INTR)	1		
LOG(DODT)	-0.26155 0.1745	1	
LOG(EXTD)	-0.39053 0.2920	0.68806 0.000	1

Source: Eview 10 Output, 2021.

The correlation matrix is used to determine the relationship between the dependent and independent variables; it is also used to examine the relationship among the independent variables of the study to detect multicollinearity problem. Domestic debt has aninsignificant negative relationship with interest rate, a one percentage increase in domestic debtwill translate to 26% decrease in interest rate in Nigeria. Likewise, external debt has an insignificant negative relationship with interest rate; a one percent increase in external debt will translate to 39% decrease in interest rate in Nigeria. The relationship between domestic debt and external debt is 68%. The relationship among the independent variables is not too high to cause multicollinearity among them. There correlation coefficient between domestic debt and external debt is not greater than 0.8, hence there is could be no problem of multicollinearity of data (Wallace & Naser, 2005).

Table 3: VAR Lag Order Selection Criteria

Endogenous variables: LOG(INTR) LOG(DODT) LOG(EXTD)
Exogenous variables: C

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-102.3457	NA	0.118958	6.384587	6.520633	6.430362
1	22.52264	219.4655*	0.000106*	-0.637736*	-0.093551*	-0.454634*
2	26.45358	6.194201	0.000147	-0.330520	0.621803	-0.010092
3	31.30643	6.764584	0.000197	-0.079178	1.281284	0.378576

Source: Eview 10 Output, 2021.

Table 3 above shows that Schwarz Info Criterion has the lowest absolute value of -0.093551 at lag 1. This shows that lag 1 is the most preferable lag to be selected for this analysis.

Stationarity Test of Variables

Table 4: Augmented Dickey-Fuller Test

LEVEL			**FIRST DIFFERENCE**			
Variables	ADF Test Statistic	Critical Value @ 5%	ADF Test Statistic	Critical Value @ 5%	Max Lag	Order of Integration
logINTR	-2.971661	-3.544284	-6.341543	-3.548490	1	1(I)
logDODT	-2.718449	-3.548490	-4.347348	-3.552973	1	1(1)
logEXTD	-1.574119	-3.544284	-5.688612	-3.548490	1	1(1)

Source: Eview 10 Output, 2021.

Table 3 shows the stationarity test of the variables used in the study. From Table 4, the Augmented Dickey-Fuller Test results revealed thatinterest rate, domestic debt and external debtare not stationary at level; they became stationary after first difference 1(1) at 5 percent level of significance.Since all the variables are integrated at the same order of I(1), that is first difference, this study proceeds to conduct the co-integration tests to determine the long run relationships among the variables.

Co-Integration Analysis
Table 5: Johansen Co-Integration

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None	0.335103	18.91954	29.79707	0.4987
At most 1	0.131154	5.043362	15.49471	0.8042
At most 2	0.007715	0.263337	3.841466	0.6078

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**

None	0.335103	13.87617	21.13162	0.3753
At most 1	0.131154	4.780025	14.26460	0.7693
At most 2	0.007715	0.263337	3.841466	0.6078

Source: Eview 10 Output, 2021

The above table shows the Johansen test of co-integration that displays the Trace and Maximum Eigen value test, this test is performed to decide the order of co-integration; the result of the co-integration test indicates that this study accepts the null hypotheses that there is no co-integration among the variables because the p-value of trace statistics of 0.4987 and maximum Eigen value of 0.3753 are greater than 0.05. It therefore means that the three variables have no long run relationship. But since the variables are stationary at the same order of I(1) using Augmented Dickey Fuller Test. Therefore, the study employs Vector Autoregression Estimation technique.

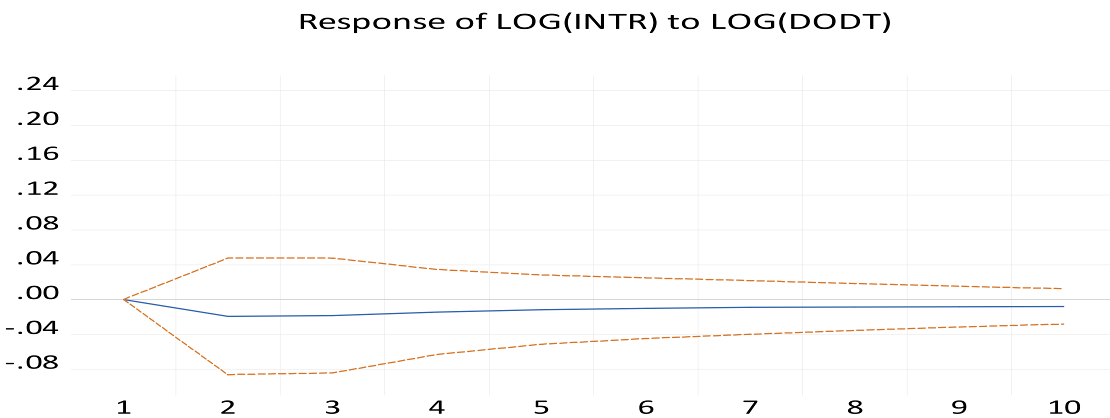
Statistical Test of Hypothesis
H_{01}: Domestic Debt has no significant effect on Interest Rate in Nigeria
Variance Decomposition of log(INTR)
Table 6: Variance Decomposition of log(INTR)

Variance Decomposition of LOG(INTR):				
Period	S.E.	LOG(INTR)	LOG(DODT)	LOG(EXTD)
1	0.199698	100.0000	0.000000	0.000000
2	0.233056	99.91862	0.000505	0.080871
3	0.244299	99.75209	0.002386	0.245525
4	0.248568	99.53004	0.006476	0.463486
5	0.250396	99.28097	0.013440	0.705595
6	0.251319	99.02524	0.023702	0.951057
7	0.251887	98.77482	0.037461	1.187714
8	0.252304	98.53557	0.054741	1.409686
9	0.252647	98.30964	0.075438	1.614925
10	0.252947	98.09717	0.099364	1.803465

Source: Eview 10 Output, 2021.

Table 6 above shows the Variance Decomposition of interest rate. It can be noticed that from the first period to the fifth periods, which account for the short run shock, it can be noticed that variation in interest rate is attributed mainly to own shock representing about 99%, with shocks in domestic debt accounting for 1%, while shocks in external debt accounted for about 70% of the changes in interest rate in the short run respectively. Moving from the sixth to tenth period, interest rate shock in the long run accounted for 98% for its own shock. Shock from domestic debt can cause 9% percent fluctuation in interest rate in the long run. Also, shock from external debt can cause 180% fluctuation in interest rate in the long run.

Figure 1: Response of Interest Rate to Changes in Domestic Debt

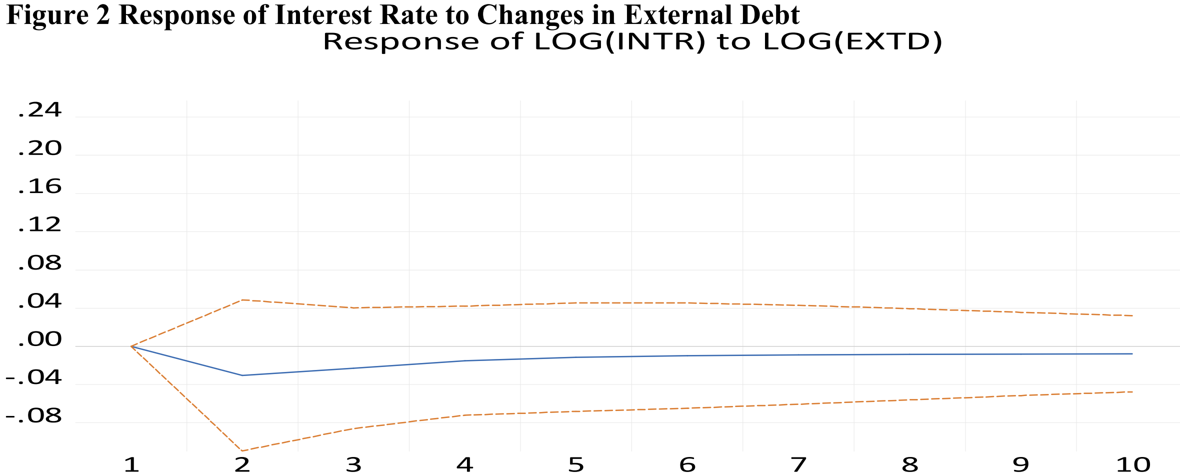


Source: Eview 10 Output, 2021.

The plot above shows a negative response of Interest Rate to the shock from Domestic Debt. The response falls below the zero origin and it does not slip above the point of origin. It can be inferred from the figure above that domestic debt has insignificant negative effect on Interest Rate in Nigeria. The effect of domestic debt on interest rate is insignificant because the variance decomposition indicates that domestic debt contributes 1% and 9% to interest rate in the short and long run respectively.

H_{02}: External Debt has no significant effect on Interest Rate in Nigeria

Figure 2 Response of Interest Rate to Changes in External Debt



Source: Eview 10 Output, 2021.

The plot above shows a negative response of Interest Rate to the shock from External Debt. The response falls below the zero origin and it does slip above the point of origin. It can be inferred from the figure above that External debt has a significant negative effect on in Nigeria. The effect of external debt on interest rate is significant because the variance decomposition indicates that external debt contributes 70% and 180% to interest rate in the short and long run respectively.

Residual Analysis

Table 7 Residual Analysis

Test	P-Values
Heteroskedasticity Test	0.3700
Serial Correlation LM Test	0.7311
Normality Test	0.2827

Source: Eview 10 Output, 2021.

The above table shows the result of the residual examination performed to test for the adequacy of the model, the outcome showed that the residuals have no serial correlation, they are homoscedastics and are normally distributed since all the p-value are more than 0.05.

Discussion of Findings

This study examines the effects of public debt on interest rate in Nigeria for the periods of 1985 to 2020. The exogenous variables of this study are domestic debt and external debt while interest rate is the endogenous variable. The study found that shock from domesticdebt has insignificant negative effect on Interest Rate in Nigeria. The effect of domestic debt on interest rate is insignificant because the variance decomposition indicates that domestic debt contributes 1% and 9% to interest rate in the short and long run respectively. The finding indicated that asdomestic debt increases, the interest rate declines. Interest rate determined through the Monetary Policy Rate (MPR) is set as low as possible to decrease the value of repayment of government debt. This finding is in consonance with the work of David and Emmanuel (2017).

Likewise, this study found that shock from external debt hassignificant negative effect on interest rate in Nigeriafor the period under study. The effect of external debt on interest rate is significant because the variance decomposition indicates that external debt contributes 70% and 180% to interest rate in the short and long run respectively. The inflow of funds from outside the country through external debt will make money available for government to spend on projects, thereby ensuring that funds are available in economy, this will definitely reduce interest rate as there are money in the economy. This corroborates the findings of earlier studies done by Harmon (2012); Turner and Spinelli (2013) and disagrees with the work of Kumu (2002); Kalulumia (2002); Engen and Hubbard (2004); Paesani, Strauch and Kremer (2006); Kundu and Munim (2016).

CONCLUSION AND RECOMMENDATIONS

This study concludes that public debt has negative effect on interest rate in Nigeria, Shock from domestic debt reduces interest rate, also, shock from external debt reduces interest rate,although, shock from external debt has more explanatory power on interest rate in Nigeria. This study recommends that the Government should design policies to expand exports opportunities instead of lowering nominal interest rate to decrease the repayment of borrowing.Government should increase external debt sources instead of taking loans from domestic sources to ensure control of rise in real interest rate.

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Effect of Independent Directors and Audit Committee on Audit Report of Listed Oil and Gas Companies in Nigeria

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Abstract

The emergence of the Covid-19 epidemic worldwide has disrupted the political, social-economic, religious and financial systems of the world as a whole. The world's top economies, such as the United States, China, the United Kingdom, Germany, France, Italy, Japan and many others are on the brink of collapse. In addition, financial markets across the world have been crushed and oil prices have dropped off the edge. Scholars of diverse intellectual backgrounds, especially populists and people-oriented ideas, have all agreed that economic determinism is a key element of progressive scholarship in the post-COVID-19 period, which has clearly shown an enormous capacity to challenge natural scientists, environmental experts and business administration, accounting, auditing, among others. This research, which does not generally involve the epidemiology of coronavirus, focuses specifically on Security and protection of investment by means of science tic monitoring systems. Therefore, studying the quality of the financial report and its determinants has attracted the attention of academics, especially those in Nigeria. This study examined the influence of institutional shareholders, independent directors and audit committees on the reliability of audit quality of listed oil and gas companies in Nigeria. The ex-post-facto research design has been adopted. Data were collected from the annual financial reports of the oil sample and the companies for the period from 2010 to 2019. The logistic regression method was used to evaluate data and to test hypotheses with the aid of STATA. The findings indicate a strong and important impact on the efficiency of the audit by institutional owners, independent directors and the audit committee. The study concluded that institutional shareholding, independent directors and audit committee are significant determinants of audit quality of listed oil and gas listed companies in Nigeria. The research suggests that oil and gas companies in Nigeria take advantage of this positive effect of this monitoring attribute on audit quality by maintaining a higher ratio of institutional ownership, independent directors as well as the audit committee, in order to enhance their monitoring and provide high-quality financial reports, it also opens up a new perspective on investment protection and guidelines in this COVID-19 era.

Keywords: Independent Directors, Institutional Shareholding, Audit Committee, Audit Quality

INTRODUCTION

The outbreak of pandemic Covid-19 all over the world has disturbed the political, social, economic, religious and financial structures of the whole world. The International Monitor Fund (IMF) clarified that the crisis is at least as bad as it was during the international economic meltdown or worse." Covid-19 is also detrimental to the global economy because the world has witnessed the most challenging economic situation since the Second World War. Therefore when it comes to the human cost of the Coronavirus pandemic, all countries need to work together just to protect human beings and reduce harm to the economy, as viruses know no bounds, the impacts will continue to spread, leaving the entire world economy to stand still, Nigeria being a philatelic capitalist economy, we will never be free from such a crisis. This is because we flourish on the free market, tough competition, privatization, commercialization, monopolization, tribalization, chaos, crisis and the deterioration of the entire economy as a result of the outbreak of COVID-19 (David, Uwaleke & Aza, 2019).

Moreover, the economic downturn at the beginning of the century and the COVID-19 pandemic is the latest occurrence to increase global interest in audit efficiency, financial reporting transparency and corporate governance since it could lead to a recession. National regulatory systems are increasingly interconnected with supranational private-sector standard-setting bodies, such as the International Accounting Standards Board (IASB), the International Federation of Accountants (IFAC), and governmental bodies such as the European Union (Newman, Patterson & Smith, 2005; Ojo, 2008; Zagonov, 2011). However, with the corporate scandals at the start of the century, characterized by fraud and accounting manipulation, much has been discussed about the scope of responsibilities of auditors, given that the opinion on financial statements has not changed.

It seems that the institutional investors, Independent directors, and audit committee creates several incentives to oversee the financial reporting and affect the independent auditor. One incentive is that the audited financial statements are the main resource for information about the company and the investors value it significantly in scrutinizing the accounting information and financial decision makings about auditing quality and the type of the auditors' reports. Therefore, it is expected that the companies' ownership potentially affects auditing quality and there is a logical connection between the amount of these ownerships and auditing quality. Institutional shareholding has also been a central issue in the empirical discussions on the interaction between monitoring mechanism and audit quality. Perhaps, the predominant view is that institutions have the required resources and financial expertise to monitor and discipline managers and thereby reducing agency problems. This effect may result in positive audit quality. On the other hand, discussions on the association between Independent directors and audit quality have also documented contradictory results. Two conflicting arguments seem to dominate these discussions. Some researchers are of the opinion that large shareholding by few individuals induces them to monitor and enhance audit quality because the cost implication of their monitoring is less than the expected benefit from their huge investments (Klein, 2002). On the contrary, Chen, Yen, and Chang, (2007) pointed out that audit quality is indeed weakened and compromised when an auditor faces a company of controlled shareholders.

Although, some considerable amount of studies exists on the relationship between corporate governance mechanisms and audit quality (such as Abdullah 2008; Sulong, Gardner, Hussin, Sanusi& McGowan 2013; Al-Nawaiseh, 2006, Qasim, (2011; Abolfazl, Amir, Noroozi Mohammad &Sahraneshinb, 2015), few focused on the influence of institutional shareholding and Independent directors on audit quality. Whereas the few that exist are discussed in the light of other countries, the effects are debatable in the Nigerian perspective given the dissimilarities in the nature of monitoring structures. Similarly, the outcomes that are obtained from samples drawn from several sectors of the economy to study phenomena highlight the possible implication of such phenomena on specific industries within the sample. Therefore, the decision to focus on the quoted oil and gas companies in Nigeria. In Nigeria, the oil and gas sector are pivotal to economic progress since the bulk of the revenue is generated from this sector. It is expected that this sector should receive the most attention in terms of monitoring and supervision given its economic importance. It is against the backdrop that this study empirically examined the effect of institutional shareholding and ownership concentration on audit quality of listed oil and gas companies in Nigeria. Therefore, the objective of this study is to examine the effect of institutional shareholding and ownership concentration on audit quality of listed oil and gas companies in Nigeria. To achieve this objective, it is thus hypothesized that:

H01: Institutional shareholding has no significant effect on audit quality of listed oil and gas companies in Nigeria.

H02: The moderating effect of the audit committee has no significant effect on the relationship between independent directors and audit quality of listed oil and gas companies in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Institutional Shareholding

Institutional shareholding is shares owned by other organisations or institutions such as insurance companies, banks, investment companies, and other organized owners. Institutional ownership is important in monitoring management because with institutional ownership it will encourage more optimal supervision. Jensen and Meckling (1976) claimed that institutional ownership has a very significant role in minimizing agency conflicts between managers and shareholders. The existence of institutional ownership is considered capable of being an effective monitoring device in any decision taken by the manager. The Agency concept suggests that monitoring by institutional ownership can be an important governance mechanism. In fact, institutional investors can provide active monitoring that is difficult for smaller, more passive, or less-informed investors (Almazan, Hartzell& Starks 2005). Moreover, institutional investors have the opportunity, resources, and ability to monitor managers. Therefore, efficient monitoring suggests that institutional ownership is associated with better monitoring of management activities, reducing the ability of managers to opportunistically manipulate earnings. The efficient monitoring assumption suggests an inverse relationship between a firm's earnings management activity and its institutional share ownership. In this vein, numerous studies documented that institutional ownership prevents managers to opportunistically engage in earnings management (Ebrahim, 2007; Koh, 2003; David, Uwaleke & Aza, 2019).

Considering the importance of corporate governance in a firm's management, shareholder's active participation in monitoring management functions is important to ensure good corporate governance practices. To date, institutional investors‟ participation has emerged as an important force incorporates monitoring to serve as mechanisms to protect minority shareholder's interest. The significant increase in the institutional investors‟ shareholdings has led to the formation of a large and powerful constituency to play a significant role in corporate governance. Earnings information, as part of accounting information, provides investors with relevant information that would help them in making correct asset pricing and investment decisions (Yuan &Jaing, 2008). The active monitoring hypothesis views institutional investors as long-term investors with raving incentives and motivations to closely monitor management action (Jung &Kown, 2002). However, some argue that institutional investors do not play an active role in monitoring management activities (Claessens& Fan, 2002; Porter 1992). According to Duggal and Millar (1999), 'institutional investors are passive investors who are more likely to sell their holdings in poorly performing firms than to expend their resources in monitoring and improving their performance'. Institutional investors may be incapable of exerting their monitoring role and vote against managers because it may affect their business relationships with the firm. Accordingly, institutional investors may collude with management (Pound 1988; Sundaramurthy, Rhoades &Rechner, 2005). It is also argued that institutional owners are overly focused on short-term financial results, and as such, they are unable to monitor management (Bushee, 1998; Potter, 1992). So, there will be pressure on management to meet short-term earnings expectations. These arguments indicate that institutional investors may not limit managers' earnings management discretion and may increase managerial incentives to engage in earnings management.

Independent Directors

An Independent director is a person or director on the board of directors of any company who does not have any hand or economic relationship with the company or related persons, except sitting fees (Kishore, 2017). According, Makni, Mohamed, and Habib (2012) independent directors are defined as persons who have no apparent family ties with those holding power in the company and do not hold any shares in the capital of the company they manage. Their decisions are always aligned with the interests of shareholders. The monitoring attribute of Corporate governance literature suggests that independent directors are synonymous with a strong corporate governance structure. The influence of independent directors on the effectiveness of the board of directors has attracted the attention of many researchers (Charreaux, 1994) also Masulis and Zhang (2018). It has been posited that the independent directors are the directing officers at the event or the activities of a company. Also that the independent directors can also be looked as the chairman of the event that relates company committee taking all the necessary control (i.e., nomination committee in cases of CEO illness/injury and CEO turnover, audit committee in cases of financial misconduct, and investment committee in cases of restructuring events) An independent director does not have any shares in the company. Consequently, the presence of independent directors on the Board has become a feature or attribute of listed companies' world over aligning the interests between management and shareholders, and therefore, reducing agency costs (Weisbach, 1988; Boeker, 1992; Hambrick & Jackson, 2000). This trend has continued in American companies, where a review conducted by Business Roundtable (2007) highlighted that about 90% of companies in the state at least 80% of their directors are independent. Business Roundtable (BRT) is an association of chief executive officers

(CEOs) of leading US corporations. However, in recent past studies such as Shen (2005), Finkelstein et al. (2008) and Hillman et al. (2010) have drawn attention to the desirability of incorporating board of directors who hold significant stakes in the capital of the company, understanding them to be the proprietary director, a very distinctive figure in the business model. After highlighting important aspects of Nigerian companies about their corporate governance, in particular to the Board, and defining the different categories of directors which comprise the same, the question is whether a greater presence of independent directors on the Board might help to increase the quality of financial information published by companies.

In line with this, works such as Baysinger and Butler (1985), Daily and Dalton (1993), Barnhart (1994) and Macvey (2005), among others, revealed that the presence of independent directors on both the Board and the Audit Committee positively influences the quality of financial information. Works such as Hermalin and Weisbach (1991) and Dalton (1998), among others, revealed no significant relationship between the presence of independent directors on the Board and the quality of financial reporting. They state that the composition of the Board will be based on the ethics of corporate governance, i.e. paying little attention to whether there are more or less independent directors on the Board. All those characteristics that lead to increasing the quality of financial information, regardless of the existence of a greater number of one or another type of director on the Board, could reflect the role of efficient company supervision as shown by Salas (2000) and Klapper and Love (2003), among others. It seems reasonable to suggest that thorough and efficient supervision by the Board can have a positive impact on the quality of financial information, given that a well-organised structure within the Board seeks, among other things; the publication of relevant and reliable financial information to safeguard shareholders' investment and the company's assets and publish useful information so that those interested in its content can make the right decisions. According to Fame (1980) and Jensen et al. (1983), the Board is a tool for monitoring managers, highlighting the presence of independent directors as a mechanism that enhances the effectiveness of the supervisory role of the Board, as they provide balance and help limit possible opportunistic management behaviour. The idea behind this study is that the structure of the Board should be made up mainly of independent directors and not employees or people close to them. This way, the elaboration of accounting information in favour of the interests of those on the inside, to obtain benefits, can be avoided.

Concept of Audit Committee

According to the lexicon, audit committees are the selected numbers of people members of a company board of directors whose responsibilities include helping auditors remain independent of management to look into the organization record. Literature suggests that a valuable audit committee should play an important role in strengthening the financial controls of a business entity (Collier, 1993; English, 1994; Vinten& Lee, 1993, Adeyemi, Okpala&Dabor 2012). A number of studies have found that companies with an audit committee, particularly when that committee is active and independent, are less likely to experience fraud (Beasley, et al., 2000; Abbott, et al., 2000; McMullen, 1996) and other reporting irregularities (McMullen, 1996; McMullen &Raghunandan, 1996). Findings also suggest that audit committees are effective in reducing the occurrence of earnings management that may result in misleading financial statements (Defond and Jiambalvo, 1991; Dechow, et al., 1996; Peasnell, et al., 2000). Generally, audit committees are people or groups of people selected to perform an official function by looking into the organizational financial record in other to give owners confidence of performance for the period under agency and principal.

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, the International Federation of Accountants (IFAC, 2009: 12) pointed to the concept of auditing 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 quality from the perspective of (IFAC) lies in compliance with professional standards and legal and regulatory requirements. (David, Uwaleke&Azah, 2019)

Measures of Audit Quality

Although several studies have sought to measure "actual" audit quality, what has prevailed in the literature, since DeAngelo's study (1981), are the metrics that try to capture "perceived" audit quality, such as: (i) the auditor's firm size, as in DeAngelo (1981), Ilaboya and Ohiokha (2013), (ii) auditor specialization, as in Behn et al. (2008), Chambers and Payne (2008), ; (iii) auditor issuing going concern opinion as in Teoh and Wong (1993) and Ghosh and Moon (2005); and (iv) accrual models as in Dang (2004) and Behn et al. (2008). For the purpose of this study, auditor specialization is used as a measure of audit quality.

Empirical Review

Zuriegat (2011) investigated the effect of ownership structure and audit quality among Jordanian listed firms. Usings sample size consisted of one hundred and ninety-eighty (198) companies out of the two hundred and sixty-two (262) listed companies on the Amman Stock Exchange. The analysis result using logistic regression in other to investigate the relationship between the audit qualities measured based on the audit firm size as a dependent variable, and ownership structure as independent variables. The results show a significant positive relationship between the audit quality and that of the company's institutional ownership and concluded that institutional investors tend to hire quality auditors**.** This study measured audit quality using firm size as the study proposes to, however, the used logit regression why this current study will apply multiple regression and there is the problem of external validity since the previous study was done Amman Stock Exchange while the study will be on the Nigerian Stock exchange specifically in oil and gas sector. Khasharmeh and Joseph (2017) ascertained the effect of ownership structure on audit quality in a developing country, the case of Bahrain. Specifically, the study considered Independent directors and institutional ownership as individual explanatory variables for ownership structure. The annual reports of listed companies in Bahrain for 2015 and unlisted companies registered by Central bank of Bahrain in September 2016 were used in the analysis. Logistic regression was used to test the hypotheses. The results indicated that institutional ownership has a positive but insignificant effect on audit firm size. This study was done in another economy different from the Nigerian economy so, a repetition using Nigerian data is imperative. Also, this current study took a different dimension, by interacting with the effect of an effective audit committee, not just a direct relationship which makes for much difference between the studies.

Alzeaideen and Al-Rawash (2018) investigated the effect of different ownership structures - (concentration, foreign, and institutional ownership) on audit quality of listed companies in the Amman stock exchange. To test each hypothesis; a model was defined based on dependent variables employed to measure audit quality. The sample study consists of 132 companies from 2005 to 2016. The analysis of logistic regression was used to investigate the relationship between the audit quality measured based on the audit firms' size as a dependent variable and ownership structure as independent variables. The results provided evidence of a positive statistically significant relationship between the audit quality and that of companies both with foreign and institutional ownership. Also, these results indicate that foreign and institutional investors tend to hire high-quality auditors. This study presents a problem or gap in external validity and did not consider the audit committee as a factor that could affect the relationship between institutional ownership and audit quality. Akhidime (2015) examined the impact of the board structure of Nigeria banks on their audit quality. The study is based on the published audited accounts of 19 banks that were selected by a simple random sampling technique from the population of the 25 Nigerian banks over the banks' post-consolidation/reform for five years. The variables of the study were analysed using binary logistic regression analysis. The hypotheses of the study were tested using F-ratios from the results of the pooled binary regression of the pooled data at a 5% level of significance. The results of the study confirm that independent directors impact the banks' audit quality. This study is on banks why the current study will dwell strictly on oil and gas companies applying multiple regression as against the binary regression used by the previous study.

Abdulmalik (2015) examined the relationship between board monitoring mechanism, continuous training, and financial reporting quality in the Malaysian context. The paper employed a sample of top 100 Malaysian firms identified by the Malaysia Shareholder Watchdog Group (MSWG) between the periods 2010-2011. Feasible GLS (FGLS) regression estimation method was used to test the relationship between the dependent variable of interest. The regression result reveals that while the proportion of grey directors in the boardroom positively and significantly relates to both accrual and real earnings management, the proportion of independent directors was negative, but not significant. The study's findings imply future regulatory initiative, as our result suggests that board mechanisms, specifically, board composition are not effective in improving the quality of reported figures. This study was done in Malaysia which post the problem of external validity. David, Uwaleke, & Aza (2019), examined the effect of institutional shareholding and Independent directors on audit quality of listed oil and gas companies in Nigeria NSE. The study adopted the ex-post facto research design. Secondary data were extracted from the annual reports of the sample firms for the period between 2009 to 2018. The logistic regression technique was used for data analyses and tests the hypotheses with the aid of STATA. The results show a positive significant effect of institutional shareholding and Independent directors on audit quality.

On the empirical studies on the audit committee on the relationship between corporate governance and audit quality, just like in the work of Goodwin-Stewart and Kent (2006) who examine whether the audit committee is associated with corporate governance and audit quality. The research work was carried out in Australia from data collected through questionnaires sent to companies. Ordinary least square (OLS) regression models are used and the study finds that the financial skill of the audit committee was significantly related to corporate governance and audit quality. He failed to mention the method used in distributing the questionnaires also did not mention how many companies in question and how many companies used for research work which was equally against the work of Dianne (2006) work carried out in Australia Bank identified losses relating to unauthorized trading. Besides, Adagye (2015) carried work on Effectiveness of Audit Committee Practice and the value of listed deposit money Banks in Nigeria the study was conducted in Nigeria with five Money deposit Bank he sends 55 questionnaires and uses a chi-square statistical tool. Yadirichukwu & Ebimobowei (2013) carried out research work on the effects of the audit committee and timeliness of financial reports that reflects audit quality of external auditors. The study was conducted in Nigeria using 35 listed firms from 2007 to 2011. The study used multiple regression analyses and concludes that the audit committee was significantly related to external auditors' corporate governance and audit quality. Five years is not enough to study 35 listed companies in Nigeria, along the line we need to consider other economic factors like inflations, exchange rate and economic power of the individual in the society and most especially the government policy, also which was not inline or against the findings of Salawu, et al (2017). Owhoso (2002) examined the effectiveness of industry specialist auditors in detecting errors during the audit review process for two specific industries, namely banking and health care. Their findings suggest that the auditors‟ experience in the specific industry enables them to detect error more effectively than non-specialist auditors. Auditors without specific industry experience perform below the nominal benchmark for error detection. Firms with greater leverage tend to have higher bankruptcy risk. According to Grossman and Hart (1982) also, in that situation, companies tend to appoint a better-quality auditor to avoid a decrease in the company's value.

Theoretical Framework

Agency Theory

Corporate governance has drawn this huge attention from different fields such as accounting, law, business, education, and banks in both developed and developing countries because it has a direct effect on corporate power- in which it influences the decisions made by managers when there is a separation of ownership and control (i.e., agency problem). To move from individual ownership to collective ownership raised new problems in the field of financial resources management, so that (Berle& Means, 1932) considered the same as agency problem (Morey, Gottesman, Baker &Godridge 2008). However, (Watts & Zimmerman 1986) argue that the demand for higher quality audits increases as agency costs rise. Meanwhile, the effective institutional and block-holder structures helped to prevent conflict between the directors and shareholders by making information conformity and balance.

METHODOLOGY

The study employed an ex-post facto research design. The population of the research comprises the ten (11) oil and gas companies listed on the Nigerian Stock Exchange (NSE) as at 31st December 2018.

Table .1: The list of the ten oil marketing companies

S/N	Name of Company
1	Forte Oil Plc
2	MRS Oil Nigeria Plc
3	Total Nigeria Plc
4	Mobil Oil Nigeria Plc
5	Conoil Plc
6	Afroil Plc
7	Oando Plc
8	Eterna Oil & Gas Plc
9	Japaul Oil & Maritime Services Plc
10	Beco Petroleum Products Plc
11	Seplat oil and gas Plc
12	Capoil Plc

Source: Author's Compilation, 2020

The number of companies was reduced to a working population of nine (11). Afroil Plc was excluded from the study population because it was delisted in 2008 and so had no published financial reports for 2010-2019. The entire working population of nine (11) oil and gas companies was used as the study sample considering the fact that the data required for the study is readily available from the published financial reports of the companies, and the NSE factbook for the relevant years. The data for this study were obtained from a secondary source. Secondary data were extracted from the published annual reports and accounts of the companies and the NSE factbook for the relevant years. The logistic regression technique was adopted. Logistic regression is a technique for making predictions when the dependent variable is a dichotomy, and the independent variables are continuous or discrete.

Model Specification and Variables Measurement

ADQ = B0 + B1IS + B2IND + B3LEV+Ut

Where:

ADQ = Audit Quality- is a binary variable with score 1 if the company is audited by a Big 4 audit firm and 0 otherwise;

INS = Institutional shareholding- the proportion of share hold by institutions on the total share issued or stock which is held by main investing institutions

INDEP = Independent director - is the proportion of ID on the board size

AUDIT COMMITTEE = Governance score of audit committee attributes

AFS= Audit Firm specialization - measured as the natural log of the firm's total assets

LEV= Leverage- is measured by the total debt to total assets.

U = Error term

B1, B2 > 0 B0 ……... B3 = Coefficient

RESULTS AND DISCUSSION

This section deals with the presentation, analysis, and interpretation of data generated for the study. The variables for measuring institutional ownership and Independent directors and audit quality are collected from the annual reports and accounts of the listed oil and gas sampled firm in the study.

Descriptive Statistics

Table 2 presents the result of the descriptive statistics of the variables where the mean, standard deviations, minimum, and maximum of the data are fully captured.

Table 2: Descriptive statistics

Variable	Obs	Mean Std	Dev	Min	Max
ADQ	120	.65	.4789695	0	1
INS	120	.2054614	.1043533	.002352	.394008
INDEP	120	.1035612	.0365128	.0526316	.1666667
AUCOM	120	.4066865	.0525313	.25	.5
LEV	120	.3156206	.1415467	.0495448	.6489305

Source: Output of summary of statistics obtained from STATA

Table 2 describes the descriptive statistics with 120 firm-year observations for the period of 10 years (2009-2018) for 11 oil and gas companies listed on the Nigerian Stock Exchange. The descriptive statistics table illustrates the dependent and independent variables correspondingly. The predicted variable, which is Audit Quality is measured by audit firm specialization. Audit quality has a mean value of .6777778 with a standard deviation of .4699457.

The value implies that sixty-eight (68) per cent of the sampled oil and gas companies were audited by the specialised audit firms in Nigeria (KPMG, PWC, Ernst and Young, Akintola Williams Delloitte) during the study period. The mean value of 68 per cent further suggests that only 32 of the sampled oil companies were audited by the specialized audit firms in Nigeria during the period of investigation. This shows that the audit market in the sector is dominated by the big 4 audit firms in Nigeria and just a few non-big 4 audit firms audited listed oil and gas companies in Nigeria.

The minimum and maximum values of audit firm size during the study period were zero (0) and one (1) respectively. The minimum and maximum values of audit firm size indicate that auditor size is measured by a dummy variable that takes the value of one of the companies are audited by a Big 4 audit firm and zero if otherwise. In addition, institutional ownership and Independent directors have used predictor variables. Table 1 further reveals that institutional ownership has a mean of .2054614 with a standard deviation of .1043533. This implies that on average institutional investors accounted for 21% in the sampled oil and gas companies in Nigeria. Institutional ownership has a minimum value of .002352 (002%) and a maximum value of .394008 (39%) respectively. the minimum value indicating that there was a particular firm in a certain year within the observations that have 2% institutional investors and 39% institutional investors respectively. Independent directors' mean of 1877407. Signifying that on average oil and gas companies has 18% block holders in the sampled firms. Independent directors have a minimum value.1054666 (11%) and maximum value of .592233 (60%) respectively. However, a large amount of equity ownership is concentrated in the hands of block holders.

The average firm size (control variable) is N 6.90 billion Naira, which is a low disparity from the standard deviation of N.8106 billion Naira. The minimum and the maximum firm size are N 4.00 billion Naira and N 7.90 billion Naira respectively. Furthermore, the control variable (LEV) also shows that the mean leverage as indicated by the mean is .1680946, indicating 17% average debt, while the standard deviation is .1330608 (13%). The minimum and the maximum as shown by the tables are .013035 (1%) and .554863 (55%) respectively.

Table 3: Correlation Matrix

Variable	AQ	LEV	IND	INS	AUDCOM
ADQ	1.0000				
LEV	0.1389	1.0000			
INDEP	-0.0176	0.0448	1.0000		
INS	-0.1490	-0.2758	-0.1884	1.0000	
AUCOM	-0.1904	-0.0191	0.3190	-0.1553	1.0000

Source: Output of summary of statistics obtained from STATA

Table 2 above is a correlation matrix table, which shows the relationship between all pairs of variables in the regression model. The result reveals a positive correlation between institutional ownership and Independent directors, the firm size on the one hand, and audit quality on the other. While leverage has no negative relationship with audit quality. The overall correlations among the explanatory variables were relatively low and fall below 0.5. The correlation matrix provides preliminary evidence that Multicollinearity is not a problem in this study.

Table 4: Tolerance and Variance Inflation Factors

Variable	VIF	1/VIF
INS	1.40	0.716573
INDEP	2.09	0.478923
FS	1.05	0.949122
LEV	3.73	0.749530

Source: STATA Output Result

From Table 4, VIF values for all the independent variables were consistently below the benchmark of 10 which is considered harmful for regression analysis. This is supported by a mean VIF value of 1.05 which is above the benchmark of 1 considered suitable for regression analysis. Also, the TV for all the variables was above 0 and close to 1 which is recommended for regression analysis. The table shows good indicators that multicollinearity is not a problem among independent variables. Logistic regression was chosen to test the hypothesis of the study because the dependent variable is binary which is more appropriate for such type of study.

Table 5: Summary of Logistic Regression Result

	Coef.	z	P>|z|
INS	-5.548265	-1.65	0.100
INDEP	6.996676	1.75	0.080
AC	-8.149584	-2.56	0.010
LEV	-.8218142	-2.12	0.018
LR chi2(4)	10.72		
Prob - F> chi2	0.0000		
Pseudo R2	0.5219		
Root MSE	.46416		

Source: STATA Output Result

A close check of the Pseudo (R2) is also called McFadden's (R2) which serves as an analogue to the squared contingency coefficient, with an interpretation like R-square. The Pseudo R2 with a value of 0.5219 indicates that institutional ownership (ISOP), Independent director (INDED), audit committee (AUDCOM), and leverage can explain only about 11% of the total systematic variation of audit quality in oil and gas companies in Nigeria. This implies that about 89% of the total systematic variation in the dependent variable has been left unaccounted for by the model hence captured by the stochastic error term. This implies that other factors not included in the model account for audit quality. On the basis of the overall statistical significance of the model, it was observed that the LR ratio statistics value of 10.72 is significant at (0.0000) 5% level of significance.

Table 5 describes the result of the logistic regression conducted for the study. The analysis in Table 5 shows a positive and significant relationship that appears between institutional ownership and audit quality with a coefficient value of -5.548265 at a 5% level of significance. This implies that institutional ownership has a positive influence on the audit quality of listed oil and gas companies in Nigeria. This indicates that a one per cent change in institutional ownership will result in changes in audit quality. The result reveals that the likelihood of high institutional ownership will be higher with audit quality. Based on the result of the logistic regression, the study rejected the first null hypothesis, implying that institutional investors are a good indicator of audit quality. This result confirms the findings of Adam and Bala (2015)

Table 5 also indicates that independent director has a positive significant effect on audit quality of listed oil and gas companies in Nigeria as evidence from the coefficient value of 6.996676 with the p-value of 0.080 which is significant at 5% level of significance. This implies that if the percentage of Independent directors increases, then the likelihood of having high audit quality also increases and the result can be generalised for our population. This is consistent with the findings of Alzeaideen and Al-Rawash (2018) and David, Uwaleke, &Azah (2019) Consequently, the null hypothesis was also rejected.

The control variable leverage has a negative significant (0.018) effect on audit quality of listed oil and gas companies in Nigeria.

CONCLUSION AND RECOMMENDATIONS

Covid-19 has already been the reason for the closing of several businesses and the closure of supermarkets, which today seems to be barren. As a result, many economists fear and expect that the pandemic will hurt the economy. For example, Bloomberg Economics warns that "full-year GDP growth could fall to zero in the worst-case pandemic scenario." There are a variety of markets and industries that tend to be most vulnerable due to this pandemic, such as both demand and supply. Also, the aims are to examine the connection between monitoring attributes, as one of the important features of corporate governance, and audit quality in oil and gas companies in Nigeria. Concentrating on Independent directors and institutional ownership as variables for monitoring attributes and audit firm size as a proxy for audit quality, the analysis shows that institutional ownership positively significant relationship with audit quality. Therefore, the study concludes that institutional ownership is a significant determinant of audit quality. In other words, institutional shareholders select the choice of high-quality auditors.

The concentration of ownership is positively and substantially linked to the efficiency of the audit of listed oil and gas companies in Nigeria. The study concludes that the largest shareholders or block-holders have an effect on audit efficiency. That is to say, oil and gas companies are inclined to employ high-quality auditors (Big4) as the proportion of block-holders has risen, such results can be explained by a concentration of ownership to use one of the Big-4 audit firms as high-quality auditors in order to maintain ownership. Therefore, the study recommends that proactive measures in the addition to traditional audit practices and transparency imperatives on oil and gas companies in Nigeria:

i. Economic diversification and transparent management. The economy has to be improved first for a thing like an audit best practices to fall in line.
ii. Increase in salaries and wages as soon as possible.
iii. Funding for the health system.
iv. Impact individuals and firms with broad, timely, targeted fiscal and financial sector initiatives.
v. Reducing the burden on the financial system and stop being equal.
vi. Recovery and mitigate the possible scarring impact of the crisis by policy action.
vii. Nations to collaborate, organize and support each other to solve this fatal pandemic first in order to save the global economic system in line with the finding of IMF (2020)

Specifically, with regard to investing protection and monitoring through institutional shareholding, independent director and audit committee on the audit quality report of listed oil and gas companies in Nigeria, which is the main concern of this study, we suggest that in this era of COVID-19 and the ensuing economic crisis which could lead to a recession in the economy, some of the imperatives discussed in this work Yet efficient supervision, probity, honesty, integrity, Prudence, transparency and the finest values of audit practice are important to the post-COVID-19 Nigerian economy in the sense of world best practice.

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Effect of Audit Quality on Organizational Performance in Nigeria

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Abstract

The study examined the effect of audit quality on Organizational performance in Nigeria. The study adopts ex-post research design and simple random sampling method. The total sample of 10manufacturing companies, quoted on the Nigerian Stock Exchange (NSE) for the period of 10years from 2009- 2018.Secondary data was collected from financial statements and the data was analyzed using Ordinary least square Regression analysis to test the hypothesis. The results reveal that audit quality (number of employee in audit companies) has a significant effect on companies' performance as represented by return on equity. The study concludes that there is a great significant positive relationship between the numbers of employee in audit firms and the performance achieved in terms of return on equity. The study recommends that number of employee is one of the great determinant of audit quality of audit assignment performed by the auditors and Nigerian companies must ensure that audit firm that has enough employee in all areas of audit are employ to enhance the company's performance.

Keywords: Audit quality, Companies' performance, Number of employee, Auditor, Return on equity, Audit firm

INTRODUCTION

The separation of ownership from management of a company has led to possible conflict of interest between the shareholders (principal) and the directors (Agent).The financial statements prepared by the agents is always seen to be doubtful and in most cases manipulated. In order to lead credence to the financial statements, the shareholders subject the stewardship accounts prepared by the agent to the scrutiny of the auditor as to attest to the validity and legality of the financial statements. For an auditor to perform this task, auditing of client's company must be carry out with the highest quality required by rules and regulations. The right environment must be in place that would improve the sustainability of audit quality in all organization for the enthronement of good corporate governance practices. The relationship that exists between managers and shareholders is that of transparency and fairness. The auditor must ensure that the audit quality are maintained and improved upon by ensuring that financial control mechanisms, implementation of acts, rules and regulations are strictly adhere to. Ghadhab, Matrood and Hameed (2019) suggested the need to strengthen the role of external auditing through various means such as the issuance of instructions, guidelines, and controls to develop the profession, both in the field of accounting and auditing.'

Farouk and Hassan (2014) in their study explained that the quality of financial reporting is based on the role that the external audit plays in enhancing the quality of financial reporting of quoted companies. They also stated that the audit of financial statement by the external auditor is a monitoring mechanism that helps to lessen information asymmetry and defend the interests of the various stakeholders to ensure that financial statements are devoid of material misstatements. International Auditing and Assurance Standards Board (IAASB) Framework recognised the term "audit quality" but did not provide a definition of audit quality that has achieved universally acceptable recognition. The IAASB identified that audit is to provide degree of confidence of users of the financial statements and that can only be achieved by auditors gathering sufficient and appropriate audit evidence which assist him to express an opinion on financial statements in accordance with the applicable financial reporting framework. The rate of audit failures all over the world has created a dislike to investors and would-be investors including other users of financial statement for decision making. Audit team with longer tenure has the tendency to issue fraudulent financial report (Adeyemi & Okpara 2011).The Enron scandal in the USA led to the enactment of SOX Act in 2002 which changed the accounting profession worldwide. The Act was enacted to improve accounting standards and practices, with long-lasting repercussions in the accounting /auditing practice all over the world. The SOX Act (2002) imposed grievous penalty for manipulating financial records. The Act also forbid audit firms for doing consulting services for the same clients (Bondarenko, 2001). The auditing scandal is not only an international affairs, the Nigeria environment has its own share. The collapsed of Cadbury Plc. in Nigeria was attributed to virtually the compromised of all watchdog institutions and as were as the system (Chukwunedu & Okafor, 2011).While the business world is still subject to more failure, Tsipouridou and Spathis (2012)stated that the compulsory adoption of International Financial Reporting Standards (IFRS) in Greece in January 1, 2005 was principally to improve quality of financial reporting, which has been under constant criticism as a result of the practice of earning management and ineffectiveness of the external auditing.

Different research studies have examined the effect of audit quality on the firm performance**.** Different proxies have been used for audit quality such as audit firm size, audit committee/ audit committee size**,** audit committee independence, audit committee meeting, audit opinion type (Qualified vs. Unqualified)auditor experience, auditor independence **(**Ogbodo & Akabuogu (2018)**,** Muotolu, Chikwemma & Nwadialor, (2019), Abid, Shaique & Anwar (2018), Zayol&Kukeng (2017**).** Tyokoso and Ojonimi (2017) represented audit quality with auditor tenure, client importance, audit firm size and auditor specialization. In spite of the importance of these two issues and their significant advantages as well as robust national and international literature, there is a paucity of literature in Nigeria, also among the above mentioned research non has used the no of employee in the audit firm to measure audit quality in relation to organizational performance. Furthermore, controversial result has been arrived at by other researchers and none has used manufacturing companies in Nigeria. Base on the above breaches, this research has been carried out to examine the effect of audit quality on organizational performance in Nigeria. Therefore, the main objective of the study is to examine the effect of audit quality on organizational performance in Nigeria. The following hypothesis in null form is thus formulated:
H01: Audit quality does not have any significant effect on companies' performance.

LITERATURE REVIEW

Conceptual Framework

Concept of Audit quality

Audit quality is arguable but difficult to understand (Knechel 2013), because an audit process involves application of testing procedures that could not be experimental by users of the financial statement (DeAngelo, 1981; Hussainey, 2009). DeAngelo (1981) defines audit quality as the market-assessed joint probability that a given auditor will both (a) discover a gap in client's accounting systems, and (b) report the gap. The auditor capacity to detect any error is related to the auditor competence, and willingness to report the errors is related to the auditor independence (Shafie, Wan –Hussein, Yusuf & Hussain, 2009)**.** Hussainey (2009) defined audit quality as the accuracy of information an auditor provided for the investors**.** Suleiman, Yasin and Muhamad (2018) posit that there are three main perspectives related to audit quality which add to our understanding of the factors affecting audit quality in practice. First they identified multifaceted concept of the term audit quality. Second, that audit quality is affected by both internal factors within the accounting firms and contextual factors affecting the accounting firm operations. Third, earlier researches adopted old approach which limits information about the understanding of audit quality.

In this research, audit quality is defined as the capability of auditor in discovering and reporting any errors in a financial statement. The most common errors made in financial statement are aggressive income or discretionary accruals. Discretionary accruals are accruals that could be manipulated by management and usually intended to achieve a desired profitability or income. This is caused by the management that has an authority in control and creating policies, including those company accounting policies that favor their position as managers. An auditor is obligate to disclose non-fair discretionary accruals to prevent misstatement of financial statement. Audit quality (AUDQ) is the independent variable contained in this study which is measured by logarithm of total number of staff audit firm.

Concept of Companies' performance

Organizational performance is concern with the 'health" of an organization which is generally measured in terms of financial and non-financial performance. The financial measurement could be in term of return on equities, return on assets, or return on investment etc. According to Cho and Dansereau (2010); it is referred to the performance of a company as compared to its goals and objectives. In addition, Tomaland Jones (2015) define organizational performance as the actual results or output of an organization as measured against that organization's intended outputs. The effectiveness of an organization consists in the efficiency of each of its individual employees, role of the external auditor and other factors. According to Lebans and Euske (2006), one significant advantage of accounting-based performance measures is that they are not requiring an exchange listing thus; also private and small business may be examined. Furthermore, they are easy to interpret. Return on equity is used as proxy to measure performance in this study. Return on Equity (ROE) helps to measure the return generated on shareholders' equity. It is the value created to owners of a company when the return on the equity is more than the cost of the equity to the owners of the company. It is calculated by taking the profit less preference share dividends and taxes of a particular year divided by ordinary shares of that same year. Equity is defined here as ordinary shares of an entity.

The formula of ROE = $\dfrac{\text{Profit after preference divided and Tax}}{\text{Total Equity}}$

Audit quality and Performance

It has been established by some studies that there is great link between audit quality and organizational performance, also this has been confirmed by agency theory. Some of these studies used auditor experience, audit fees, auditor rotation and auditor independence as proxies for audit quality (Woodland& Reynolds 2003; Nam 2011; Bouaziz 2012; Farouk & Hassan 2014; Matoke & Omwenga 2016). Nam 2011 examines the association between audit fees as a measure for auditor independence and audit quality of firms in New Zealand. The study discovered that the condition of non-audit services by the auditors of a firm compromises the auditor's independence. Farouk and Hassan (2014) investigate the effect of audit quality on the financial performance of quoted cement firms in Nigeria. They aimed at determining the impact of auditor independence and audit firm size as proxies for audit quality on financial performance using multiple regression analysis. Findings show that audit firm size and auditor independence have significant impacts. However, auditor independence is more influential than auditor size on firm financial performance.

Matoke and Omwenga (2016) test the relationship between audit quality and financial performance through the proxies of auditor independence, audit team attributes auditor experience and net profit margin of listed firms in Kenya. The study analyzed data by applying multiple linear regression analysis. This investigation found that the effect of audit quality on financial performance is positive and significant and the higher the degree of auditor independence, the more likely the firm is to have higher profitability. Woodland and Reynolds 2003 examined the relationship between indirect measures of audit quality and financial statement analysis using multivariate regression analysis. They discovered that there is no proof that auditor size, tenure or industry specializations associate with audit quality. Bouaziz

(2012) studied the association among auditor size and financial performance on a sample of 26 Tunisian firms registered on the Tunis Stock Exchange. The outcome shows that auditor size has a substantial impact on the financial performance of firms concerning Return on Assets (ROA) and Return on Equity (ROE). Having looked at other variables that other researchers have used in measuring audit quality and performance, this study use number of employee in audit firm to measure audit quality and return on equity to measure organizational performance.

Empirical Framework

Putra and Fito-Mela (2019) examined the relationship between audit quality and earning management: Informative and opportunist perspective in Indonesia. The study used samples of 615 firm-year of manufacture companies listed in Indonesian Stock Exchange for the period of 2013-2017. Audit quality is measured by a proxy of the big 4 while earnings management is by discretionary accruals. Analysis method uses logistic regression was used to measures the relationship. Result of the study shows that high audit quality increases informative earnings management and reduces opportunist earnings management. The result aligns with the role of auditor in reducing asymmetric information between managers and shareholders. Muotolu and Nwadilor (2019) explored the effect of audit quality on the financial performance of deposit money banks in Nigeria. The study examined 14 banks from the listed 22 deposit money banks in Nigerian Stock Exchange. The data collected were analysed using the simple regression and correlation analyses. The result of the study reveals that Audit Committee Size (ACSIZ) has a positive but insignificant effect on the financial performance of Deposit money banks in Nigeria. Further findings show that while Auditor's Size (BIG4) has a positive and significant effect on the financial performance of quoted banks in Nigeria; Audit Committee Independence (ACIND) and Audit Committee Meetings (ACM) both have a negative and insignificant effect on the financial performance of quoted deposit money banks in Nigeria. The study recommends that management of deposit money banks in Nigeria should use the services of the big audit firms and where the services are not available; they should employ other firms with character and integrity that is beyond question.

Elewa and El-Haddad (2019) investigated the effect of audit quality on firm performance: A panel data approach in Egypt. Audit quality is measured by a proxy of the big 4 and audit independence while companies' performance was measured by return on assets and equity. The study uses financial statements of thirty non –financial firms listed as EGX 100.The study covered a period of 2010-2014. Data panel analysis was deployed to measure the data. The findings reveal that the BIG 4 and Auditor rotation have an insignificant impact on the return on assets and return on equities of the firm. The study recommended that users of financial statement may benefit from the study when dealing with high-profit firms. Khan, Abdul and Ntim (2019) explored the Impact of board diversity and audit on firm performance in Pakistan. The study looked at board diversity in terms of its nationality and gender as a proxy for audit quality. The study sample comprises of listed companies in Pakistan Stock Exchange (PSE) 100 Index. PSE-100 index is selected on the basis of sector representation and highest market capitalization. Data collected span from 2008 to 2017 and quantitative techniques from econometrics on panel data was deployed. The finding suggests that the presence of female board members contribute to firm performance while the number of female board members does not contribute to firm performance.

Ezejiofor & Erhirhie (2018) investigated the effect of audit quality on financial performance: evidence from deposit money banks in Nigeria. Secondary data collected from the annual reports and accounts of quoted Nigerian deposit money banks was used for the study. Regression analysis and coefficient correlation were employed to test the variables of interest. The results of the investigation revealed that audit quality has a significant effect on the financial performance of Nigerian deposit money banks. The study, therefore, recommends that Nigerian money deposit banks should increase the number of its foreign directors in its management cadre and especially those with the requisite skill, experience who have integrity to protect. Ogbodo and Akabuogu (2018).The duo explored the effect of audit quality on the financial performance of selected banks in Nigeria. The study represented audit quality by audit firm size and audit committee independence. The objectives of their study were to examine the effects of audit firm size on company assets and to determine the extent of audit committee independence on profit margin. The sample of study consists of sixteen deposit money banks in Nigeria quoted on the Stock Exchange. The data of the study covered a period of 2008-2017.Regression statistical tool using the Scientific Package for Social Science (SPSS) version 20 was employed for the data analysis. The result reveals that firm size has significant effects on return of asset of quoted Nigerian banks. Another finding is that Audit Committee Independence has significant effect on the return of equity (ROE) of quoted Nigerian banks. The study recommended that company should use the services of audit firms with impeccable records of audit quality and possibly of high reputation. Abid, Shaique and Anwar (2018) examined whether big four auditors always provide higher audit quality in Pakistan. Sample of secondary data of 183 firms listed on the Karachi Stock Exchange was used covering a period of 2009-2013.The study deployed signed discretionary and performance-adjusted discretionary accruals as proxies for earnings management, and audit firm size (Big 4 vs. Non-Big 4) and audit opinion type (Qualified vs. Unqualified) as measures for audit quality. The finding reveals that there is no significant difference between earning management of firms audited by big 4and non Big 4 auditors.

Tyokoso, U-ungwa and Ojonimi (2017) examined the Effect of Audit Quality on Performance of Deposit Money Banks (DMBs) in Nigeria. Secondary data extracted from annual report and accounts of 8 DMBs were analyzed. Panel multiple regression technique was used in the analysis. The result shows that auditor tenure which serve as a proxy for audit quality has a significant effect on Tobins Q (Total market value of the firm /total assets value of the firm) of DMBs in Nigeria. Conversely, client importance has a significant negative relationship with Tobins Q while audit firm size and auditor specialisation respectively have insignificant positive and negative effect on Tobins Q of DMBs in Nigeria. The study recommends tenure of three years and above for auditors in order to enhance the performance of the deposit money banks in Nigeria. Zayol and Kukeng (2017) investigated the effect of auditor Independence on audit quality: A review of literature in Nigeria. The study employed ex post facto research design .Secondary data from journals, text books and other internet materials were used. The finding shows that there is strong relationship between auditor’s independence and audit quality. Further findings reveal four threats to auditor independence, which are client importance, non-audit services (NAS), audit tenure, and client’s affiliation with firms. The study recommended that more study should be carried out in the four threats in other sector of the economic such as manufacturing, transport, media, education etc. Motoke and Omwenga (2016) assessed audit quality and financial performances of companies listed in Nairobi Securities Exchange (NSE) violet. The study’s objectives were to determine the effect of auditor’s independence, effect of audit team, auditor’s experience on financial performance. Sample of data was drawn from the nine listed companies in Kenya. The study employed both primary and secondary data. Descriptive statistic using SPSS was adopted. Data was analysed by using multiple linear regression analysis. The findings reveal that audit quality and financial performance is positive and significant, audit size was also positive and significant but audit independence is of lesser impact. The study recommended that management of listed company should employ the services of one of the big audit firms; and where management cannot reach the firm; they should consider other firms with good characteristic and integrity that is beyond question.

Okoye, Okaro and Okafor (2015) examined corporate governance and audit quality in Nigeria. Secondary data was used for the study and the data were analysed using binary logistic regression model. The secondary data was extracted from the annual financial reports of a sample of 104 companies randomly selected from a population of 134 non-bank companies listed in the Nigerian Stock Exchange. While the dependent variable of the study is audit quality, independent variables included Board size, Board independence, Board diligence, Audit committee size, Audit Committee diligence and audit committee independence. The major findings reveal that small board size and greater board diligence impact positively on audit quality. Afza and Nasir (2014) examined audit quality and firm value: A case of Pakistan. The objective of the study was to examine the influence of audit committee characteristic on the financial performance of firms. The study used Audit Committee (AC) as a proxy for audit quality. It identified four audit committee characteristics which are audit committee size, independence, activity and quality of external audit to study their impact on firm financial performance. The study employed panel data which showed that audit committee size and external audit quality have a strong and significant positive impact on Return on Assets and Tobin's Q while audit committee independence and audit committee activity remain insignificant to return on assets. The study recommended that all regulators, policy makers and stakeholders should adopt audit committee characteristic to improve the financial performance of the organisation. The result of the study is consistent with other similar study carried out in other countries.

Theoretical Framework

Agency Theory

Jensen and Meckling (1976) propounded the agency theory. Agency theory is that principle that explains the nature of the agency relationship as a result of separation of ownership from management of a business. The separation of ownership from management of a company could lead to possible conflict of interest between the shareholders (principals) and the directors (agents).The principal (shareholders) appoint the agents (management) to take decision for the running of the business on their behalf. To ensure that the business is being run in the interest of the owners, auditing plays a vital role in reducing information asymmetry by helping to confirm the validity of the financial statements. Information asymmetry relates with the study of decisions in which one party has more or superior information than the other(s).The information asymmetric that exist between the principals and agent in whom the management betray the fiduciary responsibility to the shareholders give opportunity for conflict which betray confidence the principal placed on the management. Therefore, auditors are employed by the principals as a third party in order to strengthen this trust of aligning the interests of agents with the principals. Auditors can only strengthen this interest through a complete mechanism of audit quality. Agency theory, therefore, is a practical economic theory of accountability, which helps to explain the usefulness of audit quality.

Stakeholder Theory

Stakeholder theory was the work of Freema Edward (1984).The theory created awareness of the relationship between a company and its many stakeholders. The theory suggests that a company's stakeholders include people like employees, customers, vendors, contractors, and shareholders, including institutions like banks, government bodies, oversight organisations and the likes. They can be affected by records of the firm or its failure. The theory states that company stakeholders are interdependent and the value created by the company belong to all of them, which mean that the company has obligation to distribute it profit to all stakeholders. A company success is measured in the way the company satisfy all the stakeholders and not just shareholders. Therefore, managers have special obligations to ensure that all stakeholders receive a fair return from stake they hold in the company (Donaldson & Preston, 1995). The auditor is expected to make the audit to accountable to all stakeholders in discharging his legal responsibility of expressing an opinion on the financial statements for decision making. The reliability of the auditors' report to all stakeholders depends on the audit quality exercised by the auditor which invariably impacts the company performance.

Legitimacy Theory

Legitimacy theory is championed by Suchman (1995) which dominates the auditing and accounting literature. Legitimacy theory has the role of explaining the behavior of organisations in developing and implementing voluntary social and environmental disclosure of information which enable them to fulfill their social contract which is the recognition of their objectives and the survival in a turbulent business environment. Organisation's activities are reported in accordance with the expectations of the general society. When organization fails to respect social and moral values, the organization would be sanctioned by the society; these sanctions may even lead to the failure of such organization.It is expected that the organization justify its existence through legitimate economic and social actions that benefit the society in which the organization operates. The environment and economic challenges to the organization means that the organization must respect rules, values and norms of the society and voluntarily disclose social and environmental information to prove compliance. Legitimacy theory has a very rich disciplinary background based on management theory, institutional theory and stakeholder theory. The legitimacy literature suggests that the survival of an organization depends on its legitimating processes and how the ever constant pressures and challenges are managed. Therefore, the legitimacy theory made it necessary for firms to disclose useful information which is vital to the survival of the business. Useful information provided by the firm help to enhance audit quality of the firm. This study is thus, anchored on agency theory credited to Jensen and Meckling (1976).

METHODOLOGY

The main objective of this study is to examine the effect of audit quality on companies' performance. This study uses ex-post facto research design and simple random sampling method to select 10 out of 55 manufacturing companies listed on the Nigeria Stock Exchange that are audited by the big fours. Secondary sources of data were used through published data from the annual reports of the selected manufacturing companies listed on the Nigeria Stock Exchange as at 2018 for the periods of ten (10) years of 2009-2018 and publication provided by the big four audit firms on the internet in getting the number of employees for each of the years under the study. In testing the hypothesis, ordinary least Square regression analysis (OLS) was used to analyze the data collected after using Kolmogorov-Smirnov test to test the normality of the data. The regression model is as follows:

ROEit= β0 + β1NOEit + e

Where: ROE= Return on equity
β0 =Intercept (constant term)
β1NOEit = Number of Employee
e=Error term.

Return on equity is the proxy for companies' performance (dependent variable); Number of employee in the Audit firms (the big four) is the explanatory variable.
Apriori Expectation
It is expected *that* β1 > 0

RESULT AND DISCUSSION

Table1.
Dependent Variable: LOG(ROE)
Method: Least Squares
Date: 04/28/20 Time: 01:04
Sample: 1 100
Included observations: 100

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	15.96693	5.047738	3.163184	0.0021
LOG(NOE)	-1.063507	0.414438	-2.566140	0.0118

R-squared	0.062964	Mean dependent var	3.015237
Adjusted R-squared	0.053402	S.D. dependent var	0.793473
S.E. of regression	0.771996	Akaike info criterion	2.340122
Sum squared resid	58.40579	Schwarz criterion	2.392225
Log likelihood	-115.0061	Hannan-Quinn criter.	2.361209
F-statistic	6.585075	Durbin-Watson stat	0.492160
Prob(F-statistic)	0.011798		

Source: E-views output (2020)

From the table 1 above, the R2 is 0.062964 while the R which is the square root of R2 that is the coefficient correlation is 0.25093 which show that there is a positive correlation between audit quality and companies' performance. Also the F-statistics which shows the level of significant in which the explanatory variable which is performance is able to explain the outcome variable which is audit quality is 6.585075 , the Pro(F-statistics) which is 0.011798 shows that there is statistically significant relationship between audit quality and organizational performance because the value is less than the alpha value of 0.05.furthermore the value of Dubin-Watson stat is 0.492160 which by rule of thumb is lower than 2, this means that there is a positive serial correlation between audit quality and organizational performance.

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Discussion of Finding

The finding revealed that audit quality does not have any effect on organizational performance and accept our alternate hypothesis that audit quality has effect on organizational performance which supported the result of Motoke and Omwenga (2016)that assessed audit quality and financial performances of companies listed in Nairobi Securities Exchange (NSE) violet and their findings revealed that audit quality and financial performance is positive and significant. Also our result is in line with that of Ezejiofor and Erhirhie (2018) that investigated the effect of audit quality on financial performance of deposit money banks in Nigeria. The results of the investigation revealed that audit quality has a significant effect on the financial performance of Nigeria deposit money banks**.** Moreover, this result is against the findings of Tyokoso, U-ungwa and Ojonimi (2017) that examined the effect of Audit Quality on Performance of Deposit Money Banks (DMBs) in Nigeria. And their result shows that audit firm size and auditor specialization respectively have insignificant positive and negative effect on Tobins Q of DMBs in Nigeria.

CONCLUSION AND RECOMMENDATIONS

Majority of works on audit quality have been carried out outside Nigeria's environment. This study was carried out to investigate the effect of audit quality on some selected companies' performance in Nigeria. The main objective is to investigate the effect of audit quality (proxy by number of employee in the audit firms) on companies' performance (proxy by return on equity)of some selected Nigerian manufacturing companies quoted on the Nigerian Stock Exchange (NSE) for the period of 10 years from 2009- 2018. Ordinary least square Regression analysis was deployed to test the hypothesis. The empirical result revealed that audit quality represented by number of employee in audit firms has a significant positive effect on companies' performance i.e. return on equity in the selected manufacturing companies in Nigeria. The study concludes that there is a great significant positive relationship between the numbers of employee in audit firms and the performance achieved in terms of return on equity. Following the finding of this study, the following recommendations are made:

i. Number of staff in audit firms is a great determinant of audit quality of audit assignment performed by the auditors and Nigerian companies must ensure that audit firm of aged experience with high number of staff are employ to enhance the company's return on equity.
ii. The management of most quoted companies should employ the services of large audit firm that has enough staff in different section with experience in order to enhance its return on equity and create a better image for the company.

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Impact of Profitability on Earnings Quality of quoted Deposit Money Banks (DMBs) in Nigeria

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Abstract

The study examined the Impact of Profitability on Earnings Quality of Deposit Money Banks in Nigeria. The data used for this study were sourced from CBN statistical bulletin, and development indicators.The population consists of 14 deposit money banks quoted on the Nigerian stock exchange from the period of 2006 to 2019. The paper used purposeful sample to arrive at 12 deposit money banks used for the study. Loan loss provision (LLP) was used a proxy for earnings quality while return on asset (ROA) was used as a proxy for profitabilityby means of Ex-post factor research design, pre-estimation tests were carried out on each of the variables using Augmented Dickey Fuller (ADF) unit root test to avoid spurious regression results, Hausman test fixed and random effect was estimated to choose which model fits. The study employed random linear ordinary least square pooled OLS for which was analyzed via E-views 10. The findings from the study revealed there is a significant relationship between return on asset and loan loss provision of deposit money banks (DMBs) in Nigeria. It conclude that profitability boost earnings quality of deposit money banks (DMBs) because when banks makes more profit it increase the volume of earnings in general. It therefore recommended that proper and adequate measures should be put in place for the evaluation, examination and oversee of statement of DMBs.

Keywords: Earnings Quality, Profitability, Loan loss Provision, Return on Asset, DMBs

INTRODUCTION

Financial report is shown by an information management to assess the quality of a firm's performance and demonstrate its responsibility to investors, employees, customers, society and government. Financial report serves to present information to help investors, creditors, and other potential users in a similar decision rationally. The statements are very important because of the demonstration of quality of management performance in a period of time. One importance of financial statements is its use to measure management performance. Therefore, management will try to make a financial report in such a way that the performance of the company looks good in the financial statements. Due to the important role of financial statements in demonstrating the performance of a company, the management will try to mislead investors or the owner of the company to avoid the confidentiality of the actual condition of the financial statement. One way that is often applied to mislead the owner of the company or investors is conducting earnings management, because the manipulation of earnings quality management is the safest and legal, and does not violate generally accepted accounting principles(GAAP) now International Final Reporting Quality (IFRS) (Haryudantoand Yuyetta, 2011).

Loan loss provision is provisioning for credit losses on the loan portfolio and its funding which occurred impairment in economic value (Budiarti, 2012). Provisioning for losses is important so that the bank financial statements representation actual situation. Loan Loss Provision is provision established by a bank if there is objective evidence of impairment of financial asset or group of financial assets as a cause of one or more events occur after the initial recognition of the asset and impacting the estimated future cash flow. Therefore, loan loss provision is an important tool that has employed to reduce the risk of customers' failure to pay their liabilities to the bank. Beatty and Lioa (2016), opined that Loan Loss Provision is a policy that is followed by deposit money banks (DMBs) by putting some money aside (reserves) to face any potential loans default, which in turn would help to protect banks' positions in terms of profitability and capital. Bank Performance could be evaluating by bank profitability. Sustainability banks depend on bank profitability and performance because banks must generate the income needed to cover their operating costs issued in banking activities. Assessment of financial performance of banking is one of the important factors for banks to see how the bank in performing, whether the performance already good or not. Lipunga (2014) and Greuning and Bratanovic (2003), opined Profitability could be calculated using Return on Assets (ROA). The level of profitability with the ROA aims to measure the ability of bank management to manage assets controlled to generate income. Profit is the bottom line or ultimate performance result showing the net effects of banks policies and activities in a financial year. Its stability and growth trends are the best summary indicators of a bank's performance in both the past and the future Greuning and Bratanovic (2003). They insist that strong and stable net interest margins have traditionally been the primary determinants of intermediation efficiency and earningsperformance. A bank panic occurs when the failure of one bank to honor its depositor's demands for payment which leads to the general public to fear that other banks will be unable to honour some demands. When this occurs depositors attempt to withdraw their deposits before their bank fails and in so doing may place it and other banks in jeopardy Jansen (2006). Bank profitability and earnings are closely related because retained earnings are undistributed profits accumulated over the years which may be subsequently used for the purpose of enhancing the capital resources of the bank (Nzotta,2004).A bank generate a profit from the differential between the level of interest it pays for deposits and other sources of funds and the level of interest it charges in its lending operations. This difference is the spread between the cost of funds, and the loan interest rate. In recent history, banks have taken many new measures of income generation to ensure that they remain profitable while responding to increasingly changing marketconditions. Taking into description above, this paper has interested to Analyzing the impact of return on asset on Loan Loss Provision of banks as an objective and the hypothesis that guide study is that;

Ho1: Profitability has no significant impact on earnings quality of quoted deposit banks (DMBs) in Nigeria.

LITERATUREREVIEW

Conceptual Framework

Concept of Earnings Quality

Earnings quality and earnings management are interchangeably used in literatures, however the degree of earnings management normally determine the earnings quality of reported figures in financial reports (Vasiliki, Stergios, Emmanouli and Stephen, 2014). This view has been variously supported by scholars as Ralf & Alfred, (2009); Chan, Jegadeesh & Lakonishok (2006). The degree of quality points to the ability of reported earnings to forecast the entity's future performance (Gregory, 2014; Mary, 2017). Since high earnings quality boosts capital market efficiency, shareholders place much importance on high quality financial accounting information in their decisions to invest or divest their investments in/from entities. Consequently, accounting standards setters attempt to create standards that boost earnings quality having in mind current contribution of information communication technology towards the developments of deposit money banks in Nigeria. Accrual quality using discretionary accrual, earning predictability and income smoothinghave been the common proxies used to confirm earning qualities in financial statement.

Earnings quality can simply be referred to as the degree to which reported earnings capture a firm's economic reality of a given company. It is defined from two different perspective; decision- usefulness perspective and economic-base perspective. From the decision-usefulness perspective earnings quality is regarded to be high if the reported earnings are useful for decision making. Khairul (2014) and Dechow (2010) view earning quality from this perspective, they explained that analysts are likely to view earnings to be of high quality when the earnings numbers accurately reflect the company'scurrent operating performance are good indicatorsof future operatingperformance and are good summary measure for assessing firm value. Therefore, it is consistent with the objective of financial analysts, which is to evaluate the performance of the company, assess the extent to which current earnings indicates future performance and determine whether the current stock price reflects intrinsic firm value. Economic based-definition of earnings quality is based on Hicksian definition of Income (Shippers and Vincent, 2003). They further define earnings quality as the extent to which reported earnings faithfully represent Hicksian income; where representational faithfulness means correspondence or consensus with a measure or description of the phenomenon that it purports to represent. This supports the view of earnings quality as numbers that reflect “true earnings” which is not based on accounting rules and standards. True earnings` is a neutral context- free benchmark, yet difficult to assess as Hicksian income (economics income) is not observable (Khairul, 2014) and they concluded that the more accurate or timely that reported earnings reflect shocks in the present value of expected future dividends, the higher the quality of earnings.

Different researchers define earnings quality using certain characteristics of earnings such as persistence or sustainability, predictive ability, smoothness, conservatism, value- relevance, timeliness, earnings management or earnings manipulation and accrual quality. In general, earnings that are considered of high quality are those with high level of persistence, predictability, less volatility, timely, lower level of earnings management and higher accrual quality (Khairul, 2014). Earnings quality refers to the ability of reported earnings to reflect the company's true earnings, as well as the usefulness of reported earnings to predict future earnings. It also refers to the stability, persistence and lack of variability in reported earnings (Roya, Kamran & Ghadiri, 2012). They further explained that earnings has more quality when it shows the real value of organization which can use to predict the future value of entity. While Mishari (2009), defined earnings quality based on earnings persistent, he defined earnings quality as the ability of past earnings to predicting future cash flows. Palepu and Healy (2008), based their definition on the ability of the accounting system to capture the firm fundamental activities, they defined earnings quality as the extent to which accounting measurement, processes and their implementation by the firms captures the firms` underlying economic fundamentals. Hence, earnings quality means financial statement must be free from all forms of bias and it is measured using (Chang, 2008) model of discretionary loan loss provision. The researcher adopted discretionary loss loan provision in this study, as He found it to be the most suitable in thisinstance.

Loan Loss Provision

Loan loss provision (LLP) estimates play a key role for bank stability and soundness while fulfilling their lending functions to society. Managers use loan loss provisions for their income smoothing because in general, it reduced variability is supposed to represent a reduced risk. Bushman and Williams (2012) also find banks that have smooth earnings through loan loss provision (LLP) have less risk-taking discipline, possibly because the reduced transparency makes external monitoring more difficult, whereas banks that recognize loan loss provision (LLP) in a more timely manner which exhibit greater discipline. Shrieves and Dahl (2003) attribute income has positive association with loan loss provisions to the use of bank management discretion in determining the magnitude and the timing of those provisions. Loan loss provision is an expense on the income statement which signifies managers' assessment of expected future losses. This means that an increase in loan loss provision reduces net income, while a fall in loan losses increases net income. Since it is the resultof managers' assessment of the likely loss that the company would incurred when the borrower fail to repay his obligations as at when due, the provision for it is considered to have two (2) portions:non- discretionary and discretionary portions.The Non-discretionary is a function of specific quality determinants in the loan portfolio- non- accrual loans, renegotiated loans, loans past due over 90 days, specific analyses on troubled large credit, usually implying internal grading system (Grey and Clarke 2004). The non-discretionary portion, therefore, is the provision that is based on fair and objective analysis of the firm's economic conditions. Similarly, the discretionary portions are those accruals that largely depend on the outcome of the managers' future expectation of uncertain events (Mohammed, 2011). The components are both quantitative and qualitative. Grey and Clarke (2004) point that the qualitative components include political, economic, geographical and political factors, while the quantitative are "statistical analysis of loans not individually analyzed for special reserve and therefore are largely at the discretion of managers". In their review of earnings quality management, Sun and Rath (2010) opined that the arguments that support the use of specific accrual (loan loss provision) to detect earnings quality management is proffered by McNichols (2000) who summarizes its advantages into two.First, this approach enables researchers to develop intuition for the key factors that influence the behaviour of the accrual in determining earningsquality.Second, the approach can be applied in industries in which a certain type of business can result in a specific accrual beingmaterial.

Profitability

Profitability is one of major the areas investors pay attention to when analysing the viability of business organizations. Tulsian, (2014) explained that the word profitability is composed of two words - profit and ability. Profit refers to the total income earned by the enterprise during the specified period of time, while ability refers to the operating efficiency of the enterprise. It is the ability of the enterprise to make profit on sales; it is the ability of the enterprise to get sufficient return on the capital and employees used in the business operation. While profit report just about the financial and operational efficiency of an enterprise, profitability interpret the profit in relation to other elements likely to affect profit in order to help in decision making Tulsian, (2014). Profitability is the ability of a given firm to earn profit. It indicates how well managers of an enterprise generate earnings by using their source of the business at their disposal. Dogan (2013). Simply defines it as the profit making ability of the business. It is a strong indication of ability to pay dividend and avoid bankruptcy (Tulsian, 2014). Profitability can be measured using return on asset (ROA), return on equity (ROE) and others (Iyoha, 2012). The gross profit margin considers amount made after direct cost of sale have been taken into account, return on asset (ROA)is defined as net income divided by total asset which reflect how the well the company is using its real investment to generate profit (Türel & Türel, 2012). Return on asset (ROA)is often used to compare the efficiency and operating performance as it looks at the returns generated from the asset financed by the company. ROE on the other hand is indicating how effective a firm is in turning shareholder fund into net profit (Turrel, 2012). For the purpose of this study, profitability is defined as net income divide by totalasset.

Empirical Framework

Tortosa-Ausina., and García-Alcober (2019), carried out a study on the Profit efficiency and earnings quality: Evidence from the Spanish Banking Industry and propose an analysis of profit efficiency taking into account how the inclusion of a variety of bank risk measures might bias efficiency scores.

The researcher measures of risk are partly inspired by the literature on earnings management and earnings quality, loan loss provision was used as a as a proxy for earnings quality. The researchers also consider some variants of traditional models of profit efficiency where different regimes are stipulated so that financial institutions can be evaluated in different dimensions with regards to prices, quantities, or prices and quantities simultaneously. The researchers perform an analysis on the Spanish banking industry, whose institutions are deeply affected by the current International financial crisis, and where re-regulation is taking place. The researcher's results explored in multiple dimensions but, in general, they indicate that the impact of earnings management on profit efficiency is of less magnitude than what might, a priori, be expected, and that the performance of savings banks has been generally worse than that of commercial banks. they recommends that savings banks should adapt to the new regulatory scenario and rapidly catch up with commercial banks, especially in some dimensions of performance.

Saidu (2017), examine the impact of earnings quality management on the financial performance of listeddeposit money banks (DMBs) in Nigeria. Data was extracted from the annual report and accounts of 5 sampled banks for the period 2011-2015. Loan loss provision was used as a proxy for earnings quality management while return on assets (ROA) was used as proxy for banks performance. The study employed linear regression of pooled ordinary lease square for data analysis. Findings from the study revealed that earnings quality management exist in the Nigerian Money Deposit Banks. However, the study could not establish any statistical significant impact of earnings management on return on assets (ROA). It concludes that earnings management have impacts on the performance of deposit money banks DMBs in Nigeria. The overall findings showed that there is existence of earnings management in Nigeria's deposit money banks. It is however pertinent to note that the existence of earnings management in deposit money banks (DMBs) in Nigeria does not have significant impact on their performance as inferred from the findings of this research. It is therefore recommended that, even though the relationship between the variables is not significant, appropriate and proper measure should put in place for adequate evaluation, examination and overseeof DMBs financial statement and adequate procedures for early detection of earnings management practices should also be put in place before earnings management practices will have a great and notable negative impacts on theirperformance.

Uwuigbe, Adeyemo, and Ogunbajo (2016) examined the effect of corporate attributes on the profitability of companies by employing the annual reports of thirty selected companies listed on the Nigerian Stock Exchange (NSE) for a period of 5 years (2007-2011). They used Ordinary Least Square (OLS) regression to test for the effects of the selected corporate attributes on profitability. They tested for the relationship between leverage, firm size, firm age and return on assets using Pearson's product moment correlation coefficient. Of the three corporate attributes employed in the study, only firm age showed a positive statistically significant relationship with profitability measured by return on assets. It therefore concludes that older firms perform better than younger ones. The finding supports the argument that, older firms are likely to perform better than younger firms because they are more experienced, have enjoyed the benefits of learning, are not prone to the liabilities of inventiveness, and can therefore enjoy superior profitability. It recommends that companies should pay adequate attention to financial leverage, because firms that are highly leveraged are at the risk ofinsolvency.

Mohammed and Usman (2016), examine the impact of corporate attributes on the share price of listed pharmaceutical firms in Nigeria using a panel data of five sampled firms for a period of ten years (2004-2013). The data is extracted from the annual accounts of the selected firms. Multiple regression technique is employed to examine the influence of corporate attributes on the share price of listed pharmaceutical firms in Nigeria. The study reveals that firm size, leverage, profitability and growth have positive and significant relationship with share price implying that they have impact in increasing share price. However, the relationship between liquidity and share price is found to be negative, indicating that liquidity has no influence in enhancing share price of listed pharmaceutical firms in Nigeria. The study therefore, recommended that firm size, leverage, profitability and firm growth should be enhanced in view of their influence in increasing the share price while liquidity should not be given any attention in an effort of raise profit.

TheoreticalFramework

The theories relevant to earnings quality and profitability are reviewed below of which one is to underpin the paper.

Stewardship Theory

Stewardship Theory was propounded by Donaldson and Davis (1991) which explains the role of managers to ensure that the main goals are achieved by doing hard tasks thus their inspiration overcomes simple financial concerns. This theory emphasizes on the principals need to act harder to increase the profits of the shareholders. Also, managers need power and desire respect from their colleagues, friends and their bosses so as to perform their duties effectively. Therefore, the shareholders also need to empower the managers through governance organization systems, power and information to empower the managers' independence, trust building and to take decisions that matter in their capability to achieve their main goal objectives. In comparison with the Agency theory, Stewardship theory insists on the responsibilities of directors as the stewards who control all the activities of an organization. (Daily, 2003) contends that executives and directors ensure that the organization is effectively run so as to ensure that financial performance is well enhanced. Managers are required to increase the shareholders benefits and to create a good name to ensure they hold to their positions in the firms (Farouk and Hassan, 2014).

Resource Dependency Theory

The resource dependency theory was developed by Jeffrey Pfeffer (1973) and Gerald Salancik (1978), it highlights the responsibilities by the board of directors (BODs) in ensuring that there is easy access of resources that eventually leads to the good performance of firms. Through the easyaccess of resources, the boards improves organizational performance through easy access to the environment to natural resources and ensure buffers are created against hostile external changes (Daily., 2003).According to Farouq and Ngo (2014) there are four categories of directors of a company; the insiders (they are executives either former members or current members that give advice to the company directors), experts in business (they provide advice on business strategies), specialists in support systems (lawyers, farmers, insurance company representatives that provide support in their individual specialized field) and the community at large (political leaders, university faculty, members of clergy, and leaders of social or community organizations). According to (Elliott, 2014) outside directors, play a great role in the firm as they monitor and control the activities of the board. This theory emphasizes on the background of the firm's directors as their advice is highly relied upon. Large boards are favouredin this theory, as cooperation and agreements are harder to attain in large boards (Daily, 2003) although large boards do not lead to great firm value when firm risk is measured by the vitality of stock returns, board independence is affectednegatively.

Stakeholders' Theory

This theory was developed by Edward Freeman (1984) he 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) opined that there are two category of stakeholders primary and secondary stakeholders in entities. Primary stakeholders are those who continuously in improve the going concern attributes of the entities. Those in this category are: investors, employees, customers, suppliers, government and community. Secondary stakeholders are those who Clarkson, M. B. E, 1988. Corporate social performance in Canada, 1976-86. In L. E. Preston (Ed.), Research in corporate social performance and policy, vol. 10: 241-265. Greenwich, CT: JAI Press.influence/are influenced or affect/ affected by the entities. These are neither engaged in transactions with the entities nor essential for their survival. According to Freeman, Wicks and Farmer (2004), for organizations to be effective, they must pay attention to all those relationships that can affect or be affected by the achievement of the organization. The stakeholders' theory was adopted as a refinement of agency theory, as the latter theory only dealt with the problem between the agent and the investors, as the sole principal, but the stakeholders' theory has widened the problem of agency by including multiple principals (Sand, Garba & Mikailu 2011).The stakeholders' theory proposes that companies have a social responsibility that requires them to consider the interest of all parties affected by their actions. The original proponents of the stakeholders' theory suggested a restructuring of the theoretical perspectives that extends beyond the owner manage-employee position and recognizes the numerous interestgroups.

All theories reviewed are relevant to this study in one aspect or other. However, this study was underpinned on stakeholder theory. Stakeholder theory provides natural backdrop upon which this research is based. This is because of its relevance in proffering solution to organizational management and business ethics that accounts for multiple constituencies impacted by business entities like employees, suppliers, local communities, creditors, and investors. It also addresses morals and values in managing an organization which help in achieving target which will boost the earnings quality.

METHODOLOGY

The study used Ex- post facto and descriptive research design .The paper used secondary data only which was extracted from the annual report and financial statements of the banks. The population consists of 14 deposit money banks quoted on the Nigerian stock exchange from the period of 2006 to 2019. The paper used purposeful sampling toarrive at 12 deposit money banks used for the study. Loan loss provision was used a proxy for earnings quality while return on asset was used as a proxy for profitability. The study employed linear of panel ordinary least square pooled OLS for which was analyzed via E-views 10.

Model Specification

The study adopted the model used by (Isa, 2017) in which he used one dependent variable discretionary loan loss provision and five independent liquidity, profitability, leverage, firm size and ict intensity but this study is using one dependent and one dependent variable. The model used to examine the study is specified below:

$$LLP = \beta_0 + \beta ROA_{1t} + \varepsilon_{it}$$

Where:

LLP = Loan Loss Provision

ROA =Return on Asset

β = Coefficient of ParameterEstimate

ε =Error term

RESULT AND DISCUSSION

Table 1: Descriptive Statistics

	LLP	ROA
Mean	1.664286	1.901430
Median	0.240000	22.49500
Maximum	0.056756	10.69001
Minimum	12.56048	4.240000
Std. Dev.	2.120043	4.305584
Skewness	0.257934	4.246244
Kurtosis	1.239807	4.266597
Jarque-Bera	35.38353	44.96754
Probability	0.000000	0.000000
Sum	52.80000	6031.440
Sum Sq. Dev.	2.406514	153886.6
Observations	168	168

Source: Authors Computation, 2020 (Eviews-10)

Table 1 above shows the mean of loan loss provision (LLP) 1.67 indicting the average level of earnings quality management practice across the sampled DMBs. The table also showed that the difference between the mean of LLP and standard deviation of LLP across the banks is 0.45. This indicates a low variability around the mean. It implies that the amount of loan loss provision is not widely dispersed among the quoted banks; thus, indication that earnings quality management practice is not common to all banks. The table also showed that the minimum and maximum LLP are 0.05 and 15.57 respectively, implying a very wide range. This means that the practice of earnings management is very high in some years and banks than in others. Thus, banks tend record a relatively high earnings quality in some years that inothers.Table 1 also shows that the mean profitability (ROA) as indicated by the mean is 1.0, indicating 10% average return on asset, while the standard deviation is 4.35 representing the average variability of return on total asset among the sampled banks within the period covered by the study. This implies that the level of profitability among the banks is widely spread. Some banks tend to record relatively higher level of profitability than others do. The minimum and maximum as shown abovein tables1 with the value 10.69 and 4.24. Hence, the range is 6.45 implying that there isvery wide gap between the highest profit and lowestloss.The table 1 above also shows skewness of loan loss provision (LLP) which is 0.25 and that of a kurtosis which is 1.23 which implies that the loan loss provisons(LLP) skewness is a normal because the value is 0 and it is platykurtic because it is less than 3 which implies that LLP has a flattened curve with a normal with more lower value than the sampled mean 1.66.The table also shows that skewness of profitability (ROA) 1.27 and a kurtosis of 4.27 which implies that profitability (ROA) has a long right tail positive skewsness and it is leptokurtic because the value of kurtosis is greater than 3 which is the average value of normaldistribution. The table also shows that LLP probability value of 0.0000 and a Jarque bera statistics 35.39 which shows that the null hypothesis is rejectedit shows that the distribution is normal because the probability is less than the significance level points of0.05.The table also shows probability value 0.0000 with Jarque bera statistics 44.97 which shows that the null hypothesis is rejected, while the alternate is accepted because the probability value is highly statistically significant and the distribution are normal.

Panel Data Properties

Overtime, the panel data properties of most financial data set are non-stationary and using non-stationary variables leads to spurious regression. Thus, the variables were investigated for their stochastic properties. Augmented Dickey-Fuller (ADF) test was used to ascertain whether the variables of the study exhibit unit root properties. The decision rule for the ADF Unit root test states that; the ADF Test statistic value must be greater than the Mackinnon Critical Value at absolute term for stationarity to be established at level and if otherwise, differencing occurs. The results of unit root test conducted for the variables are presented below.

Table 2: Unit Root Test (LLP at 1st Difference)

Null Hypothesis: Unit root (individual unit root process)
Series: D(LLP)
Date: 10/11/20 Time: 20:55
Sample: 2006 2019
Exogenous variables: Individual effects
User-specified lags: 1
Total (balanced) observations: 132
Cross-sections included: 12

Method	Statistic	Prob.**
ADF – Fisher Chi-square	39.0618	0.0269
ADF – Choi Z-stat	-2.96019	0.0015

Source: Authors Computation, 2020 (Eviews-10)

From the table above, the traditional test of Augmented Dickey-Fuller (ADF) indicated that the Probability value under the ADF is 0.0269, less than 0.05 at 1st difference. This implies that loan loss provision (dependent) variable was non-stationary at level (as attached in the Unit root test in the appendix), but became stationary at 1st difference. Similarly, the Augmented Dickey-Fuller (ADF) Z-Statistic (2.96019) with probability 0.0015 which is less than the absolute critical values 0.05 level of significance. This implies the Null Hypothesis must be rejected and it can be concluded that LLP has no unit root and the data is stationary

Table 3: Unit Root Test (ROA at Level)

Null Hypothesis: Unit root (individual unit root process)
Series: ROA
Date: 10/11/20 Time: 21:00
Sample: 2006 2019
Exogenous variables: Individual effects
User-specified lags: 1
Total (balanced) observations: 144
Cross-sections included: 12

Method	Statistic	Prob.**
ADF - Fisher Chi-square	43.9501	0.0077
ADF - Choi Z-stat	-3.44188	0.0003

Source: Authors Computation, 2020 (Eviews-10)

From the table above, the traditional test of Augmented Dickey-Fuller (ADF) indicated that the Probability value under the ADF is 0.0077, less than 0.05 at level. This implies that return on asset (ROA) (dependent) variable was stationary at level (as attached in the Unit root test in the appendix). Similarly, the Augmented Dickey-Fuller (ADF) Z-Statistic (3.44188) with probability 0.0003 which is lessthan the absolute critical values 0.05 level of significance. This implies the Null Hypothesis must be rejected and it can be concluded that ROAhas no unit root and the data is stationary

Table 4: Hausman Test

Decision: if the probability is PV >0.05 random effect model is accepted, similarly if the probability is PV<0.05 fixed effect is accepted.

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
ROA	0.011002	0.341102	0.330000	0.3400

Source: Authors Computation, 2020 (Eviews-10)

Due to the panel nature of the data set, both fixed effect and random effect regressions were run. Hausman specification test was then conducted to choose the preferred model between the fixed effect and random effect regression models as shown in the table above. The result shows that the random effectappropriate for the sampled databased on the probability 0.3400 which is PV>0.05.

Statistical Test of Hypothesis

The decision rule: The decision rule for accepting or rejecting the null hypothesis was that the hypothesis must be based on the Probability Value (PV). If the PV is less than 5% or 0.05 (that is, PV < 0.05), it implies that the variable in question is statistically significant at 5% level; otherwise, it is not significant at that level.

H01: Profitability has no significant impact on the earnings quality of quoted Deposit Money Banks in Nigeria

Table 5: Pool Ordinary Least Square Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.353833	0.013842	25.56241	0.0000
ROA	-0.231102	0.000295	-3.736809	0.0003

R-squared	0.770592	Mean dependent var	0.314286
Adjusted R-squared	0.720305	S.D. dependent var	0.120043
S.E. of regression	0.115638	Akaike info criterion	-1.464866
Sum squared resid	2.219788	Schwarz criterion	-1.427676
Log likelihood	125.0487	Hannan-Quinn criter.	-1.449772
F-statistic	13.96374	Durbin-Watson stat	1.967416
Prob(F-statistic)	0.000256		

Source: Authors Computation, 2020 (Eviews-10)

The coefficient of determination (R^2) is 0.770592 and this shows that77.05 % of variation in LLP is caused by variations in ROA while the remaining 23.95% of the variation in the model is captured by the explanatory variable and error term. This suggests that the line of best fit is fitted. The Durbin-Watson statistics is 1.967416 which shows that there is no autocorrelation in the model. However, the value of F-statistics is 13.96374 and the value of the probability 0.0000. This result implies that the overall regression is statistically significant at 5% level of significant given that probability of F-statistics is 0.000256, which is less than 0.05. This implication of this is that improving the ROA can be a further move towards encouraging the LLP. Therefore, based on the probability (F-Statistics) value of 0.000256, which is less than 0.05, the null hypothesis that Profitability (ROA) has no significant impact on the earnings quality (LLP) of quoted Deposit Money Banks in Nigeria(DMBs) is rejected..

Discussion of Findings

This study was undertaken to examine the impact of profitability on earnings quality of deposit money banks (DMBs) for 14 years ranging from 2006 to 2019 where the dependent variable earnings quality proxied by loan loss provision(LLP) and the independent profitability was proxied with return on asset (ROA). The impact of the independent variable on each dependent variable was analyzed in terms of strength and significant and the random effect Ordinary Least Square (OLS) regression shows the relationship ofamong the variables.
The result of hypothesis (in line with the objective of the study) return on asset (ROA) has a positive and significant impact on LLP and this implies that ROA is significantly an independent predictor of loan loss provisions (LLP). That is to say an increase in profitability will lead to an increase in earnings quality. This finding is in agreement with Saidu (2017), and Tortosa-Ausina., and García-Alcober (2019)who found that earnings quality management have impacts on the performance of deposit money banks DMBs in Nigeria. This result could be interpreted that return on asset has significant influence on loan loss provisions.

CONCLUSION ANDRECOMMENDATIONS

This paper investigates the impact of profitability on earnings quality of deposit money banks in Nigeria. The profitability Return on asset (ROA) constitutes firms attributes while loan loss provision (LLP) was used to proxy Earnings Quality which represent dependent variables of the study. It was found that profitability have a positive and significant influence on earnings quality of deposit money banks. Therefore the results conclude that firm's attribute (profitability) strongly and significantly impacted on the loan loss provision of deposit money bank, the findings from the study revealed that earnings quality exist in Nigeria Deposit Money banks. It is therefore recommend that proper and adequate measures should be put in place for the evaluation, examination and oversee of statement ofdeposit money banks, adequate procedures for early detection of earnings quality management practices should also be put in place before earnings management practices will have a great and notable negative impacts on theirperformance.

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Sectorial Impact of Foreign Direct Investment Inflow on Economic Growth in Nigeria

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Abstract

The study examined the impact of foreign direct investment on economic growth in Nigeria between 1986 to 2019. The data used for this study were sourced from CBN statistical bulletin, and world bank development indicators. By means of expost factor research design, pre-estimation tests were carried out on each of the variables using Augmented Dickey Fuller (ADF) unit root test to avoid spurious regression results. The cointegration test result showed that long-run equilibrium relationship exists between foreign direct investment and economic growth in Nigeria. Findings from the study revealed that there is a significant relationship between foreign direct investment in manufacturing and economic growth in Nigeria. It showed that the attraction of multinational firms in the manufacturing sector has enhanced the output growth of the economy. Based on these findings, the study recommends that there is the need to sustain the FDI inflow into the manufacturing sector as it serves as a means for skills acquisition from industrialized to developing countries' manufacturing sector. The study also recommends that the government should initiate policies that will promote the long-run growth of the economy at large.

Keywords: Foreign Direct Investment, Economic growth, manufacturing sector

INTRODUCTION

To attract Foreign Direct investment (FDI), developing countries have established pro-investment policies that help firms to open subsidiaries in all parts of the world with relative ease. In this regard, policy makers in developing countries such as Nigeria attract FDI to accelerate economic growth, job creation and poverty reduction. This is based on the premise that FDI is a way of obtaining capital and technology that is not available in the host country (Olusanya 2013). Despite the perceived and obvious importance of FDI in the economic growth of a country, the effort of most African countries to attract foreign direct investment (FDI) has not quite been successful. The Nigerian economy with her large natural resources and large market size qualifies to be a top most recipient of FDI in Africa (Ayanwale, 2007). Over the years, Nigerian government made policies that accommodated FDI in the hope that it will significantly contribute to the development of the Nigerian economy. Government has been making available subsidies and special incentives in anticipation that the total benefits will outweigh the total costs of attracting FDI. Potential benefits are that foreign firms can raise the level of capital formation, promote exports, and generate foreign exchange and also they provide the much needed market for domestic suppliers and support industries and, in the process, transfer technology, increase industrial linkages and stimulate industry as a whole, while providing direct and indirect employment (Fadayo, 2003).

Hence, Meaningful, long-lasting economic growth and development is almost entirely contingent upon securing substantial amounts of foreign direct investment. FDI is crucial for the Nigerian economy, as it facilitates improvements in productivity. Ultimately, this can help alleviate Nigeria's widespread poverty by increasing per capital income and elevating overall standard of living. The impact of FDI may vary greatly depending on the characteristics of the sector of the economy. According to the world investment report 2001(UNCTAD), FDI can be disaggregated into primary(Extractive), Secondary(Manufacturing) and tertiary(Service) Sectors.This research therefore seeks to investigate the sectoral impact of foreign direct investment (FDI) on the Nigerian economic growth with a specific focus on the manufacturing components of FDI; in other to achieve the stated objective one hypothesis was formulated as follows.

Ho_1: Foreign direct investment in manufacturing has no significant impact on Gross domestic product (GDP) in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Foreign Direct Investment

World Bank (2007) conceptualized Foreign Direct Investment (FDI) as investment that is made to acquire a lasting management interest (usually 10% of voting stock) in an enterprise and operating in a country other than that of the investors. According to Ndiyo and Ebong (2003), foreign direct investment is an inflow of foreign resources in the form of capital, technology, management skills and marketing enterprises into the host country. According to World investment reports(UNCTAD 2010), "FDI is the sum of equity capital, other long term capital as shown in the balance of payment and that there are two types of FDI: inward and outward, resulting in a net FDI inflow (positive or negative) and stock of foreign direct investment", which is the cumulative number for a given period. In other words Foreign Direct Investment (FDI) is the process where people in one country obtain ownership of assets for the purpose of gaining control over the production, distribution and other activities of a firm in a foreign country (Moosa, 2002).

According to Thomas and Peter (2000), FDI is any flow of lending to, or purchase of ownership in a foreign enterprise that is largely owned by the residents of the investing country. Also, FDI has been described as investment so as to acquire a lasting management interest (for instance 10% of voting stocks) and at least 10% of equity shares in an enterprise operating in another country other than that of investors' country (Mwillima, 2003; World Bank, 2007). Foreign direct investment (FDI) is seen as a major and integral part of an open and international economic system and a major catalyst to development (OECD, 2002). It refers to investment made to acquire a lasting management interest (usually at least 10 % of voting stock) and acquiring at least 10% of equity share in an enterprise operating in a country other than the home country of the investor; it can take the form of either "greenfield" investment (also called "mortar and brick" investment) or merger and acquisition (M&A), depending on whether the investment involves mainly newly created assets or just a transfer from local to foreign firms (Mwilima, 2003). It involves the mobilization of investment funds from foreign investors into the host economy. It may be in the form of transfer of ownership from domestic to foreign investors, or in the form of expansion in productive capacity and capital formation in a country (Adelopo, 2010).

2.1.2 Economic Growth

Economic growth is, in a limited sense, an increase of the national income per capita, and it involves the analysis, especially in quantitative terms, of this process, with a focus on the functional relations between the endogenous variables; in a wider sense, it involves the increase of the GDP, GNP and NI, therefore of the national wealth, including the production capacity, expressed in both absolute and relative size, per capita, encompassing also the structural modifications of economy(Devrim, 2009).. It could therefore be estimated that economic growth is the process of increasing the sizes of national economies, the macro-economic indicators, especially the GDP per capita, in an ascendant but not necessarily linear direction, with positive effects on the economic-social sector, while development shows us how growth impacts on the society by increasing the standard of life (Haller, 2012).

Economic growth is a complex, long-run phenomenon, subjected to constraints like: excessive rise of population, limited resources, inadequate infrastructure, inefficient utilization of resources, excessive governmental intervention, institutional and cultural models that make the increase difficult,etc(Anyanwale, 2007). Economic growth is obtained by an efficient use of the available resources and by increasing the capacity of production of a country. It facilitates the redistribution of incomes between population and society.

Empirical literature

Dinh, Hong, Vo and Nguyen (2019) examined foreign direct investment and economic growth in the short run and long run: empirical evidence from developing countries.They examined and sought to provide additional and relevant quantitative evidence on the impact of foreign direct investment (FDI) on economic growth, both in the short run and the long run in developing countries of the lower-middle-income group in 2000–2014. Various econometric methods are employed such as the panel-based unit root test, Johansen cointegration test, Vector Error Correction Model (VECM), and Fully Modified OLS (FMOLS) to ensure the robustness of the findings. The results of this study show that FDI helps stimulate economic growth in the long run, although it has a negative impact in the short run for the countries in this study. Other macroeconomic factors also play an important role in explaining economic growth in these countries. Money supply has a positive effect on growth in the short run while total credit for private sector has a negative effect. In addition, long-run economic growth is driven by money supply, human capital, total domestic investment, and domestic credit for the private sector. Based on these results, the researchers recommended that government should create policies that encourage and sustain the inflow of FDI. Ekine, Ewubare and Ajie (2019) examined the impact of foreign portfolio investment and Foreign Direct Investment on the performance of the Nigerian Economy over a period of 1980-2017. The data used were purely secondary sourced from the central Bank of Nigeria statistical Bulletin and World Bank Development indicator. The ordinary least square (OLS) regression analysis was used. The findings revealed that the performance of the Nigerian Economy is directly related to inflow of foreign portfolio investment and foreign direct investment and it is also statistically significant at 5% level. This means that a good performance of the economy depends on the inflow of these variables, or that the variables serve as an engine of economic growth. The study recommended that policy makers should work on improvement of economic incentives capable of mobilizing external resources to the country to engender macroeconomic stability. A stable economy will attract foreign investment and this result to increased inflow of foreign capital.

Osisanwo (2018) analyzed the impact of foreign direct investment in manufacturing sector output on economic growth in Nigeria between 1970 and 2011. He used econometric model and log of foreign direct investment (FDI), first lag of real manufacturing output level (MANt-1), degree of openness (OPEN), investment in human capital development (INV), and inflation rate (INF) in Nigeria during the review period. While, manufacturing output growth was proxied by real manufacturing output growth as the regress and. The ordinary least square (OLS) method was adopted and the result revealed that the first lag of real manufacturing output level (MANt-1) and inflation (INF) were significant factors influencing the growth rate of Nigerian manufacturing industry, while manufacturing output was insignificant and inelastic of foreign direct investment in Nigeria. Given the outcome of the results, the researcher recommended that attracting Foreign Direct Investment should not be done in isolation if it must impact on the performance of manufacturing sector; therefore it becomes absolutely necessary to improve rapidly on domestic investment and human capital skill.

Ebekozien, Ugochukwu, and Okoye (2017) analysis on the inflow trends of foreign direct investment investigated in the Nigerian construction industry with a view to studying the pattern of flow and assessing the effect of increased flow of FDI on the industry. Annual time series archival data from the central bank of Nigeria and the National Bureau of Statistics served were used. The data collected was analyzed using simple percentages, regression analysis, Duncan Multiple Range Test and causality Test. Results revealed that there is poor flow (or an insignificant flow) of FDI into construction sector when compared to other sectors of the economy. According to Granger test, the Granger Causality is bi-directional, suggesting that FDI is an important prerequisite and catalyst for sustainable growth and development in construction and on the other hand, the level of infrastructural facilities available on ground is a prerequisite for attracting foreign direct investors. A high positive correlation or significant relationship between FDI and the construction sector further confirm this result. They recommended that policies should be put in place for sustained FDI flows such as maintaining a stable Dollar/Naira exchange rate which will help to encourage the continuous inflows of FDI.

Ajayi, Adejayan&Obalande (2017) examined the impact of foreign private investment on the Nigerian capital market using time series data from 1986 to 2014. Johansen co-integration model was used to estimate the causal effect between both variables. Market capitalization, foreign direct and portfolio investments were proxies for the dependent and independent variables respectively. The result of the study revealed that that there is a long run relationship between Market capitalization and foreign portfolio investment however this relationship is negative meaning that an increase in foreign portfolio investment will cause a decrease in Market capitalisation. The study concluded that foreign direct investment has a positive and significant impact on capital market Development while foreign portfolio investment has positive but insignificant impact. The study recommended that a robust re-investment incentive policy or roll- over window package need to be established to encourage retention of foreign portfolio investment proceeds within the system. This is required in order to minimize the rate of capitalflight through illegal and indiscriminate repatriation of investment proceeds through foreign portfolio investment channel. Mounde (2017) examined the causal relationship between foreign direct investment and manufacturing output in Nigeria. Using the Industrial production as a proxy for manufacturing output, time series data was compiled from Central Bank of Nigeria and National Bureau of Statistics spanning 36years, 1981-2016. The findings revealed that there is a long run relationship between foreign direct investment and output growth of the manufacturing sector in terms of industrial production. The error correction model was employed to determine the degree to which equilibrium behaviour drives short run dynamics. Also, the result revealed that foreign direct investment are more important factors in explaining manufacturing growth rate in Nigeria and there exists bi-directional causality between them. The author recommends that the position of FDI can be well improved when the Nigerian government encourage and improve the investment climate for existing domestic and foreign investors through infrastructural development, provision of services and changes in the regulatory framework

Theoretical Framework

The Internalization Theory of FDI

Buckley and Casson (1976) coined the notion of internalization itself, based on the application of the market imperfections approach in an international context. In the theory, Buckley and Casson suggest that firms try to maximize profits under the imperfect condition existing in intermediate products by internalizing the key intermediate products such as knowledge, marketing, human capital and management expertise. Under the imperfect market conditions in intermediate products, firms link different activities through markets under common ownership and control. The linking of different activities through these markets, however involves significant time lag and transaction costs. Firms are encouraged to replace these external markets with their own internal markets for these products to avoid the above mentioned difficulties. In other words, some transactions should be internalized to reduce transaction cost and hence increase profitability

International Trade Tradition

It is certainly no surprise that International Trade economists were among the first to study the FDI phenomenon. Foreign production can be a substitute for exports, as it can influence the terms of trade (TOT) and thus change the whole pattern of specialization. However, in the neo-classical world of the Heckscher-Ohlin tradition there is no space for foreign direct investment. Any disequilibrium in the prices of goods or factors across countries brought about by different factor endowments would be immediately corrected by international movements of goods (the Samuelson theorem). Mundell (1957) used an extension of the basic model to show that trade and capital movements can be substitutes, namely, that the introduction of tariffs would induce a flow of FDI towards the country where tariffs are imposed. That is, the same way that restrictions to international movements of factors can be substituted by trade (the original H-O model) restrictions to trade can be replaced by international movements of factors, in particular capital given the intrinsic imperfect mobility of labor. In a way, these hypotheses based on the Heckscher-Ohlin model are not very different from those based on capital movements. As Taveira (1984) point out, in both cases "FDI was analyzed as a re-equilibrium device within a generally perfectly competitive economy", a major limitation of the explanatory potential of both approaches

Eclectic Theory of FDI

Dunning (1958) developed an eclectic theory of FDI which is called OLI paradigm. O, L and I refer to ownership advantage, location advantage and internalization advantage respectively. The theory emphasized that operating in a foreign country has many cost and these costs include a failure of knowledge about local market, cultural, legal and many others. Therefore, foreign firms should have some advantages that can offset these costs. Ownership advantage is the specific advantage that gives power to firms over their competitors. These include advantage in technology, in management techniques, easy access to finance, economies of scale and capacity to coordinate activities. Location advantages on the other hand, are advantages firms take in order to reap the benefit of specific advantages. These include accessibility and low cost of internal resources, adequate infrastructure, political and macroeconomic stability. Therefore, the location advantage of a host country is one essential factor that determines the investment decisions of TNCs. Internalization is the ability of the firm to internalize some activities to protect their exclusive right on tangible and intangible assets, and defend their competitive advantage from rival firms. Accordingly, all the three conditions must be met before firms open subsidiaries in a foreign country (Soderstein, 1992; Laar, 2004). The researcher aligns with this theory.

METHODOLOGY

The research design adopted in this study is the ex post facto research design; this is because this research relies on historical data. Secondary data was used for the period 1986-2019. These were sourced from various publications of Central Bank of Nigeria (CBN), National bureau of statistics (NBS), World Bank Reports, International Financial Statistics (IFS) and Federal Ministry of finance. The study adopted quantitative technique (the error correction procedure). Here, the co-integration analysis based on the Pesaran bounds testing approach was conducted to ascertain the long run equilibrium relationship in the model. Hence, the study proceeded to estimate the error correction mechanism in order to obtain the speed of error adjustment in long run convergence. Augmented Dickey-Fuller test (ADF) was used to test for stationarity of series since time series data was used.

The study adapted the model of Yen Li Chi (2010) which gave clear understanding of the impact of FDI on economic growth relative to other sources of foreign capital. The implicit representation of the model is expressed as:

$GDP_t = f(FDIM)$------------------------- *(3.1)*

Where;

GDP_t = Gross Domestic Product.

$FDIM_t$ = Foreign direct investmentin Manufacturing

The explicit form of the model in equation (3.1) is expressed as:

GDP = β0 + βFDIM +μt...……………………………….. (3.2)

RESULTS & DISCUSSION

Descriptive or summary statistics was performed on the data to have a glimpse and behavior of the data used in the analysis.

Table 1: Descriptive Statistics Results

	GDP	FDIM
Mean	4.77037	88161.54
Std. Dev.	3.786656	86836.7
Skewness	0.50312	0.460183
Kurtosis	2.77072	1.422204
Jarque-Bera	1.508873	4.726726
Probability	0.470276	0.094103
Observations	34	34

Source: Authors Computation, 2020 (Eviews-10)

From the descriptive statistics results in Table 4.1, all the variables were found to be positively skewed.Variables with value of kurtosis less than three are called platykurtic (fat or short-tailed), and all the variables qualified for this during the study period. Jarque-Bera test shows that all the variables are normally distributed as their probability values were found to be greater than 5%. In summary, the descriptive statistics revealed that on a general note, the data sets are normally distributed.

Unit Root Test Results

This study adopted Augmented Dickey-Fuller (ADF) Techniques to test and verify the unit root property of the series and stationarity of the model as captured in Table 2.

Table 2:Summary of Unit Root Test Results

Variable	**ADF Test Statistics**				
	Levels	Critical Value	First Difference	Critical Value	Order of Integration
GDP	-2.963321	-3.552973	-4.586079*	-4.296729	I(1)
FDIM	-2.092293	-3.552973	-4.562280*	-4.273277	I(1)

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

Source: Authors Computation, 2020 (Eviews-10)

From Table 2, it could be observed that GDP,and FDIM were all found to be stationary at first difference; that is integrated at order one and at 1% level of significance. At this order of integration, their ADF test statistics, -4.586079 and-4.562280, were greater than the critical test statistics of (-4.296729 and-4.273277, at 5% significant level respectively. Since all the variables were found to be stationary at different orders, it was safe for the study to employ ARDL bound test approach to validate or test for the presence of Co-integration.

Co-integration Results

Table 3 presents the result of ARDL bounds test for Co-integration for the three models using the recommended lags by AIC.

Table 3: Bound Test-Co-integration Results

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	6.863100	10%	2.72	3.77
K	3	5%	3.23	4.35
		1%	4.29	5.61

Source: Authors Computation, 2020 (Eviews-10)

From the co-integration test captured in Table 3, it could be seen that F-statistic value of 6.863100 is greater than the lower (*I*(0)) and upper bound (*I*(1)) critical values of 3.23 and 4.35 respectively at the 5% significance level. It can therefore be inferred that the variables are co-integrated, and as such, there is a long-run equilibrium relationship between foreign direct investment and economic growth between 1986 and 2019. Thus, the null hypothesis of no long-run relationship is rejected at the 5% significance level.

Statistical Test of Hypothesis

The level of significance for the study was 5percent (for the two-tailed test); as such the hypothesis formulated in this study was tested using Wald F-statistic test as well as their associated p-value.

The decision rule: The decision rule for accepting or rejecting the null hypothesis was that the hypothesis must be based on the Probability Value (PV). If the PV is less than 5% or 0.05 (that is, PV < 0.05), it implies that the variable in question is statistically significant at 5% level; otherwise, it is not significant at that level.

Test of Hypothesis

H_{01}: Foreign direct investment in manufacturing has no significant impact on GDP in Nigeria.

Table 4: Wald Test Results on Foreign Direct Investment in Manufacturing and Economic Growth

Test Statistic	Value	Df	Probability
F-statistic	18.008303	(5, 8)	0.0016
Chi-square	20.041511	4	0.0012

Source: Researchers Computation, 2020 (E-views 10)

The Wald-test in Table 4.5 indicates that the calculated F-value for the relationship between foreign direct investment in manufacturing and GDP is 18.008 and its probability value is 0.0016. Since the probability value is less than 0.05 at 5percent level of significance, it thus falls in the rejection region and hence, the first null hypothesis (**H_{01}**) was rejected. The result thus shows that foreign direct investment in manufacturing has a significant impact on economic growth in Nigeria.

Discussion of Findings

Findings from the study revealed that there is a significant relationship between foreign direct investment in manufacturing and GDP in Nigeria. It showed that the attraction of multinational firms in the manufacturing sector has enhanced the output growth of the economy. This agrees with Mounde (2017) whose study showed that foreign direct investment are more important factors in explaining manufacturing growth rate in Nigeria. Ebekozien, Ugochukwu, and Okoye (2017) findings also showed a significant positive impact of foreign direct investment on industrial output growth in Nigeria.

CONCLUSION AND RECOMMENDATION

This study examined the impact of foreign direct investment on the Nigerian economy from 1986 to 2019, On the basis of findings of this study, it was revealed that Nigeria has reaped significant benefits of FDI in manufacturing, as its effects on output growth at the moment was found to be significant. Based on the findings and conclusion above the study recommends that:

i. Both the state and federal government are encouraged to sustain the FDI inflow into the manufacturing sector as it serves as a conduit for the transfer of technology, machines, knowledge and skills from industrialized to developing countries' manufacturing sector. This will in turn lead to the growth and diversification of the Nigerian economy.
ii. The study recommends that as a matter of urgency, the government should initiate policies that will promote the economy at large. To this end, there is the urgent need to woo foreign and local companies through tax holiday, reduction in transactions cost and other incentives that would attract investorsthat will drive sustainable economic growth.

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Impact of Interest Rate on the Financial Performance of Listed Manufacturing Companies in Nigeria

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Abstract

This study examines the impact of interest rate on the financial performance of listed manufacturing firms in Nigeria from 2009 to 2018. The dependent variable of the study was financial performance measured by return on assets (ROA) and return on equity (ROE), while the independent variable was interest rate (ITR). Secondary data on financial performance was obtained from the annual reports and accounts of 28 sampled manufacturing companies for the period 2009 – 2018 while data for interest rate was obtained from the Central Bank of Nigeria (CBN). Correlation research design was adopted andcross-sectional/time series data was extracted from the reports of the firms, while andpanel multiple regression was used to analyse the data in order to establish relationship between the variables usingEviews-10.The findings showed that Interest rates had a significant impact on ROA but no significant impact on ROE of listed manufacturing firms in Nigeria. It is therefore recommended that interest rates should be set at values that would not negatively impact the financial performance of listed manufacturing firms in Nigeria.

Keywords: Interest Rate, Financial Performance, Return on Assets, Return on equity, Earnings per share

INTRODUCTION

Interest rate is a key macroeconomic factor that can pose a positive or negative threat to the performance of a firm (World Bank Group, 2015). Other macroeconomic factors include the consumer price index, inflation rate, unemployment, gross domestic product (GDP), stock market index and corporate tax rate (Broadstock et al., 2011). While micro factors are within the control of management, the macro factors such as interest rates are beyond the control of management (Dioha, Mohammed and Okpanachi, 2018).
Interest rate is the price a borrower pays for the use of money they borrow from a lender or fee paid on borrowed assets. Ngugi (2001) described interest rate as a price of money that reflects market information regarding expected change in the purchasing power of money or future inflation. Interest rates are important because they control the flow of money in the economy(Murungi, 2014). High interest rates curb inflation but also slow down the economy. Low interest rates stimulate the economy, but could lead to inflation. In Nigeria, the increases in the nominal interest rate and inflation rate intensify the aggregate rates of failure or default of firms (Davis, 1995; Robson, 1996).Khan and Mahmood (2013) showed that

the financial structure of some industry makes firms in that industry more susceptible to interest rates volatilities than others. A significant relationship between interest rate and financial performance of micro enterprises in Kenya was reported by Mnang'at et al. (2016), although Barnor (2014) found a significant negative effect of interest rate on stock market returns of listed firms in Ghana.

Financial performance is the measure of how well a firm can use its assets from its primary business to generate revenues. It can be measured by variables which involve productivity, profitability, growth or, even customers' satisfaction. The measures of financial performance includes return on investment (ROI), residual income (RI), earning per share (EPS), dividend yield, return on assets (ROA), growth in sales, return on equity (ROE),e.t.c (Stanford, 2009). The performance of the manufacturing sector in Nigeria indicates low productivity, as its share of about 9.2% of Nigeria's Gross Domestic Product as at 2018 (NBS, 2019) is poor when compared with between 20% to 40% in many industrialized and industrializing nations. The lack of access to credit and resultant sky high costs of production are signs that interest rates whether high or unstable have deprived the manufacturing sector of its funds to grow. If the interest rate is too high, the cost of borrowing goes up, resulting in the high cost of doing business and consequently poor performance (Dunmade, 2012). The unstable financial performance of companies in the sector in terms of their ROA, ROE and EPS could be as a result of continued lack of access to cheap finance characterized by rising lending rate or the interest being paid on the borrowed assets/funds. Hence, the study seeks to assess the impact of interest rate on the financial performance of manufacturing companies in Nigeria. In line with the aim of the study, the following hypotheses were formulated:

H_{01}: Interest rate has no significant impact on ROA of listed manufacturing firms in Nigeria.

H_{02}: Interest rate has no significant impact on ROE of listed manufacturing firms in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Interest Rate

According to Keynes, interest is the reward for not hoarding but for parting with liquidity for a specific period of time. Keynes' definition of interest rate focuses more on the lending rate. Adebiyi (2001) defines interest rate as the return or yield on equity or opportunity cost of deferring current consumption into the future. Some examples of interest rate include the saving rate, lending rate, and the discount rate. Jhingan (2003) defines interest as the price which equates the supply of 'Credit' or savings plus the net increase in the amount of money in the period, to the demand for credit or investment plus net 'hoarding' in the period. This definition implies that an interest rate is the price of credit which like other price is determined by the forces of demand and supply; in this case, the demand and supply of loanable funds.

Firms' Financial Performance

Performance is multi-faceted, and the appropriate measure selected to assess corporate performance depends on the type of organization evaluated, and the objectives to be achieved through that evaluation (Kaguri, 2013). Firm performance encompasses three specific areas: financial performance (profits, ROA, ROI, EPS, etc.); product market performance (sales, market share, etc.); and shareholder return (total shareholder return, economic value added) (Richard, Devinney, Yip & Johnson, 2009). Financial performance refers to a firm's ability to achieve planned financial results as measured against its intended outputs (Mutende, Mwangi, Njihia and Ochieng, 2017). Financial performance is usually measured using financial ratios, such as ROE, ROA, return on capital, return on sales (ROS) and operating margin (Gilchris, 2013). Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues (Van Horn, 2005; Pandey, 2001).A firm's financial performance is of importance to investors, stakeholders and the economy at large.

Return on Assets (ROA)

Return on Asset (ROA) is operationalized as the proportion of net income generated from the total assets of a company. It measures the naira earnings an organization derive from each naira of assets they control and utilized. It is a useful for comparing rival companies in the same industry. ROA gives a manager, investor, or analyst an idea as to how efficient a company's management is at using its assets to generate earnings (Hargrave, 2019). Return on assets is displayed as a percentage. ROA, as an accounting-based measurement, gauges the operating and financial performance of the firm (Klapper & Love, 2002). The measurement is such that the higher the ROA, the effective is the use of assets to the advantage of shareholders (Haniffa & Huduib, 2006). Higher ROA also reflects the company's effective use of its assets in serving the economic interests of its shareholders (Ibrahim & AbdulSamad, 2011).

Return on Equity (ROE)

Return on Equity (ROE) is operationalized as the percentage of income generated as a return to shareholders on their capital investment in a company. ROE is calculated by taking the profit after tax and preference dividends of a given year and dividing it by the book value of equity (ordinary shares) at the beginning of the year (de Wet and Toit, 2007).It measures the profitability of a business in relation to shareholders' equity, which is also known as net assets or rather asset minus liabilities. A potential investor assesses the company's future by looking at the extent of the growth of the company's profitability. And the indicator that is often used is Return on Equity (ROE), which illustrates the extent to which the company's ability to generate profit that can be obtained by shareholders (Kamar, 2017). The high of ROE reflects that the company managed to generate a profit from its own capital. The increase of the value of ROE will increase the value of selling the company, which would certainly impact on stock price.

Empirical Review

Interest Rate and Return on Assets (ROA)

Egbunike and Okerekeoti (2018) investigated the effect of interest rate, inflation rate, exchange rate and the gross domestic product (GDP) growth rate, while the firm characteristics were size, leverage and liquidity. The dependent variable financial performance was measured as return on assets (ROA). The study used the ex post facto research design and the population comprised all quoted manufacturing firms on the Nigerian Stock Exchange. The sample was restricted to companies in the consumer goods sector, selected using non-probability sampling method. The study used multiple linear regression as the method of validating the hypotheses. The study found no significant effect for interest rate and exchange rate, but a significant effect for inflation rate and GDP growth rate on ROA. Second, the firm characteristics showed that firm size, leverage and liquidity were significant.The study recommended that managers should effectively consider interest rates in making borrowing decisionsas it might affect the cost of debt.
Zulfiqar and Ud-Din (2015) investigated the effects of macroeconomic variables on the performance of textile industry of Pakistan. The penal data of fifty different textile firms listed at Karachi stock exchange were sampled for the research and tested using the hypothesis regression model. They found out that inflation and interest rate has a significant and positive impact on Return on Asset (ROA). Furthermore, the inflation rate was found to be positively insignificant with Return on Equity (ROE) but interest rate was found to be highly significant and having a positive impact on ROE. The study recommended that inflation rate should be kept in single digit for the further betterment of the overall economy.

Owoputi, Kayode, and Adeyefa (2014) examined the impact of bank-specific, industry-specific and macroeconomic factors on profitability of banks in Nigeriaover the time period from 1998 to 2012, using random-effect model. Bank profitability was proxied by ROA, ROE and net interest margin (NIM). They found that inflation rate was significant for both ROA and ROE. But Interest rate was significant for ROAand NIM. The real growth rate of GDP was not significant. Among the bank-specific variables, size was found significant for the profitability measuresof ROA, ROE and NIM. However, they recommended that an aggressive deposit mobilisation with efficient expensesmanagement are needed to increase Bank profits.

Interest Rate and Return on Equity (ROE)

Hasan, Islam and Wahid (2018) examined the impact of some selected macroeconomic variables on the performance of 32 non-life insurance companies of Bangladesh over the period of 7 years (2009–2015) giving rise to 224 panel observations. Two performance measures, like return on asset (ROA) and return on equity (ROE) were used as dependent variables. The explanatory variables were inflation rate, GDP growth rate, interest rate, and exchange rate. The research employed panel data regression methodology. The regression results suggested that inflation rate, GDP growth rate and exchange rate, except interest rate, had no statistically significant influence on the performance of non-life insurance companies. The study recommended that interest rate along with firm-specific factors(age, sizes, loss ratio, solvency margin, tangibility of assets) should be identified as determinants of the performance of the Bangladeshi nonlifeinsurance companies. Osamwonyi and Michael (2014) investigated the impact of macroeconomic variables on profitability of banks in Nigeria from 1990 to 2013. They used pooled ordinary least squares (POLS) regression. The macroeconomic variables were: GDP, interest and inflation rate; profitability was proxied using ROE. The study reported a positive effect of GDP on ROE. Interest rate had a significant negative effect on ROE, while inflation was not significant at all levels of significance.The study recommended that investors should considerinterest rates in their investment decisions because it affects profitability of banks.

Kanwal and Nadeem (2013) investigated the impact of macroeconomic variables on profitability of public limited commercial banks in Pakistan for years 2001–2011. They used Pooled Ordinary Least Square (POLS) regression technique to examine the effect of three major external factors: inflation rate, real GDP and real interest rate on profitability indicators: ROA, ROE and equity multiplier (EM) ratios in three separate models. The study finds that there is a negative relationship of inflation rate with all three profitability measures (ROA, ROE and EM).The study recommended that government should be wary of the prevailing interest rate because of its negativeeffect on manufacturing capacity utilization.

Theoretical Framework

Modern Portfolio Theory

Any investment firm should have a portfolio of investments in different types of investment to maximize returns and minimize risks. Its standard practice for private equity firms to invest in a diversified portfolio to minimize risk and harness the returns of the various investment options on offer (Cumming, 2009). The modern portfolio theory (MPT) is a theory of finance that attempts to maximize expected portfolio returns for a given amount of portfolio risk, or equivalently minimize risk for a given level of return by carefully choosing the proportions of various assets. MPT models a portfolio as weighted combination of assets, so that the return of a portfolio is the weighted combination of the assets return. The process of selecting a portfolio may be divided into two stages. The first stage starts with observation and experience and ends with beliefs about the future performances of available securities. The second stage starts with the relevant beliefs about future performances and ends with the choice of portfolio. One type of rule concerning choice of portfolio is that the investor does (or should) maximize the discounted (or capitalized) value of future returns. Since the future is not known with certainty, it must be "expected" or "anticipated" returns which are discounted. Through combining different assets whose returns are not perfectly positively correlated, MPT seeks to reduce the total variance of the portfolio return. MPT also assumes that investors are rational and the markets are efficient (Markowitz, 1952).

Mackinnon and Shaw saving and investment hypothesis

Mckinnon (1973) and Shaw (1973) argue that increase in the real interest rate will have strong positive effects on savings which can be utilized in investment, because those with excess liquidity will be encouraged to save because of the high interest rate, thus banks will have excess money to lend to investors for investment purpose thereby raising the volume of productive investment. The empirical works of Mckinnon (1973) showed evidence to support the hypothesis that interest rate determine investment. Thus, there are two transmission channels through which interest rate affects investment. They relate to investment as cost of capital. They also opined that interest rate encourages loans (external finance).

The Classical Theory of Interest Rate

The Classical theory of interest rate enumerated by Alfred Marshall and Pigou as enumerated in Jhingan (2003) argues that the demand for capital consists of the demand for production and consumption purposes. But, it should be noted that the productivity of capital is subject to the law of variable proportion. That is, upon addition of units of capital to a fixed factor, a stage comes when the employment of an additional unit will not add more productivity. Thus, the demand for capital is inversely related to the rate of interest, and the schedule for capital or investment or investment slopes downward from left to right. A rise in the rate of interest will make loan less desirable, hence a fall in investment and output of manufacturing firms. This theory underpins this study.

METHODOLOGY

This study used secondary data obtained from the annual reports and accounts of the sampled manufacturing firms and Nigerian Stock Exchange Fact Book. Cross-sectional/time series data was extracted from the annual reports and accounts of the firms for the purpose of assessing the relationship between the variables of the study for the period 2009–2018. Secondary data for interest rate was obtained from the Annual Report and Statement of Accounts of the CBN.Correlation research design was adopted based on positivism paradigm. Panel data was used in the study in order to detect and measure effect that cannot be simply observed by pure cross section or pure time series data. Panel data multiple regression analysiswas used to analyse the data in order to establish relationship between the variables. The population of this study consisted of the 79 manufacturing firms listed on the Nigerian Stock Exchange as at December 2018. The firms were classified into nine (9) sub-subsectors. For the purpose of this study, stratified and random sampling techniques were used considering the sectorial grouping of firms in the stock market. The sample size of the study wastwenty eight (28) manufacturing firms drawn from the defined populationand it was arrived at by using Yamane sample size formula, which is represented below.

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

Where n = Number of samples; N = Total population; e = Error tolerance (margin of error)

Hence: $n = 79/(1 + 79\,(0.15)^2) = 28$

Procedure of Model Specification

The variables of the study consist of the dependent variable, financial performance which proxies areROA (Net income/Total assets) and ROE (Net income/Total equity), and the independent variable which is interest rate (ITR). The Interest rates are as determined and documented by the CBN for the study period. The model that was used in testing the hypotheses of the study is presented below:

$$ROA_{it}=\beta_0 + \beta_1 INT_t + \varepsilon_{it} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (i)$$

$$ROE_{it} = \beta_0 + \beta_1 INT_t + \varepsilon_{it} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (ii)$$

Where: ε = error term signifying other variables not captured in the study; and it = Firm i at time t.

The study used statistical software such as Microsoft Excel and Eviews-10 to analyze the data. Given that the study model is multivariate and descriptive in nature, the study used multiple regression technique in analyzing the relationship between the selected determinants and the financial performance of listed manufacturing firms. The analyses entailed the computation of the interest rate correlated against the ROA and ROE. In the test for significance, t-statisticswas used to test the hypothesis of the study.

RESULTS 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 is presented in Table 1.

Table 1: Descriptive Statistics Results

	INR	ROA	ROE
Mean	17.06	0.198912	0.284676
Std. Dev.	0.808849	1.376769	0.715984
Skewness	1.166577	16.26334	8.120632
Kurtosis	3.67781	269.4241	77.85817
Jarque-Bera	68.8687	840464.2	68454.44
Probability	0.0000	0.0000	0.0000
Observations	280	280	280

Source: Authors Computation, 2020 (Eviews-10)

From the descriptive statistics results in Table 1, it could be observed that INR has a mean value of 17.06 percent. ROA has a mean value of 0.198; and this was followed closely by ROE with a mean value of 0.284. The analysis was also fortified by the value of the skewness and kurtosis of all the variables involved in the model. All the variableswere found to be positively skewed. Variables with value of kurtosis less than three are called platykurtic (fat or short-tailed), and no variables qualified for this during the study period. On the other hand, variables whose kurtosis value is greater than three are called leptokurtic (slim or long tailed) and all the variables qualified for this during the study period. Jarque-Bera test shows that all the variables were not normally distributed as their probability values were found to be less than 5%. In summary, the descriptive statistics revealed that on the average, the data sets are not normally distributed.

Correlation Analysis

The results in Table 2 indicate that a positive and significant correlation exists between ROA and INR. This relationship was also found to be good as indicated by the strong correlation coefficient value of 0.556165, and with a p-value of 0.0488. However, negative but significant and strong correlation was found to exist between ROE and INR. This was captured by the correlation coefficient value of -0.811429 (and a p-value of 0.0210) among the two variables of interest.Therefore, among the two correlations of interest based on the model specification, the correlation between ROE and INR was found to be the strongest; in summary thus showing that interest rates and financial performance of listed manufacturing companies in Nigeria has strong correlational association.

Correlation Matrix Result

Covariance Analysis: Ordinary
Date: 09/11/20 Time: 15:54
Sample: 2009 2018
Included observations: 280

Correlation Probability	INR	ROA	ROE
INR	1.000000		

ROA	0.556195	1.000000	

	0.0488	-----	
ROE	-0.811429	0.025322	1.000000
	0.0210	0.6731	-----

Source: Authors Computation, 2020 (Eviews-10)

Hausmann Test

For the crosssectionrandom effect result, we perform the Hausman Test to determine the viability of the model (Table 3). The Hausman test (1978), is used to decide whether a random effect model or fixed effect model should be used for a panel data model. Hausman test has an asymptotic distribution with a null hypothesis that the fixed effect and random effect do not differ substantially.The choice of the appropriate model depends on the rejection or acceptance of the null hypothesis. The nullhypothesis underlying the Hausman test is that the FEM and REM estimators do not differ substantially. If correlated(H0 is rejected), a random effect model produces biased estimators, so a fixed effect model is preferred. The testhas a chi-square distribution if the null hypothesis is rejected, the conclusion is that random effect model (REM) is not appropriate andFixed effect model(FEM) is better.

Hausman Test Result

Correlated Random Effects - Hausman Test					
	Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**	**Decision**
ROA Model	Cross-section random	4.52641	1	0.0860	Random Effect
ROE Model	Cross-section random	7.25411	1	0.0489	Fixed Effect

Source: Authors Computation, 2020 (Eviews-10)

ROA Model

From Table 3, the Hausman diagnostic test showed that the null hypothesis was accepted at 5% significant level as the probability value of 0.0860 was found to be greater than 0.05. Thus, there is aninsignificant uncorrelated fixed effect in the model. Hence, we conclude that the random effect model significantly performs better than the fixed effect. In view of this, the study adopts the results from the random effect model as basis to interpret the relationship between the dependent variable and independent variables in ROA model.

ROE Model

In the result shown in Table 3, the Hausman Test revealeda Chi-square statistic of about 7.25411, with a probability value of 0.0265 which is less than 0.05. This provides a strong argument for the alternative hypothesis that there is no misspecification when fixed effect model is employed and thus provides the justification for the acceptance of the fixed effect estimates. The implication of this result is that the fixed effects model will not be bias and inconsistent.

Test of Hypothesis One:

$H0_1$: Interest rates has no significant impact on ROA of listed manufacturing firms in Nigeria

Table 4: Random Effect Model

Dependent Variable: ROA
Method: Panel EGLS (Cross-section random effects)
Date: 09/11/20 Time: 15:50
Sample: 2009 2018
Periods included: 10
Cross-sections included: 28
Total panel (balanced) observations: 280
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.

INR	0.265865	0.100534	2.644522	0.0086
C	-4.336742	1.717151	-2.525545	0.0121
	Effects Specification			
			S.D.	Rho
Cross-section random			0.106554	0.0061
Idiosyncratic random			1.358261	0.9939
	Weighted Statistics			
R-squared	0.524539	Mean dependent var		0.193060
Adjusted R-squared	0.421030	S.D. dependent var		1.372773
S.E. of regression	1.358261	Sum squared resid		512.8747
F-statistic	6.993494	Durbin-Watson stat		1.630194
Prob(F-statistic)	0.008646			
	Unweighted Statistics			
R-squared	0.524397	Mean dependent var		0.198912
Sum squared resid	515.9402	Durbin-Watson stat		1.623478

Source: Authors Computation, 2020 (Eviews-10)

Hypothesis One

From the random effect regression result in Table 4, it was observed that the calculated t-value for Interest rates and ROA of listed manufacturing firms in Nigeriais 2.644522and with an associated p-value of 0.0086. Since the p-value is less than 0.05 (0.0086< 0.05), it thus falls in the rejection region and hence, we reject the first null hypothesis (**$H0_1$**). The conclusion here is that Interest rates has a significant impact on ROA of listed manufacturing firms in Nigeria.

Using the f-statistic, the study sought to investigate the random effect regression model whether it was valid or not. The F statistics was used to determine the model validity. The study found out that the model was valid F (1, 280) = 6.993494, PV of0.008646. Therefore, this implies that the model has overall statistical significance.The study also sought to determine the model's goodness of fit statistics. The coefficient of determination as measured by the (R-square) (0.5245) shows that interest rates explain 52.45% of the total variation in ROA. This implies that the stochastic disturbance error term (ε) covers 47.55%. Durbin-watson was used to test for the presence of serial correlation or autocorrelation among the error terms. The model also indicates that there is no autocorrelation among the variables as indicated by Durbin Watson (DW) statistic of 1.630194 (as the acceptable Durbin – Watson range is between 1.50 and 2.40). This shows that the estimates are unbiased and can be relied upon for quality and sound investment and managerial decisions.

Hypothesis Two:

Table 5 indicated that interest rate has no significant influence on ROE as captured by the t-value of -0.025811 and its associated PV of 0.9794 which was found to be greater than 0.05. Therefore, the study accepts the second null hypothesis (**$H0_2$**) and concludes that Interest rate has no significant impact on ROE of listed manufacturing firms in Nigeria. The F-statistic which captures the overall significance of the model showed that the model is fit in prediction. This was captured by the F-statistic vale of 2.689881, with an associated p-value of: 0.000024. The coefficient of determination (R-square), which was used to measure the goodness of fit of the estimated model, indicates that the model is reasonably fit in prediction. It showed that 53.08 percent changes in ROE was due to INR, while 46.92 percent unaccounted variations was captured by the error term. The model also indicates that there is no autocorrelation among the variables as indicated by Durbin Watson (DW) statistic of 1.512. This shows that the estimates are unbiased and can be relied upon also for policy decisions.

Test of Hypothesis Two:

$H0_2$: Interest rate has no significant impact on ROE of listed manufacturing firms in Nigeria

Table 5: Fixed Effect Model

Dependent Variable: ROE
Method: Panel Least Squares
Date: 09/11/20 Time: 15:48
Sample: 2009 2018
Periods included: 10
Cross-sections included: 28
Total panel (balanced) observations: 280

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INR	-0.001265	0.049002	-0.025811	0.9794
C	0.306254	0.836915	0.365932	0.7147

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.530809	Mean dependent var	0.284676
Adjusted R-squared	0.445002	S.D. dependent var	0.715984
S.E. of regression	0.662043	Akaike info criterion	2.110833
Sum squared resid	110.0135	Schwarz criterion	2.487293
Log likelihood	-266.5166	Hannan-Quinn criter.	2.261832
F-statistic	2.689881	Durbin-Watson stat	1.512347
Prob(F-statistic)	0.000024		

Source: Authors Computation, 2020 (Eviews-10)

Discussion of Findings

Findings from the study revealed that Interest rates has a significant impact on ROA of listed manufacturing firms in Nigeria. The implication of this result is that interest rate has contributed significantly to the growth of ROA of listed manufacturing firms in Nigeria. This is similar to the findings of Owoputi, Kayode, and Adeyefa (2014) who found that Interest rate was significant for ROA of banks in Nigeria. Our findings is further corroborated by the results of Zulfiqar and Ud Din (2015) whose study showed that interest rate had a significant and positive impact on ROA of textile industry in Pakistan. However, it is contrary to the findings of Hasan, Islam and Wahid (2018) and Egbunike and Okerekeoti (2018) whose studies showed that interest rate had no significant impact on ROA of non-life insurance companies and quoted manufacturing firms respectively.

However, the study revealed that Interest rate has no significant impact on ROE of listed manufacturing firms in Nigeria. This showed that high cost of borrowing due to wide interest rates spread had been the main challenge to manufacturing sector growth in Nigeria from independence till date. The results also showed that insignificant relationship (between interest rate and ROE) which is attributed to the high level of interest rate inhibits investors access to credit and consequently making them to be caught in a development trap. Osamwonyi and Michael (2014) reported a similar result in that they found a significant negative effect of interest rate on ROE of banks in Nigeria. However, this is contrary to the findings of Zulfiqar and Ud Din (2015) which showed that interest rate had a significant and positive impact on ROE of textile industry in Pakistan.

CONCLUSION AND RECOMMENDATIONS

This study examined the impact of interest rates on the performances of the Nigerian manufacturing sector. Findings from the study shows that rising interest rate in Nigeria has made significant contribution to returns on assets without any significant impact on return of equity of listed manufacturing firms in Nigeria. This implies that the rising interest rate in Nigeria impedes the financial growth of the Nigerian manufacturing firms. Therefore, the study recommends that more needs to be done by the CBN and its partners to accurately manage the interest rates in such a way as to enhance financial growth of companies without engendering inflation in the Nigerian economy. In addition, the study also makes the following recommendations:

i. managers should effectively consider interest rates in making borrowing decisions, as this may affect their financial performance in terms of returns of assets;
ii. government should endeavor to decrease the interest rates as no country flourishes with high level of lending interest rates because it discourages investments in firms.
iii. The central bank of Nigeria should put in place monetary policies that would facilitate the financial performance of listed manufacturing companies in Nigeria and ensure proper regulation of the banking industry so as to provide adequate credit facilities for the manufacturing firms.

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Impact of Foreign Direct Investment Inflow on Capital Market Development in Nigeria

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Abstract

The study examines the impact of foreign direct investment on the capital market in Nigeria. Continuous growth of foreign direct investment flows into the country has led to questions how this flow of capital actually impacts the development of the capital market of the country. The main objective of this study is to determine how the inflow of tertiary FDI impacts the development of the Nigerian capital market. The research uses time series data for 39 years spanning from 1981-2019. The study employed annual tertiary FDI inflow into Nigeria as proxy for FDI while annual total value of transactions in the Nigerian capital market was used as proxy for the Nigerian capital market. Ex-post facto research design was adopted and was analysed using regression analysis with the aid of STATA 13. The results of the analysis showed that there is no statistically significant evidence of any impact of FDI inflow on the Nigerian capital market. The study concluded thatthe inflow of FDI does not impact on the capital market variables statistically. Therefore, the study recommended continued liberalisation of foreign investment and the industries that make up the tertiary sector of the economy in Nigeria.

Keywords: Foreign Direct Investment, Volume of Capital Market Transactions, Tertiary FDI inflow

INTRODUCTION

The capital market is a systematic mechanism that exists with the sole purpose of trading intermediate and long term securities. The fact that the capital market helps to mop up excess cash from economic units and directs such excess cash to deficit economic units tostimulate and support necessary economic activities has made it one of the most prominent systems in finance of a country. Rasmus and Mathias (2018), defined foreign direct investment (FDI) as an investment made across border by an investor in one specific country, with the main objective to establish a long-lasting interest in another country. Sghaier&Abida (2013), stated that FDI is an investment that comprises the acquisition of lasting management interest in a corporation in a country other than the nationality of the investors with the aim of playing an effective vocal role in the earning of long and short term capital as depicted in the country's balance of payment account statement. There has been a continuous growth of FDI across the world since the seventies. The World Bank (2017) posited that the inflow of FDI around the world has multiplied itself with 200 times between year 1970 and 2016. Closer examination of World Bank statistics indicates that FDI inflow and outflows of Nigeria since the seventies has multiplied itself by 43 and 308 times respectively till date. United Nations conference on trade and development (UNCTAD) (2019) released a statistic titled world investment report 2019 that exhibited that west African FDI inflow declined by 15% and also reported a 42% drop in foreign direct investment inflow into Nigeria in the 2018 financial year while Africa's overall FDI inflow increased by 11% with other African countries like South Africa doubled its FDI inflow, Morocco in northern Africa increased their FDI inflow by 36%. From 2009 up till 2019, the tertiary sector of Nigeria's economy have accounted for an average of 53% of the total GDP in the country. This figure is higher than the combination of the contributions made by both primary and secondary sectors of the economy to the GDP. This indicates that the tertiary sector of Nigeria's economy is a very prominent and significant part of the economy.

The capital market is one of the most prominent financial institutions in Nigeria with market capitalisation reaching up to trillions of naira and about 23% of the national GDP in 2018. FDI flow still accounts for a substantial portion of external finance to Nigeria. Figures extracted from Central bank of Nigeria external sector statistical bulletin for 2018 indicate that from 2015-2018, FDI inflows in Nigeria accounted for an average of 46% of external finance inflows. FDI outflows formed over 9% of foreign finance outflows from Nigeria while exhibiting an average growth rate of 10% over the past eight years. According to Prince and Vijay (2019), on the average, between 2013 and 2017, FDI accounted for 39% of external finance for developing economies like Nigeria. The concept of materiality in Accounting qualifies FDI as a material aspect in Nigerian finance sector if the above statistics are considered. This calls for prudent and proactive actions to support FDI flows. This study posits that there is a lack of sufficient and appropriate knowledge on the type of relationship that exists between FDI inflows and volume of capital market development in Nigeria due to inadequate research efforts invested towards the subject area. The inflows of FDI should ordinarily make more funds available and its outflows should reduce the amount of capital available for local investment. Concerns on how these relationships actually manifest in Nigeria should not be subject to educated guesses rather, it must be addressed from the point of scientific research by integrating extensive econometric, theoretical and empirical analysis to solve the research problem. The research problem is to fill the long standing knowledge gap of how FDI flows; particularly tertiary FDI inflows affect the Nigerian capital market.

This study will examine in detail the inflow of tertiary FDI in Nigeria collected over most recent years to understand how these flows have impacted the volume of capital market in Nigeria. The knowledge of this relationship could help prepare the capital market from the effects of shocks that would emanate from the fluctuations in FDI flows. Little is known on how these sectorial flows impact the local capital market. The inflow of FDI into Nigeria also needs to be analysed for its impact on the local capital market. The main objective of this study is to determine how foreign direct investment inflows into the tertiary sector of the Nigerian economy have impacted the development of the Nigerian capital market during the study period. To help achieve this objective, the study formulated the null hypothesis that states that there is no relationship between FDI inflow and Value of capital market transactions.

LITERATURE REVIEW

Conceptual Framework

For the purpose of this study, the following concepts will be explained as variables to help measure and analyse the pertinent relationships. These are the concepts of foreign direct investment, tertiary FDI inflow, capital market volume of transactions and inflation rate. These concepts will be discussed in this section to clarify the criteria for recognition and measurement. This would enable the users of this research work to understand what these concepts are and how they were measured.

FDI and Tertiary FDI Inflow

Bharat (2019), defined Foreign direct investment inflow as the total value of inward overseas direct investment made by foreign entities, including individuals, firms and governments. It is therefore, investment coming into the domestic country or reporting economy. The researcher went further to explain inward foreign direct investments into the domestic country to include all assets and liabilities exchanged between the foreign investors and enterprises based in the domestic country, where the investment is being made. The World Bank (2020), defines FDI inflows as the value of inward direct investment made by non-resident investors in the reporting economy. Inward Direct Investment, also called direct investment in the reporting economy, includes all liabilities and assets transferred between resident direct investment enterprises and their direct investors. It also covers transfers of assets and liabilities between resident and non-resident fellow enterprises, if the ultimate controlling parent is non-resident. FDI inflow is the amount of direct investment from overseas investors that were made in the reporting economy. It includes cost of equity, assets and retained earnings. This can be classified as primary, secondary and tertiary inflows depending on the receiving industry. This amount is used to conduct business in the reporting economy for profit making purposes. Tertiary FDI inflow is the amount of FDI inflow that is channelled into the tertiary economic sector of the country. Tertiary FDI inflow encompasses all FDI received by the tertiary sector of the reporting economy. The exporting country will classify it as tertiary FDI outflow because it is going into the tertiary sector of another country. Ownership, destination and direction of FDI flows are very crucial in defining the proper classification of FDI flows.

The economy is divided into three major sectors based on the nature of business carried out by firms. These are the primary, secondary and tertiary sectors of the economy. The primary sector of the economy focuses on the extractive industries who are involved in acquiring raw materials from the earth. The primary sector consists of firms involved in mining, forestry, fishing and agriculture. The secondary sector of the economy is based on firms using the output of primary industries as inputs to create final goods. The secondary sector is made up of firms that are involved in manufacturing, processing, building and construction. The tertiary sector of the economy is also known as the services sector. The tertiary sector of the economy is made up of businesses that do not extract raw materials from the earth nor engage in manufacturing of goods. In other words the tertiary economic sector is made up of businesses that offer services like transportation, communication, miscellaneous services and trading and business services. Tertiary FDI inflow is any inward direct investment that is solely invested in a firm operating in the tertiary sector of the economy. Shaolong, Yiqun and Junjie (2020), defined tertiary FDI inflow of a country as the total amount of foreign direct capital that allow foreign investors significant control and ownership of any local firm operating in the tertiary industries of the country. They went further to state that tertiary FDI inflow is one of the main factors responsible for technology transfers into the country in the course of business. Fernando and Caroline (2019), defined tertiary FDI as FDI flows committed to businesses that are neither extractive nor manufacturing. They argued that the diverse nature of tertiary sector of the economy makes it hard to accurately describe what it is; rather a clearer picture would be painted by stating what it's not. In other words any FDI that comes into the country into a company that does not belong to either the primary or secondary sectors of the economy can be described as tertiary FDI inflow.

Capital Market Volume of Transactions

Beck and Levine (2004), defined Volume of shares traded as the total measure of shares traded from seller to buyer on the stock market during a period of time. It is the total measure of shares bought and if a particular stock is bought five times, it will have to be added to the total value of shares the same number of times it is traded. Omodero and Ekwe (2016), defined Value of shares traded as the sum of all share sales in the capital market for a given period of time. They went further to state that it is a measure usually taken on daily, weekly, monthly, quarterly and even yearly basis. Malik and Amjad (2013), defined volume of capital market transactions as the measure of capital market activity level that involves comprehensive assertion of the number of shares that were traded within a particular period of time on a particular stock market. If a particular share is traded multiple times it is added as many times as it is traded to this measure. A low volume of transactions does not necessarily mean that the market is weak as high volumes of trade have sometimes been attributed to lack of stability in stock prices.Buthiena and Ahlam (2019) explained the concept of capital market volume of transactions as the amount of shares that have changed ownership within a particular period of time as regards a particular capital market or company stock. They went further to state that trading volume is bound to rise when commodity prices change more frequently. Value of shares traded is a measure of capital market transactions that indicate the total measure of all sales of securities during a particular period of time. This is used to measure market activity level and also value of shares. Shares included in the sum can be recorded at the original price they were traded, number of shares traded or simply number of market deals. It is usually measured daily, weekly, monthly, quarterly and even annually.

Concept of Inflation Rate

Rasmus and Mathias (2018),explained inflation as the progressive increase in the general level of prices brought about by an expansion in demand for or supply of money. This was a bold definition as it did not only seek to clarify the meaning of inflation but also state the factors that cause inflation. Saba and Neelam (2017), define inflation rate as the rate of change in the price of commodities and services over a period of time. These changes are measured in average on a basket of commonly consumed goods and services. Inflation is a numerical measure of the rate which prices of goods and services change over a period of time. Inflation rate is usually measured in percentages. Inflation can be used to interpret the economic situation of the country and also stability of prices. Inflation is a measure of average changes in the price of a basket of goods and services. Inflation is a normal economic phenomenon which is usually monitored and controlled by monetary authorities in the interest of prolonged economic growth. It brings both good and bad effects on the local economy. A high rate of inflation will affect the purchasing power of the local currency while increasing the local cost of living.

Empirical Review

Tsagkanos, Siriopoulos, and Vartholomatou (2019), examined the impact of FDI on the Greek capital market. The study which was fitted into the historical research design covers a time period of 27 years spanning from 1988 till 2014; this period was split into two for separate analysis to see if the relationship changes over time. Annual FDI inflow and stock market capitalisation were used as the independent and dependent variables respectively. Cointegration techniques and Markov switching regression model were employed in analysing the relevant data. The study found weak but positive and symmetric long run relationships for the full period of the study. The study concluded that FDI only affected the greek capital market on the long run. The recommendations focused on the upgrading of the Greek capital market. The time scope of the research is no longer considered for research purposes. The Greek financial sector has been in devastating financial crisis over the years and thus cannot be a suitable model for understanding Nigeria's situation. The study failed to analyse sectorial FDI flows as potential influencer of the stock market. Rasmus and Mathias (2018), studied the impact of foreign direct investment on the stock market development in Sweden. Affärsvärlden General Index (AFGX) was used as proxy for stock market development and net FDI inflow was used as proxy for FDI. The study which was fitted into the descriptive research design uses quarterly time series data for 36 years from 1982-2017 for the necessary analysis. The study employed the use of time series regression. The study found that no strong contemporaneous relationship between FDIs and the stock market development existed, while the FDI during the previous quarter did not significantly affect the stock market. The study concluded that on the short run, FDI is insignificant in affecting the Swedish stock market. The study failed to proffer any recommendations based on its findings. The study failed to recognise sectorial FDI flows as a potential determinant of stock market development. The Swedish economic climate is different from the Nigerian climate and this makes the findings of a Swedish study inapplicable in Nigeria.

Ebele (2016), studied the impact of different classes of investment on the Nigerian stock market development. The study covered a period of 10 years from 2001-2010. The study which was built on the ex-post facto research design employed the use of ordinary least square techniques for the time series analysis. Market capitalization and value of traded securities as ratios of real GDP were used as the dependent variables representing stock market development while FDI inflow as a percentage of real GDP was used as the independent variable representing gross investment. The study found that foreign direct investment has a positive significant influence on Nigerian capital market development during the study period. From the findings, the study concluded that FDI inflows cause a crowding in effect on the Nigerian capital market. Policy recommendations to increase liquidity and ease of entry in the local capital market were proffered by the study. The study is no longer current enough to be considered current and consistent with the Nigerian situation. The scope of the study was too limited and old to give a clear picture of the characteristics of FDI and its relationship with the capital market. The study also failed to recognize sectorial FDI flows as a potential influencer of the capital market. Omodero and Ekwe (2016), examined the impact of FDI on stock market performance in Nigeria from 1985-2014. The study employed stock market index and value of capital market transactions as proxies for stock market performance while FDI inflows was used to proxy FDI. The study was built on the quasi-experimental research design and employed the ordinary least square regression techniques in analysing data that covered a scope of 30 years. Descriptive statistics and ordinary least square regression were used to analyse the data. The study found that FDI has no significant impact on the share price index & Nigerian stock exchange transactions and also that the macroeconomic variables determine the performances of the Nigerian stock market.The study concluded that FDI is not a prominent factor in determining stock market performances in Nigeria. The study recommended policies to encourage foreign firms operating in the oil and gas including the telecommunication and agricultural sectors to be listed, insisting that it would go a long way in attracting more FDI, leading to improvement in the stock market performance. The study failed to recognise sectorial FDI flows as a factor that can affect the local capital market. The scope of the study is no longer considered current for research purposes.

Stijin, Daniela, and Sergio (2002), examined the relationship between FDI and stock market development; questioning whether they were complements or Substitutes. The cross sectional study which was built on the descriptive research design used panel data gathered from 77 countries. The study employed the ratio of market capitalisation to GDP, value of domestic traded stock to GDP and value traded over market capitalisation as proxies for capital market while the ratios of capital raised abroad to GDP, capital raised abroad to capital raised domestically and FDI inflows as proxies for foreign investment. The study employed the use of Hausman specification tests and random effects regression for the necessary analysis. The study found that FDI inflow was positively correlated with the capital market variables. The study concluded that FDI inflows normally cause a crowding in effect on the receiving stock markets. The research recommended continuous effort by government to attract and maintain higher FDI inflows. The results of the study which are currently about 20 years old can no longer be considered current for research purposes.

Theoretical Framework

Uppsala Model

The Uppsala model is a theory that seeks to illustrate how foreign firms navigate foreign investment from low intensity operations to more complex operations as the firms get increasingly familiar with the new environment. It was first proposed by Johanson andVahlne (1977) and revisited again in (2009) attributing the decision to revisit the model to changes in business practices and theoretical advances that have been made since the 1970s. The model seeks to explain how firms acquire relevant experience from the domestic market through normal operations and then move to foreign markets. The model posits that such venture into foreign markets will begin by taking investment in geographically close countries and gradually the firms will move to more distant countries. Arvidsson and Arvidsson (2019), stated that when firms have enhanced knowledge of the market and more control of resources, gradually they become more experienced and acquire better resources, and then they expand to the more distant market. The model also posits that these foreign ventures will usually begin with simple conventional import and export operations before moving to more complex and intense operations with the foreign countries. In other words, due to uncertainty in investment decisions, MNC's begin foreign investments gradually and grow based on success rates and capacity. It is like a form of defence mechanism by multinationals to minimise risk but that is not its only advantage. Continuous increase in firm foreign activities will translate to increase in capital flow. This continuous increase in capital flow has a stimulant effect to the FDI receiving economy which would cause the economy to mimic traits of economic growth and ultimately bring some degree of economic growth. The Uppsala model when applied to a FDI receiving country will imply that incremental inflow of FDI will encourage capital market and economic development. The revised version of the Uppsala model was far evolved and was stripped of its limitations to international investment and placed it more as a general strategic investment theory.

Modern Portfolio Theory

This is a theory proposed by Harry Markowitz on the concept of modern portfolio theory in an article which was posted in the Journal of Finance in 1952. The theory seeks to explain the behavioural pattern of investors based on risk and investment diversification.
Ali and Setayesh (2007), state the modern portfolio theory as an investment theory based on the idea that risk averse investors can construct portfolios to maximise returns while minimising risk, emphasising that risk is an

inherent part of higher reward. They went further to describe it as one of the most important and influential economic theories dealing with finance and investment. The theory assumes that the investor is rational and would take the more profitable if faced with a choice of different investments. Also assumes that the investor will not select a more risky venture over a less risky one if there is no additional compensation for the additional risks. The theory also assumes that the investor will diversify his risk across different investments to balance the risk level of his portfolio. This is done by constructing a portfolio of many assets to maximise returns given a particular level of risk. This diversification will cause the investor to spread his investment risk over different countries and sectors of the economy. This is done with a believe that holding investment in one pool could be dangerous if something goes wrong but by spreading the risks, it is almost impossible for something to go wrong on all the investments and if something goes wrong with one investment the shortage would be remedied by the proceeds from other investments. A major criticism of this theory is that risk, return and correlation measures used by MPT are mathematical estimates of future events which do not always tally exactly with the real outcome.

Capital Market Theory

This theory is often called the currency area theory. It is considered one of the first theories that explained FDI and foreign investment as a whole. It's based on the work of Aliber (1970), it postulated that foreign investment in general existed as a result of capital market imperfections. Nayak and Choudhury (2014), stated that FDI specifically was the result of differences between source and destination country currencies. According to Aliber (1970), weaker currencies have a higher FDI-attraction ability and are better able to take advantage of differences in the market capitalisation rate, compared to stronger country currencies. Aliber (1971), further adds that source country MNCs based in hard currency areas can borrow at a lower interest rate than host country firms because portfolio investors overlook the foreign aspect of source country MNCs. This gives source country firms the borrowing advantage because they can access cheaper sources of capital for their overseas affiliates and subsidiaries than what local firms would access the same funds for. While this capital market theory holds true in the case of developed countries such as the United States, United Kingdom and Canada, it was challenged by later scholars on the basis of ignoring basic currency risk management fundamentals. A major criticism of Aliber's theory was made by Lall (1979), when he highlighted that the theory does not apply in the case of less developed countries with highly imperfect or non-existent capital markets, and those with strictly regulated foreign exchange rates. Also, Nayak and Choudhury (2014), allude to the fact that Aliber's theory does not explain investment between two developed countries with similar strength currencies, nor how developing country MNCs with weaker currencies are able to invest in developed countries with much stronger currencies. This they exemplified using the case of Chinese firms with sizeable investments in USA and the UK. The inflow and outflows of FDI is expected to affect the local capital market due to the intertwined nature of relationship that exists between them.

Eclectic Paradigm (OLI) Theory

Just as the name implies, this theory is a notable concinnity of paramount theories relevant to understanding FDI. This theory was originally brought up by Dunning (1980). It is a mix of three different theories. These theories are ownership, location and internationalisation (OLI). The grand idea is that firms with ownership of income bearing or cost saving assets which can be transferred between firms and places will have to consider if the usefulness of such assets is strongly affected by location specific variables and if an international location seems to be a more lucrative destination for such assets, then the firm will opt for foreign investment. Ownership advantages include possession of patents, mineral rights, brand name, property, plant & equipment etc. Location advantages may arise from lower operating costs, political support from host country's

government, or better social acceptability while finally the internalization characteristic allows a firm to set up foreign production rather than license it.
The Eclectic paradigm shows that Ownership, Location and Internationalisation parameters can vary from firm to firm and the final form it takes depends upon context and the economic, political, and social characteristics of the host country. Eclectic paradigm theory takes into account a series of decisions firms take that lead to foreign investment. The theory considers ownership of special resources, identifying a location with the most conducive environment and incurring foreign exchange, political risks and foreign cost of doing business.

According to Dunning (2001), in order for a firm to engage in foreign direct investment, it must simultaneously fulfil three conditions. The firm should possess net ownership advantages over other firms serving particular markets. These ownership advantages are firm specific and exclusive to that firm, in the form of both tangible and intangible assets such as trademarks, patents, information and technology, which would result in production cost reductions for the firm. Thirdly, that some location advantages are present in using firm's ownership advantages in a foreign locale. The advantages of using firm's resources abroad were emphasised by Hymer (1976) and Kindleberger (1969) in their market imperfections' theories on firm-specific and monopolistic advantages, respectively. It must have ownerships of internationally usable resources. Secondly, it must be more profitable for the firm possessing these ownership advantages to use them for itself (internalisation), rather than to sell or lease them to foreign firms through licensing or management contracts (externalisation). Boddewyn (1985), refers to this as the internalisation condition. Thirdly, assuming that the preceding conditions are both met, it must be profitable for the firm to exploit these advantages through production, in collaboration with additional input factors such as natural resources and human capital, outside its home country. Location-specific factors have to be taken into consideration by the investing firms, as per the economic geography and institutional FDI fitness theories discussed under the macroeconomic FDI theories. Boddewyn (1985) praised Dunning's theory for explaining the initial FDI decision by Multinational corporations (MNCs), but however laments the lack of explanation with regard to subsequent FDI increases, which may only require changes only in some but not necessarily all the OLI factors. Another criticism of the eclectic theory according to Makoni (2015) is that it incorporates so many variables that it ceases to be operationally practicable as it does not explain FDI at the firm, industry and country levels.This is the theoretical framework that underpins this research work. This is because it is the most comprehensive theory to explain why there is FDI inflow into Nigeria at the while the capital market needs of investor countries have not been fully met.

METHODOLOGY

The study adopted the Ex-post facto research design using regression analysis through the stata 13 interface. The research used secondary time series data for the necessary analysis. This research is built on the ex-post facto research design. Ex-post facto research is a form of conclusive research which seeks to describe past events, phenomena or scenario. The population of this study is made up of Nigerian inflow of tertiary FDI, value of capital market transactionsand annual inflation rate which represent independent, dependent and control variables respectively. The sample is made up of three macroeconomic indicators covering a 39 year time period from 1981 to 2019. The study sample for FDI data is the tertiary FDI inflow into Nigeria, value of capital market transactions and annual inflation rate. Judgemental sampling technique was used to sample the population.Adefila (2008) defined a judgemental sampling technique as one where the researcher will intentionally select certain groups or individuals as samples mainly because of their relevance to the investigation being carried out. It is also called the purposive sampling technique. The annual total value of transactionsand annual inflation rates were sourced from CBN annual statistical bulletin 2019 while Nigeria's tertiary FDI inflows was sourced from National Bureau of Statistics report 2019.

The study will employ regression analysis for hypothesis testing using the stata 13 statistical software. The null hypothesis of this study is that there is no relationship between FDI inflow and Value of capital market transactions.The model used to examine the hypotheses was adopted from Shehu, (2015) as specified below:

$LNTVT = \beta_0 + \beta LNTERTFDI_{1t} + \beta LNINF_{2it} + \varepsilon_{it}$

Where:

$LNTERTFDI_{it}$= Foreign direct investment inflow

$LNTVT_{it}$= Volume of capital market Transactions

$LNINF_{it}$= Inflation Rate

β = coefficient of parameter estimate
ε = error term
t= time
i= individualfirms

RESULT AND DISCUSSION

Results

In order to get a summarised glimpse of the data used in this study, a tabular representation of the descriptive statistics carried out is presented below in table 1.

Table 1: Descriptive statistics

stats	tertfdi	inf	tvt
mean	90.02281	19.14718	376.4597
sd	89.90261	17.06314	572.7314
variance	8082.48	291.1507	328021.2
skewness	.61587	1.783729	1.635293
kurtosis	1.87481	4.998158	5.204277
p5	1.9433	5.72	.2254

Source: *Authors computation using STATA 13*

Table 1 displays the summary of descriptive statistics of variables used in the study. There is evidence of wide variations in the values of variables as depicted by the mean and standard deviation figures in the table for the years 1981-2019. Skewness measures the degree of asymmetry in the distribution while Kurtosis tells us the peakness and the flatness of the distribution in relation to the series.Normal skewness means a distribution that is symmetric around the mean and that the skewness value is 0. Positive skewness means that the series has a long right tail, indicating higher values above the sample average. MesokurticKurtosis embodies a normal distribution with a kurtosis of 3. LeptokurticKurtosis has a positive kurtosis, it is peaked and indicating higher values of the series above the sample average. PlatykurticKurtosis means negative kurtosis and a flater curve. More lower values below the sample average.

An FDI skewness value of 0.61587 mirrors a normal distribution. Because the value is close to zero. An Inflationskewness value of 1.783729 does not mirror a normal distribution. This means that the series has a long right tail, indicating higher values above the sample average. It is positively skewed. A skewness value of 1.635293 for total value of capital market transactions does not mirror a normal distribution. This means that the series has a long right tail, indicating higher values above the sample average. It is positively skewed. Tertiary FDI has a kurtosis value of 1.87481. This means that tertiary FDI inflow is Platykurtic. Because the figures in the series will be lower than the sample average. Inflation rate has a kurtosis value of 4.998158. This means that the series is Leptokurtic because the kurtosis value is higher than 3. This means that the series has more observations with higher values that are higher than the sample average. Total value of capital market transactions has a kurtosis value of 5.204277. This means that the series is Leptokurtic because the kurtosis value is higher than 3. This means that the series has more observations with higher values that are higher than the sample average.

Augmented Dickey Fuller Test (ADF)

The augmented dickey fuller test was used to test each of the variables separately to determine whether or not they are stationary. Here, the null hypothesis is that the variable has unit root or not stationary. The decision rule here is that the series is stationary if the test statistic is greater than the 5% critical value. All the variables were found to be stationary at first difference. The results are depicted by tables 2 to7 below.

Table 2: Augmented Dickey Fuller Test (ADF) for Tertiary FDI at log level

Augmented Dickey-Fuller test for unit root Number of obs = 37

	Test Statistic	Interpolated Dickey-Fuller 1% Critical Value	5% Critical Value	10% Critical Value
Z(t)	1.135	-2.641	-1.950	-1.605

D.lntertfdi	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
lntertfdi						
L1.	.0211186	.0186098	1.13	0.264	-.0166612	.0588985
LD.	.0042422	.1692966	0.03	0.980	-.3394481	.3479326

Source: *Authors computation using STATA 13*

In table 2, the test statistic of 1.25 is less than the absolute 5% critical value of 1.950. Therefore, the study cannot reject the null hypothesis that tertiary FDI was not stationary. This means that at log level, FDI was not stationary.

Table 3: Augmented Dickey Fuller Test (ADF) for Tertiary FDI at First Difference

Augmented Dickey-Fuller test for unit root Number of obs = 36

	Test Statistic	Interpolated Dickey-Fuller 1% Critical Value	5% Critical Value	10% Critical Value
Z(t)	-3.498	-2.642	-1.950	-1.604

D. lntertfdi_D1	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
lntertfdi_D1						
L1.	-.7892929	.2256267	-3.50	0.001	-1.247821	-.3307643
LD.	-.188582	.1627194	-1.16	0.255	-.5192676	.1421036

Source: *Authors computation using STATA 13*

In table 3 above, the test statistic of 2.498 is more than the 5% critical value of 1.950. Due to this, the study will reject the null hypothesis. This means that FDI is stationary at first difference.therefore, FDI will be converted to first difference for the purpose of this analysis.

Table 4: Augmented Dickey Fuller Test (ADF) for Inflation Rate at Log Level

Augmented Dickey-Fuller test for unit root Number of obs = 37

	Test Statistic	Interpolated Dickey-Fuller 1% Critical Value	5% Critical Value	10% Critical Value
Z(t)	-0.649	-2.641	-1.950	-1.605

D.lninf	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
lninf						
L1.	-.026474	.0407636	-0.65	0.520	-.1092286	.0562805
LD.	.0178431	.1640824	0.11	0.914	-.3152619	.350948

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Source: *Authors computation using STATA 13*

In table 4, the test statistic of 0.649 is less than the absolute 5% critical value of 1.950. Therefore, the study cannot reject the null hypothesis that inflation rate was not stationary. This means that at log level, inflation rate was not stationary.

Table 5: Augmented Dickey Fuller Test (ADF) for Inflation Rate at First difference

Augmented Dickey-Fuller test for unit root   Number of obs = 36

	Test Statistic	Interpolated Dickey-Fuller 1% Critical Value	5% Critical Value	10% Critical Value
Z(t)	-6.990	-2.642	-1.950	-1.604

D.lninf_D1	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
lninf_D1						
L1.	-1.388594	.1986526	-6.99	0.000	-1.792305	-.9848837
LD.	.4653219	.1390267	3.35	0.002	.1827856	.7478581

Source: *Authors computation using STATA 13*

The test statistic of 6.990 is more than the 5% critical value of 1.950. Due to this, the study will reject the null hypothesis. Due to this, the study will reject the null hypothesis. This means that inflation rate is stationary at first difference. Therefore, inflation rate will be converted to first difference for the purpose of this analysis.

Table 6: Augmented Dickey Fuller Test (ADF) for Total Value Of Capital Market Transactions at Log Level

Augmented Dickey-Fuller test for unit root   Number of obs = 37

	Test Statistic	Interpolated Dickey-Fuller 1% Critical Value	5% Critical Value	10% Critical Value
Z(t)	-0.399	-2.641	-1.950	-1.605

D.lntvt	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
lntvt						
L1.	-.0115384	.0289355	-0.40	0.692	-.0702805	.0472038
LD.	.1937161	.2323069	0.83	0.410	-.277892	.6653242

Source: *Authors computation using STATA 13*

In table 6, the test statistic of 0.399 is less than the absolute 5% critical value of 1.950. Therefore, the study cannot reject the null hypothesis that Total value of capital market transactions was not stationary. This means that at log level, Total value of capital market transactions was not stationary.

Table 7: Augmented Dickey Fuller Test (ADF) for Total Value of Capital Market Transactions at First Difference

```
Augmented Dickey-Fuller test for unit root         Number of obs   =        36

                              ---------- Interpolated Dickey-Fuller ----------
                  Test         1% Critical       5% Critical      10% Critical
                Statistic          Value             Value             Value
------------------------------------------------------------------------------
 Z(t)              -6.413            -2.642            -1.950            -1.604

------------------------------------------------------------------------------
  D.lntvt_D1 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    lntvt_D1 |
         L1. |  -1.889486   .2946353    -6.41   0.000    -2.488257   -1.290715
         LD. |   .2852232   .1719193     1.66   0.106    -.0641588    .6346052
------------------------------------------------------------------------------
```

Source: *Authors computation using STATA 13*

The test statistic of 6.413 is more than the 5% critical value of 1.950. Due to this, the study will reject the null hypothesis. Due to this, the study will reject the null hypothesis. This means that Total value of capital market transactions is stationary at first difference. Therefore, Total value of capital market transactionswill be converted to first difference for the purpose of this analysis.

Table 8: Summary of Augmented Dickey Fuller Tests for Stationarity

S/N	Variable	Stata I.D	Functional level	Test statistic	5% Critical Value	Interpretation
1	Tertiary FDI	Lntertfdi	Log level	1.135	1.950	Not stationary
2	Inflation rate	Lninf	Log Level	0.649	1.950	Not stationary
3	Total value of transaction	Lntvt	Log Level	1.616	1.950	Not stationary
4	Tertiary FDI	lntertfdi_D1	1st difference	3.498	1.950	Stationary at 1st difference
5	Inflation rate	lninf_D1	1st difference	6.990	1.950	Stationary at 1st difference
6	Total value of transaction	lntvt_D1	1st difference	6.413	1.950	Stationary at 1stdifference

Source: *Authors compilation*

Breush-pagan/ Cook-Wiseberg Test for Heteroskedasticity

The Breush-pagan test is makes use of residuals and sums of squares from a regression analysis to determine if a model is homoskedastic or not. The null hypothesis here is that there is no heteroskedasticity. The decision rule is that If the p value is less than 0.05 it means that the model is heteroskedastic and the null hypothesis should be rejected. The results of these estimates are shown in table 9 below.

Table 9: Breush-pagan/ Cook-Wiseberg Test for Heteroskedasticity

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Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of utsq

         chi2(1)      =     3.81
         Prob > chi2  =   0.0508
```

Source: *Authors computation using STATA 13*

The probability value of 0.0508 in the Breusch-Pagan estimations is above the 5% significance level. Therefore the research cannot reject the null hypothesis. The null hypothesis here is that there is no heteroskedasticity. Therefore, the research can conclude that the model is homoskedastic.

Regression Analysis

Regression analysis was estimated to detect linear relationship between the variables. Here the null hypothesis is that there is no relationship between FDI inflow and Value of capital market transactions. The decision rule is to reject the null hypothesis if the probability value of a predictor variable is less than 5%. The results are displayed in table 6 below.

Table 10: Regression Analysis

Source	SS	df	MS
Model	1.18367309	2	.591836546
Residual	129.086253	35	3.68817865
Total	130.269926	37	3.52080881

Number of obs	38
F(2, 35)	0.16
Prob > F	0.8524
R-squared	0.0091
Adj R-squared	-0.0475
Root MSE	1.9205

D.lntvt	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
lntertfdi						
D1.	.2921699	.7897144	0.37	0.714	-1.311036	1.895375
lninf						
D1.	.1681111	.4662129	0.36	0.721	-.7783513	1.114574
_cons	.1010877	.3324221	0.30	0.763	-.5737649	.7759404

Source: *Authors computation using STATA 13*

The results in Table 10 above indicate that all the variables were previously converted to first difference. A coefficient value of -0.1681111 falls between the values of -0.7783513 and 1.895375. This goes to demonstrate that the coefficient is significant. A negative coefficient value depicts a negative association between the variables. The decision rule is to reject the null hypothesis if the probability value of a predictor variable is less than 5%. The FDI probability value of 0.714 is higher than the 5% level of significance and as a result, the research will not reject the null hypothesis. This means that the independent variable is not statistically significant in explaining the dependent variable. In other words, there is no statistically evidence in the results of this study that suggests that tertiary FDI inflow impacts total volume of transactions in the Nigerian capital market.

Discussion of Findings

This study found that there is no statistically significant relationship between FDI inflow to the tertiary sector and capital market. This was evidenced by the 0.714 pvalue found in Table 10 above. The findings of this study state that there is no evidence that FDI impacts capital market in Nigeria. The findings of this study are in line with the findings of Omodero and Ekwe (2016) and Rasmus and Mathias (2018). Omodero and Ekwe (2016) found that FDI inflow had no significant impact on the share price index & Nigerian stock exchange transactions. Rasmus and Mathias (2018) did not find any evidence of strong relationship between FDIs and the stock market development existed.

The results of this study are in contrast with Tsagkanos, Siriopoulos, and Vartholomatou (2019), Ebele (2016) and Stijin, Daniela, and Sergio (2002). Tsagkanos, Siriopoulos, and Vartholomatou (2019) found weak but positive and symmetric long run relationships for the full period of the study. The study concluded that FDI only affected the Greek capital market on the long run. Ebele (2016), studied the impact of investment on the Nigerian stock market development The study found that foreign direct investment has a positive significant influence on Nigerian capital market development during the study period. Stijin, Daniela, and Sergio (2002), examined the relationship between FDI and stock market development; questioning whether they were complements or Subtitles. The study found that FDI inflow was positively correlated with the capital market variables. The contrast in these results could be due to differences in scope, population and methodology.

CONCLUSIONS AND RECOMMENDATIONS

From the results of the analysis conducted, the study has come up with the following conclusions and recommendations. Using descriptive statistics and regression analysis, the study examines the impact of tertiary FDI inflow on the Nigerian capital market. The study concludes that the flow of FDI does not impact capital market variables statistically. This was evidenced by the 0.714 Pvalue found in Table 10 above. This does not undermine the significance of FDI into the country. FDI inflows had not yet reached a level from where it can impact the Nigerian capital market. From the findings and conclusions above, the study recommends continuous liberalisation of the capital inflow and repatriation in the country as a way of attracting more FDI. The study also recommends the minimisation of entry barriers into the tertiary sector of the economy to enable the maximum profitability from the sector.

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Effect of Capital Structure on Financial Performance of Quoted Composite Insurance Companies in Nigeria

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Abstract

This study evaluated the effect of capital structure on financial performance of quoted composite insurance companies in Nigeria for the period 2015- 2019.The study data which was collected by secondary means was analyzed using STATA 13 to test the relationship between the independent variable (capital structure) and the dependent variable (financial performance). Findings from the study indicate that there is a negative relationship between debt to asset ratio and return on equity of the companies during the study period, i.e. increase in debt to asset ratio lead to decrease in return on equity. And that there is a positive relationship between return on equity and Debt to equity ratio, i.e. increase in debt to equity ratio leads to increase in return on equity. The study therefore recommends that insurance companies in Nigeria deploy more debt in their capital structure mix, but should endervour to minimize their debt to assets ratio.

Keywords: Capital Structure, Financial Performance, Insurance Companies, Debt to Equity ratio, Return on Equity.

INTRODUCTION

Capital structure refers to the mix of funding sources for an organization's financing. It is the proportionate relationship between debt and equity financing by a company. Organizations sources of funding can be internal in the form of equity which includes paid up share capital, share premium and reserves or external in the form of debts or both. According to Aziz and Abbas, (2019) in Nelson, Johnny, Peter and Ayunku (2019), it is the debt and equity mixture that organizations use to finance their business operations. Equity capital is typically provided or supplied by owners of the organization or firms and is usually in the form of ordinary shares. Whilst this form of financing is relatively cheap, continued use of it may result to dilution or loss of control by the original owners. Debt financing on the other hand ensures maintenance of control but comes at a cost to the organization. According to Abor (2016) in Mukumbi et al (2020), there is a relationship between the choice of capital structure by a company and its overall market value because this choice determines how the operating cash flows are shared between owners(shareholders) and debt holders. They posited that increased leverage by a company increases its value up to a point, beyond which any further increase raises overall cost of capital and decreases its market value. Capital structure is considered a very important financial variable because it has a close relationship with the ability of a company to meet its obligations to various stakeholders: shareholders, employees etc (Mukumbi et al; 2020)

Discussions about capital structure of companies became well pronounced following the work of Modigliani and Miller known as (M & M) in 1958. According to them capital structure has no relevance for a company. That under certain circumstances, the option between equity and debt does not impact an entity's worth hence, the capital structure decision is irrelevant. Some of the circumstances that can make the M & M submission hold are no taxes, no transaction cost, no bankruptcy cost, perfect contrasting assumptions, and complete and perfect market assumption. According to M&M a company can have wholly debt as an optimal capital structure under certain circumstances. That neither capital structure not dividend policy has any impact on the market value of a company in a perfect market. However, this theory has been a subject of controversy and several other researches because, in the real-world scenarios, their central assumptions never held, as there is no perfect market. Financial performance is a measure of how well a company utilizes assets from its principal course of operation to create revenues. It reflects what management has achieved over a given period of time in monetary terms. It also enables comparison between similar companies and between different periods of the same company aside from being an objective way of evaluating business activities Mukumbi et al (2020). Financial performance measures such as profitability or liquidity among others assist stakeholders to assess a company's past financial performance as well as its current position. This assessment provides a basis for determining a company's strength, weaknesses, opportunities, and threats. Evaluation of financial performance provides answers to multiple important questions which may include whether the company has sufficient cash to meet all its financial obligations when they fall due, whether it is generating enough sales to justify current investment. Through ratio analysis, financial performance measure how much value has accrued to shareholders at the end of an accounting period in comparison to the beginning Zeitun& Tian (2007).

Parameters that show profitability, productivity, growth or even satisfaction for customers are used to measure financial performance. Some of the most frequently used parameters are, return on assets (ROA) and return on equity (ROE). Other parameters include residual income (RI), return on investment (ROI), earning per share (EPS), dividend yield, growth in sales, etc. total debt to total assets, short term debt to total assets, total debt to total equity and long term debt to total assets. The total debt as a ratio to total assets measures the amount of debt utilized to finance the company assets and other capital expenditures that can advance company's performance. Following the irrelevancy of capital structure theory propagated by M&M in 1958, there has been several researches into the other assumptions like no taxes, and the other imperfect market issues they enumerated and whether the choice of capital structure has any effect on a company's market value. It has been shown that capital structure choice decisions are important since there is no perfect market. But the extent to which this decision affects a company's market value is still a subject of debate. In this paper an attempt is made to determine if capital structure has any effect on the financial performance of quoted composite insurance companies in Nigeria for the period 2015 to 2019. Studies found on this subject matter in Nigeria have not covered the entirety of the period in question. The hypothesis underlying this study is:

Ho_1: Capital structure does not affect financial performance of composite insurance companies in Nigeria

LITERATURE REVIEW

Conceptual Framework

The conceptual framework for this study will be on the following concepts: capital structure, financial performance, link between capital structure and financial performance, insurance companies in Nigeria, ratio analysis.

Concept of Capital structure

Capital structure has been defined by different authors and writers. But in summary all the definitions point to the fact that it is proportionate mix of equity and debt to finance a company's operations. According to Subramanian (2009) in Aljamaan 2018, capital structure is a long term financing of a companies operations as represented primarily by long term debts and equity and that one of the crucial decisions of management is to decide on a more suitable capital structure, because it has a close relationship with the value of a company. Gitman and Zutter (2012) in Aljamaan (2018) posit that capital structure is a "mix of long-term debt and equity maintained by a firm." Capital structure refers to the combination of different financing sources for starting and running a business, Rafiu et al (2018).

Capital structure of a company determines the ownership structure of the company. That is, it shows how much of the company's sources of funding is provided by the owners who have last claim in the event of a liquidation versus how much of it is provided or covered by debts or creditors who have first claim in the event of a liquidation. There are different rewards and incentives to the two major components of the capital structure. Whereas equity shareholders exert control over the company, their earning is not fixed and secured, they are only paid where a company makes profit and declares dividend. All other funds provided have to be paid first before equity shareholders are. Debt holders on the other hand have fixed earnings in form of interest whether the company makes profit or not as stipulated by the contract. They do not share in the risk of the business and are settled first in the event of a liquidation. Therefore, the question of finding a balance or an optimal capital structure for a company is an important one for management. When a company is financed entirely by equity, all its resultant profit orcash flows will go to the equity shareholders. When its financing is a mixture of debt and equity, its profits or cash flows are shared between equity stockholders and the debt holders, with the debt holders getting a fixed amount, while the equity stockholders get the residual amount depending on the overall performance of the business.

Concept of Financial Performance

Financial performance as a concept describes how best a company puts resources at its disposal to use in generating revenue. Using financial performance measures such as profitability and liquidity, company stakeholders can evaluate a company's financial performance over time as well as its current position. Financial performance measurement provides a means by which the result of a company can be measured in terms of monetary value. It is a good gauge to measure the success of a company and to compare it with others or with its past performance. A firm's financial performance is critical to its existence as it shows how effective and efficient a company has been able to manage its resources to finance operations and for investing activities. Commonly used measures of financial performance include profitability, liquidity/solvency, efficiency, and capital structure Lodewyckx et al (2007) in Matsoso and Benedict (2016). Profitability shows whether an organization is making profits or losses. Liquidity measures how easily a company can convert assets to cash within its normal operating circle and its ability to meeting its short-term obligations with available resources. Efficiency shows how well resources of the company are being managed and utilized. Capital structure shows what source of funding is being utilized whether equity share capital or borrowed funds.

Capital Structure and Financial Performance

The relationship between capital structure and financial performance of organizations has been a subject of debate for a long time following the irrelevance of capital theory as propounded by M&M in 1958. So many researches have been undertaken in this area with vary diverse findings. Much of the controversy around this area started with M&M capital structure irrelevance theory. According to M& M publication of 1958, under certain conditions, the market value of a company is not influenced by or dependent on it capital structure. This theory assumes the existence of a perfect market where there are no taxes, transactions costs or bankruptcy costs. It also works with the assumption that abundant information exists for all persons who need information about a company (Ahmeti & Prenaj; 2015). The M&M theory suggests the existence of a fully efficient or perfect market. In reality however, there is no perfect market in the world and transactions have a cost. The controversies around the irrelevance of capital structure theorem of Modigliani and Miller (1958) has led to the development of several other theories of capital structure some of which focus on the cost and others on the benefits of different finance sources. Some of these theories are: the trade-off theory, the pecking order theory, market timing theory and agency cost theory Iqbal et al (2012).Tian and Zeitun (2007)however,argue that capital structure of companies and corporate performance are closely related or interlinked.By and large studies have shown that the relationship between a company's capital structure and its financial performance is a mixture of positive and negative depending on the place, size, and industry Aljamaan (2018).

Insurance Industry in Nigeria Conceptualized

The main idea behind insurance is the provision of cover by the insurer for an unsure future event or occurrence of negative consequenceto another party, the insured or the policyholder, for a specified premium. The insured pays a premium to the insurer in return for security on that uncertain future occurrence (Business Day 2020). Because the event for which an insurance is taken cannot be predicted with any certainty and the fact that the insured needs to be protected from any economic jolt arising from the occurrence of the insured event, insurance companies usually wait until end of the year with fingers crossed to know if they have made any profit or not. In Nigeria, the insurance industry is regulated by the

National Insurance Commission (NAICOM) which was established by the National Insurance Commission Act of 1997. Apart from regulating and controlling the insurance business in Nigeria, NAICOM protects insurance policy holders, beneficiaries and third parties to an insurance contract. As at March 2021 there are 66 insurance companies in Nigeria grouped into 5 categories 13 Composite insurance (life and non-life business), 29 general insurance businesses, 17 life insurance businesses, 3 reinsurance businesses and 4 companies transacting Takaful business (NAICOM website). By the end of 2016 fiscal year, the investment portfolio controlled by the insurance industry was N723 billion (Business Day 2020). As part of its activities to control and regulate insurance activities in Nigeria NAICOM by its circular of May 20 2019 increased the minimum paid up share capital for insurance companies to the following: N8billion for life business, N10billion for general insurance, N18 billion for composite insurance and N20billion for reinsurance business. In 2018 it had issued guidelines to review minimum paid up capital for micro-insurance companies as follows: ₦40million (₦15million for life business, and ₦25 million for general insurance business) for companies that will do business in the community, ₦100million (₦40million for life business, and ₦60million for general insurance business) for State business, and ₦600million (₦200million for life business, and ₦400million for general insurance business) for National business.

Concept of Ratio Analysis

In measuring the financial performance of companies, ratio analysis is used. Ratio analysis is a tool used to compare line items in a financial statement against one another. Information derived from ratio analysis is used for various purposes. Ratios are generally group into two depending on how they are constructed or their general characteristics. By construction there are four groups of ratios: coverage ratio which measure ability to meet certain obligations, returns ratio which assesses net benefits compared to resources expended, turnover ratio which assesses gross benefits compared to resources expended and component percentage which compares one item to another for various purposes. The operating and financial condition of a company can be assessed using financial ratios. Ratios such as liquidity, profitability, active ratio, financial leverage ratio, shareholder ratio, return on investment, return on assets, return on equity and the like are used in assessing a company's financial and operating health.

Empirical Framework

Several studies have been carried out to establish the relationship between capital structure and financial performance of companies; some in the insurance industry, others in other industries. Habimana (2014) examined the relationship between capital structure and financial performance with focus on firms in emerging markets. Data from this research was obtained from firms in Africa, Middle East, Asia, Eastern Europe, Russia, and China. Findings from this study which employed the use of ordinary least squares technique for data analysis shows that, capital structure has an impact on financial performance of firms. It established that leverage has a negative significance in relation to returns and positive relationship to systemic risk. The findings of this study support the static trade-off theory of capital structure which says there is an optimal level of debt to equity to equity ratio beyond which the marginal benefit of financial capital with debt is not beneficial. In their study of capital structure and the performance of quoted insurance industry in Nigeria, Rafiu et al (2018) posited that there is a significant negative effect by capital structure on the performance of insurance companies in Nigeria. Their study which sourced data from 29 insurance companies in Nigeria between 2006 and 2014 examined the pattern of debt and equity on the financial performance of these companies. Using graphs, percentages, trend analysis and random effect model based on the outcome of LM-test and Hausman test for their data analysis, they concluded in agreement with the pecking order and static trade-off theories of capital structure. They noticed that higher debt in relation to equity led to lower financial performance of the insurance companies. They therefore recommend that insurance companies increase their retained earnings so as not to depend much on debt as a source of finance.

Mukumbi et al (2020) on the other hand concluded that debt financing increase positively the financial performance of firms operating on the Nairobi Securities Exchanges(NSE). They therefore recommended that firms should increase debt financing compared to equity. In their study, Mukumbi et al (2020) made use of secondary data sourced from company websites and the NSE handbook for 16 non-financial firms the period 2013-2017. Financial performance was proxied by return of assets and return on equity ratios while capital structure was proxied by change in debt and debt to equity ratios. They analyzed their data usingcorrelation and regression analysis using STATA version 15 as an aid. A study by Mauwa et al (2016) of the effect of capital structure on the financial performance of 6 firms listed on the Rwanda Stock Exchange(RSE) arrived at the conclusion that capital structure has a significantly negative relationship with Financial performance, that the association between both ROA and ROE and capital structure is negative and significant. This study used both primary and secondary data and used descriptive research design. Data obtained was analyzed using descriptive statistics, correlation analysis and regression analysis using SPSS version 20. Studying the effect of capital structure on profitability of listed insurance firms in Nigeria between 2013 to 2017, Karim, Alaji & Innocent (2019) applying correlation research design analyzed data for 15 insurance firms in Nigeria using ordinary least square regression technique and 75 firm year paneled observations with the aid of OLS multiple regression technique. The result showed that short term debt has significant negative effect on profitability. That premium growth has significant positive effect on profitability. They recommend that insurance companies depend less on debts as a source of financing and increase equity level as optimum capital structure.

Theoretical Framework

Following the Modilgiani & Miller 1958 proposition on capital structure a lot of controversy has trailed their assertions leading to the development of many other capital structure theories Xhaferi & Xhaferi (2015). Some of the most popular alternative capital structure theories are discussed below

Trade-off Theory

This theory suggests that to choose between the two modes of company financing: debt or equity, companies do or must do a cost benefit analysis to arrive at the option that best suits its situation. In choosing debt financing a company is to compare the benefits derived from this choice to the cost of bankruptcy and financial distress. If the tax relief from debt financing offsets the cost of bankruptcy and financial distress, the company should use debt financing Xhaferi & Xhaferi (2015). Deciding on an optimal capital structure is still a challenge because there is no agreement as to what constitute the benefits and costs Abeywardhana (2017). According to Myers (1977) in Abeywardhana (2017), using debts up to a certain level offsets the cost of financial distress and interest shield from tax. Also, Fama and French (2002) in Abeywardhana (2017) opine that "optimal capital structure can be identified through the benefits of debt tax deductibility of interest and cost of bankruptcy and agency cost." Also, the Miller model suggests that the optimal debt assets ratio is that point where marginal tax benefit and marginal bankruptcy costs equals Abeywardhana (2017).

Pecking Order Theory

According to this theory, companies have a hierarchy of financing, preferring first internal financing, then debt, then equity due to asymmetrical and signaling problems. That companies prefer financing following an order from safer to riskier therefore preferring internal financing compared to external financing Xhaferi & Xhaferi (2015). According to Myers and Majluf (1984) investors outside a company would usually discount a company's stock price when a company issues equity instead of taking riskless debts. This is the reason why company managers would as much as possible avoid equity offers. That managers would normally follow the pecking order going first for internal funds, followed by less risky debts then equity. Going by the pecking order theory, Harris and Raviv (1991) suggest that decisions about capital structure are intended to do away with the inefficiencies caused by information asymmetry. Information asymmetry and separation of ownership according to Myers (2001) in Abeywardhana (2017), is a reason why companies avoid the capital market. Also, Frydenberg (2004) in Abeywardhana (2017) explains that debt issues by a company provide a signal to the market that the firm is confident and outstanding and that its management is not afraid of debt financing.

Market Timing Theory

This theory suggests that managers time when to issue equity shares in the market. Managers issue shares when they perceive that their share price is overrated and buy them back when they perceive their share prices are underrated Baker & Wurgler (2002) in Abeywardhana (2017). These fluctuations in shares prices affect financing decision of companies and ultimately their capital structure. Aljamaan (2018) see the practice of issuing shares at high prices and repurchasing them at low prices by companies as a temporary exploitation of the fluctuations in the cost of equity compared to other forms of financing. According to a study by Al-tally (2004), see Aljamaan (2018), low leverage firms take advantage of when their market valuation is high to raise funds while high leveraged firms do same when their market valuation is low.

Agency Cost or Free Cash flow Theory

Agency costs arise when there is a conflict of interest between shareholders and managers where both have different objectives. According to Ehrhardt & Brigham (2011) in Aljamaan (2018) conflicts arise between shareholders and managers where they have different objectives and the managers have cash at their disposal. That managers tend to use cash to finance projects that do not have much to do with maximizing stock prices. According to Niu (2008), two types of conflicts exist; first between shareholders and managerswhen managers hold less than 10% of the residual claim and second between equity holders and debt holders where the debt contracts allows for suboptimal investment by equity holders. There are many suggestions on how to mitigate these conflicts and so minimize agency cost. According to the agency cost theory, choosing an optimal capital structure helps a company mitigate conflicts and decrease agency cost. Therefore high leverage/debt ratio helps a company to reduce its agency cost, Aljamaan (2018). The debt ratio makes managers to act more in the interest of shareholders as a result of which the company's value is increased Gansuwan & Onel (2012).

METHODOLOGY

This research employed the descriptive survey design methodology for the study. The study population consists of seven composite insurance companies listed on the Nigeria Stock Exchange and on the Nigeria insurance Commission website. Secondary data sourced from 2015 to 2019 audited financial statements of the target population as obtained from the companies' websites and Africafinancials.com was used. Data collected was analyzed using STATA 13 to test the relationship between the independent variable (capital structure proxied by total debt to equity ratio and total debt to total assets ratio) and the dependent variable Financial performance proxied by return on equity ratio).

RESULT AND DISCUSSION

Table 1 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Return on Equity (ROE)	35	-0.0571	0.3403	-1.2	1.23
Total Debt to Equity ratio (DER)	35	2.0394	2.4253	-1.44	8.25
Total Debt to Total Asset ratio(DTR)	35	3.474	3.7233	0.42	0.82

Source:Stata 13 Output Results based on study data

Table1 presents the descriptive statistics for the dependent and independent variables (Return on Equity (ROE), Debt to Equity ratio (DER), and Debt to Total Asset ratio (DTR). The standard deviation of the variables ranges from 0.3403 to 3.7233. Return on asset have the lowest standard deviation of 0.3403 followed by debt to equity ratio, Total debt to Total asset ratio has the highest standard deviation of 3.7233. The relatively low standard deviation for all the study variables may be an indication that the sampled data for the study is normally distributed. The table also indicated an average value of 0.0571 for return on equity. The minimum and maximum values of return on equity during the study period are -1.2 and 1.23 respectively. These values implied that all the sampled companies actually have values for return on equity during the study period. The table further reveals an average value of 2.0394 for total debt to shareholders fund ratio. The minimum and maximum values of total debt to equity ratio during the study period were -1.44 and 8.25 respectively. Similarly, the table shows that Total debt to total asset ratio had a mean value of 3.474, with minimum and maximum value of 0.42 and 082.

Table 2 Correlation Matrix of Dependent and Independent Variables

Variable	ROE	DER	DTR
Return on Equity (ROE)	1.0000		
Debt to Equity (DER)	0.1584	1.0000	
Total debt to total asset ratio	-0.6319	0.1282	1.0000

Source:Stata 13 Output Results based on study data

From table2, it is observed that the independent variables of the study correlates well around 12.82%. There is no relationship among the independent variables that is large enough (greater than 0.7) to pose the problem of singularity of data. The extent of relationship among all the independent variables is therefore minimal and negligible. The table revealed a positive correlation coefficient (of 0.1584) between return on equity and debt to equity ratio of the companies during the period under study. The positive correlation coefficient is an indication that debt to equity ratio is associated with increase in return on equity of the sampled companies during the study period. Similarly, debt to asset ratio is negatively associated with return on equity of the sampled companies (-0.6319). The negative relationship showed that debt to asset ratio is associated with decrease in return on equity of the companies. The Variance Inflation Factor (VIF) was conducted to ascertain the existence or otherwise of multicollinearity between and among the independent variables. The results of the VIF test are shown in table 3 below:

Table 3 Results of VIF Test

Variable	VIF	Tolerance (1/VIF)
Debt to Equity (DER)	1.02	0.9835
Total debt to total asset ratio	1.02	0.9835
Mean VIF	1.02	

Source: STATA 13 output Results based on study data

Table 3 shows that Debt to Equity (DER) has a VIF of 1.02 and a tolerance value 0.9835, indicating that the data for Debt to Equity (DER) was not highly collinear with the data for debt asset ratio; ABNCF has a VIF of 1.11 and a tolerance of 0.902074, signifying that there was no multi- collinearity between and other independent variables. In each case, VIF is less than 10 and tolerance level is less than 1 respectively, showing that there was absence of perfect multicollinearity among the independent variables. The mean VIF of 1.02 also attests to this fact.

Table 4 Breusch- Pagan/ Cook- Weisberg test for heteroskedasticity

Variable	Chi^2	Prob.> chi^2
Return on equity (ROE)	4.23	0.0398

Source: STATA 13 output Results based on study data

Heteroskedasticity Test– A pooled –OLS regression result was generated based on the dataset. After the OLS regression result, this test was conducted using Breusch–Pagan/Cook- Weisberg test of heteroskedasticity to check if the variability of error terms is constant. The presence of heteroskedasticity indicates that the variation of the residuals or error terms may not be constant and could affect inferences made from beta coefficients, coefficient of determination (R^2) and F-statistics of the study model. The result of the test as shown in table 4 above shows that the presence of heteroskedasticity as the probability chisquare value of 0.0398 is less than 0.05. This was corrected by running a panel corrected standard error regression

Table 5 Fixed effect, Random effect regression, Hausman test and Lanrangian multiplier test.

	Chibar ^{2}	Prob.> chi^2
Fixed effect	10.25	0.0005
Random effect	25.00	0.000
Hausman test	0.06	0.9705
Breusch and Pagan Lanrangian multiplier	0.95	0.1647

Source: STATA 13 output Results based on study data

Hausman Specification Test – Due to the panel nature of the data set, both fixed effect and random effect regressions were ran. Hausman specification test was then conducted to choose the preferred model between the fixed effect and random effect regression models. The result of the tests howed a chi square value of 0.06 and probability value of 0.9705 indicating that random effect regression model is most appropriate for the sampled data. However, The Breusch and Pagan Lanrangian multiplier test for random effect was conducted to determine between the pooled OLS and random effect regression which is most appropriate. The results in table 5 above shows a chi $bars^2$ of 0.95 with a corresponding prob > chibar of 0.1647 therefore the study rejected the alternative hypothesis and conclude that pooled OLS is the most appropriate model. As a result, pooled OLS should be used. The post diagnostic analysis shows that there is a problem of heteroskedasticity; consequently, the pooled OLS regression result presented in Table 6 were analyzed based on the robust standard error test and not random effect regression.

Table 6 Pooled OLS Regression Results

ROE	Coef.	Std. Err.	t-value	P-value
-Cons	0.0446	0.0578	0.77	0.446
Debt to Equity (DER)	0.0342	0.0814	1.85	0.073
Total debt to total asset ratio (DTR)	-0.0164	0.0033	-5.05	0.000
R2				0.4576
Prob > chi2				0.0001
F- statistics				13.50

Source: STATA 13 Output Results based on study data

The F-statistics value of 13.50 and a corresponding Prob.>Fof 0.0001indicated that the model is fit to explain the relationship expressed in the study and further suggests that the explanatory variable are properly selected, combined and used. The nature and extent of relationship between the dependent variable and each of the independent variables of the study in terms of coefficients, z- values and p-values are explained further: The regression result for the sampled companies as presented in table 6 above showed that there is a positive relationship between return on equity (ROE) and Debt to equity ratio (DER) as explained by a coefficient value of 0.0342 and a t- value of 1.85 with a corresponding P value of 0.073 This revealed that a one unit rise in debt to equity ratio lead to 0.0342 unit increase in return on equity. The p-value of 0.073 is greater than 0.05, therefore the study rejects the alternative hypothesis and accept the null hypothesis that capital structure (proxy by debt equity ratio) has no significant effect on financial performance (proxy by return on equity). This is at variance with the findings of Nelson et al (2019) that debt to equity ratio and return of equity have a negative and insignificant relationship. Similarly, the results revealed that there is a negative relationship between debt to asset ratio (DTR) and return on equity of the companies during the study period. This is explained by a coefficient value of -0.0164 and t-value of -5.05 with a corresponding P-Value of 0.000. This showed that a unit increase in debt to asset ratio (DTR), lead to 0.0164 unit decrease in return on equity. The p-value of 0.000 is less than 0.05, therefore the study rejects the null hypothesis and accept the alternative hypothesis that capital structure (proxy by debt to asset ratio) has significant effect on financial performance (proxy by return on equity).This is in alignment with the findings of Habimana, O. (2014) in his study of the relationship between capital structure and financial performance with focus on firms in emerging markets which showed that leverage is negatively and significantly related to returns.

CONCLUSION AND RECOMMENDATIONS

Based on findings of this study, it has arrived at a conclusion that components of the capital structure have varying degree of effect on financial performance, some positive, others negative, some significant and others not significant. The results reveals that there is a negative relationship between debt to asset ratio (DTR) and return on equity of the companies during the study period, i.e. increase in debt to asset ratio (DTR), lead to decrease in return on equity. And that there is a positive relationship between return on equity (ROE) and Debt to equity ratio (DER), i.e. increase in debt to equity ratio leads to increase in return on equity. In view of these findings, it is recommended that insurance companies in Nigeria while employing a capital mix that has higher debt than equity so as to boost its return on equity, should stive to minimize their debt to assets ratio.

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Impact of Information Communication Technology on E-Commerce Transactions in Nigeria: Evidence from Covid-19 Pandemic

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Abstract

The world has been shocked by the outbreak of the Covid-19 pandemic and no country is spared of the effects of the pandemic. The Internet has brought about the emergence of virtual markets with four primary distinct characteristics, which are real-time, shared, open and global. The growing rate of ICT utilization particularly the Internet has influenced at an exponential rate, online interaction and communication among the generality of the populace. The study examines the impact of ICT on E-commerce transactions in Nigeria; evidence from Covid-19 pandemic. The study found out that virtually all organizations in Nigeria have online presence and Internet access. In fact, it is a status quo. Their goods and services are displayed online but no sales because of poorly embraced payment instrument and fear of scammers. Sales are still done the traditional way. Similarly, Internet access is fairly popular among the citizens, particularly for sending mails and sourcing for information. This is primarily due to the high number of cybercafés that offers Internet access to all and sundry for a fee. Therefore, it is recommended that government and private initiatives be encouraged to improve this sector of the economy. There is need for improved national image on the international arena and an appropriate legislation put in place to guide the operations of e-commerce.

Keywords: Information Communication Technology (ICT), E-Commerce, Covid-19

INTRODUCTION

Firms across sectors are looking to leverage new opportunities during the pandemic through e-commerce. New evidence in the paper using World Bank's (2020) 'Impact of COVID survey' data from 1182 firms across four African countries- Niger, Togo, Zambia, Zimbabwe- shows that 266 firms (22.50%) of the sample report adopting a digital response to the pandemic. Over 70% of the firms with digital response (in manufacturing, retail and other services) report having adjusted or converted production, compared to roughly 40% of firms with no digital response, and over 50% of firms with a digital response report having started or increased delivery of goods and services, compared to less than 25% of firms with no digital response. A significantly higher share of firms with a digital response in manufacturing and retail sectors report witnessing an increase in demand for their goods and services and a higher share export over 10% of sales directly compared to firms with no digital response to the pandemic. Interestingly, 6.77% of firms in retail sector and 4% of firms in other services sectors report an increase in monthly sales compared to a year ago, with 3.5% of retail firms also reporting a permanent increase in employees. But e-commerce revenues remain relatively small in Africa, with physical retailers in low and middle-income countries faring better than pure-play e-commerce retailers (or e-tailers), which sell goods and services online through an online channel with no physical stores.

However, there exist significant differences across regions in B2C e-commerce, with Africa lagging behind the rest of the world, particularly in terms of delivery infrastructure. Supply-side shocks to e-commerce during the pandemic are making things worse; shortages of delivery workers due to sickness, delays in parcels due to cargo, air and transport disruptions, increasing air freight prices due to cancellation of flights etc. On the demand side as well, there exists significant differences in online buying across income status, gender, age and education. On average, 24% of the world's population is engaged in online buying, but only 2-4% of the population in low and lower middle-income countries is buying online. While 57% of females in high-income countries are engaged in online buying, it falls to 1% in low-income countries. Similarly, over 60% of the youth in high-income countries is buying online, but this falls down to 44% in upper-middle income countries, 7% in lower middle-income countries and 3% in low-income countries. E-commerce in Nigeria has numerous challenges and these challenges have impacted negatively to the rapid growth of the economy. One of the major problems that have hindered the growth of e-commerce is the low broadband penetration in Nigeria most especially in the rural areas and this is supposed to be a high priority growth for the ICT industry in the country.

It has been reported that 97% of Nigerian firms experience power outages, and such outages lasts on the average for some 196 hours per month. As a result of this situation, 86% of Nigerian firms have their own generators which produce over half of their electricity needs. (Larossi, Mousley & Radwan 2009). Therefore, firms will have to incur extra costs in the consumption of petrol or diesel. One huge challenge is the low consumer confidence in using electronic payment means because of lack of diverse internet security and forensic intelligence to contain cybercrime in the country. There is the problem of high cost of accessing the web. Most Nigerians access the web through there mobile phones, meanwhile most of the e-Commerce website are configured for PCs. A critical challenge to e-Commerce growth is the issue of poverty in the country. A greater percentage of the population live on less than $1 hence, they see shopping online as a thing for the rich. The coming of e-Commerce in the country has only received awareness in few big cities such as Lagos, Abuja, and Port-Harcourt. There is the challenge of timely delivery of goods bought online to the customers. Hence, this study is timely and will provide insight onImpact of Information Communication Technology (ICT) on E-Commerce Transactions in Nigeria: Evidence from Covid-19 Pandemic.

LITERATURE REVIEW

Conceptual Framework

Information Communication Technology (ICT)

James (2004) defines information technology as a term used to describe the act of computing and communication devices that capture data (input) processes and convert data, store data and present data (output). Information technology is an electro-mechanical device, which accepts to input data, process it according to programmed logical and arithmetic rules, store and output or calculate results (Cash and James, 2000). Technology is knowledge of methods to perform certain tasks efficiently and solve problems pertaining to products and services (Lockett & Littler, 2001). ICT is one of the most crucial determining factors for the growth of e-commerce. The growth of e-commerce requires reliable access to modern technologies which is typically lacking in most developing economies.

ICT's relevance in the growth of e-commerce cannot be overemphasized because it integrates all communication channels such as phones, computers, internet and so on for us to use in our everyday life. The impacts of ICT on the growth of e-commerce in Nigeria are: (i.) ICT has brought a major paradigm shift in e-commerce in the entire world. It has made access to buying and selling of goods and services less complicated, (ii.) ICT is a tool that helps in improving communication among businesses and commerce activities in different parts of the world. In fact, ICT is so commonly used in commerce field to communicate various financial matters such as acceptance of money, producing receipts and transferring funds that ICT and e-commerce have become almost tantamount terms. (iii.) ICT has help business organisations in cost savings by using e.g. VoIP instead of normal telephone, e-mail instead of post, video conferencing instead of travelling to meetings, e-commerce web sites instead of sales catalogues. Access to larger, even worldwide, markets. Web sites can be seen from all parts of the world and orders can be taken wherever there is a compatible banking system to process payments, e.g. credit / debit card, Pay-Pal, bank transfer facility. (iv.) ICT enhance efficiency in e-commerce by provide access to new markets or services which in turn create new favourable condition for income generation that can lessen poverty, improve governance, improve per capita income, and reduce unemployment. (v.) Through the help of ICT, e-commerce can reduce the delivery time by using efficient integrated computer systems which allows buyers to browse a wide selection of goods and services from their home. (vi.) ICT has made e-commerce to become the cheapest means of doing business since costs of trading are lower and there is savings on staff, premises and storage of goods and services.

Electronic Commerce (E-commerce)

The concept of Electronic commerce (E-commerce) predates the Internet. However, initial growth of e-commerce started prior to 1960s, although many applications linked with the innovations emerged around 1970s in form of transferring cash electronically (Solomon and Ajagbe, 2014; Abiso, 2017). However, subsequent Innovations that followed around that era are known as electronic data interchange. Okoro and Kigho (2013) posited that the electronic data interchange allowed business transactions such as purchase orders or invoices to be forwarded through electronic means from organisation to organization. Nonetheless, the Internet, a linkage of computer networks, was introduced in 1969 by the government of America to boost academic and scientific research. As the years passed by, the number of organizations using the internet substantially increased, hence, encouraging the exchange of goods and services amongst businesses (B2B e-commerce), and between organisations and individual consumers (B2C ecommerce). Oliveira and Martins (2011) opined that the growth of e-commerce has been seento be slower than that expected initially with B2B becoming more popular than B2C. In view ofthis, many descriptions of the term electronic commerce are bound in existing literature. Hence,Abiso (2017) perceived e-commerce as an online interaction between a business and itscustomers or a business and its suppliers for the placement of orders. He added that theinternet becomes an essential component of the business organization adopting the technology. In addition, the e-business involves several stakeholders, including the business that concludes the transactions, its customers and suppliers.

Thulani et al. (2010) argued that the implementation of electronic commerce technologyallows firms of all sizes and in all market segments to enhance their competitiveness. It cutsacross geographic locations and time zones to save time and costs, to open up new marketopportunities and enable even the smallest of firms to compete internationally (Mkomange et al.,2013; Okoro and Kigho, 2013). Electronic commerce spans established processes such as barcode scanning, electronic data interchange, electronic mail, the Internet, the World Wide Weband mobile. The prosperity recorded by firms that implement e-commerce encouraged otherbusinesses that previously do not implement the technology to start to consider adopting electronic commerce in their daily operations. Oliveira and Martins (2011) reported that thedifferent changes that firms experienced by the implementation of e-commerce haverestructured the boundaries of businesses, thus resulting to a new but strong internationaleconomy never anticipated before and at a much faster rate than the industrial revolutions.

Effects of the Covid-19 Pandemic in Nigeria

Generally, the Covid-19 pandemic has social, religious, political and economic effects on the economy. Some people might argue that it is too early to discuss the effects of the pandemic. However, the pertinent question is, when likely will the pandemic be over? According to experts, the Covid-19 pandemic may not go away anytime soon or completely (Brito, 2020). Besides, there is no cure for it now. Therefore, it is important to discuss the effects now so that measures or actions can be taken to cushion the effects of the pandemic. With that said, the following are the effects of the Covid-19 pandemic in Nigeria.

Job Losses

Many people have lost their jobs as a result of the outbreak of the Covid-19 pandemic and many jobs are in jeopardy in the near future. The pandemic has worsened the unemployment situation in Nigeria. For instance, the unemployment rate in Nigeria before the pandemic stood at 23.1 per cent (National Bureau of Statistics, 2018). However, due to the pandemic, the unemployment rate is estimated to rise to about 33 per cent by the end of 2020 (Obiezu, 2020). An upsurge in unemployment has negative effects on the economy. For example, when unemployment increases there is the likelihood that social vices or criminal activities would increase and this portends grave danger for the country. Also, an upsurge in unemployment could lead to more hunger and poverty in the country.

A Sharp Drop in Income of the Informal Workers and the Poor

The informal workers and the poor are the hardest hit by the Covid-19 pandemic because they live on daily income. This category of people includes street vendors or hawkers, petty traders, taxi drivers, motorcycle (i.e. "Okada") riders, artisans, hairdressers and garbage collectors, etc. They engage in daily trading activities for their daily bread. The lockdown and other containment measures have threatened their means of livelihoods and subjected them further to poverty and hunger. It is important to note that the informal workers constitute about 60 per cent of the global labour force (International LabourOrgnization, 2020) and they live on less than $2 per day.

Business Closures

Many businesses, particularly small and medium enterprises (SMEs) have been closed down as a result of the Covid-19 pandemic. SMEs are badly hit by the outbreak of the pandemic due to their vulnerability and limited resources. Measures such as self-isolation or quarantine, social distancing, ban on social gatherings and closure of markets taken to contain the spread of the disease have impacted negatively on their operations, sales and profits. Many SMEs have experienced demand and supply chains shocks during this pandemic. Demands for goods have reduced drastically due to lockdown and restrictions of movement. Additionally, the supply chains have been badly affected. For example, business organizations in Nigeria import their goods from China (Ozili, 2020). With the ban on foreign travels during this pandemic, the supply of such goods and the continuity of such businesses would be negatively affected. Needless to say, border closures have negative impacts on import and export businesses.

Agriculture and Food Insecurity

The Covid-19 pandemic has affected the production and marketing of agricultural products. No doubt, the pandemic has worsened the food insecurity situation in the country. The demand and supply chains of agricultural products and foods internally and externally have been affected as a result of the measures adopted to contain the spread of the disease. Farmers find it difficult to obtain seedlings, fertilizers, pesticides and farm implements. Moreover, labour-intensive agricultural production processes have been affected due to labour shortages and logistical constraints. Additionally, the timing of the outbreak of the Covid-19 pandemic in Nigeria disrupts farming activities. For some farmers, the timing of the outbreak of the disease coincides with the planting season whereas, for others, the timing of the outbreak of the pandemic coincides with the period of harvest. These disruptions, no doubt, have devastating effects on the production and marketing of agricultural products.

A Steep Decline in Oil Revenues

Nigeria is a mono-product economy (Agbaeze&Ukoha, 2018; National Bureau of Statistics, 2019). It depends heavily on the export of crude oil for economic growth and development. The outbreak of the Covid-19 pandemic has affected negatively the price of crude oil in the international market. For example, the price of crude oil dropped from about $60 per barrel to less than $30 per barrel (Ozili, 2020) and this has affected negatively the revenues from the sales of crude oil for Nigeria. The demand and patronage of Nigeria's crude oil has reduced drastically due to the pandemic. The plunge in the price of crude oil has far-reaching effects on the Nigeria's economy. Specifically, it affects Nigeria's 2020 budget. The steep decline in oil revenues has led to the review of the budget. The Nigeria's 2020 budget was originally N10.594 trillion. It has been reduced to N10.276 trillion. Likewise, the oil benchmark that was originally pegged at $57 per barrel has been reduced to $30 per barrel (Ozili, 2020). It is important to note that revenues from the sales of crude oil form the largest part of the money expected to fund Nigeria's 2020 budget (BudgI, 2020; PWC, 2020).

School Closures

The Covid-19 pandemic has posed a huge challenge to education systems. With the ban on social gatherings and the social distancing measure adopted to contain the spread of the disease, many schools (primary, secondary and tertiary) have been closed down. Academic activities have been suspended and many academic calendars have been disrupted. The implication is that students would not graduate at the expected time.

Death Toll

The coronavirus pandemic has claimed many lives across the country. The statistics released by the NCDC as at 23rd May, 2020 shows that 221 deaths have been recorded since the outbreak of the disease. The number of active cases as at 23rd May, 2020 stands at 5,123 (NCDC, 2020). This is a serious cause for concern considering the poor state of the health facilities in the country.

Economic Uncertainties

The Nigeria's economy is bleak, sliding towards a recession or an economic contraction as a result of the Covid-19 pandemic. Indices of economic recession abound. Prices of goods and services have skyrocketed during this pandemic. Unemployment has increased and exchange rate has become volatile. Moreover, economic activities have been greatly disrupted and the Covid-19 pandemic has no cure for now. This situation makes the economy unpredictable. Additionally, production and job losses and change in buying habits have strained the economy. Moreover, the steep decline in oil revenues occasioned by the sharp fall in crude oil price is likely to deplete Nigeria's external reserves, thereby making the future unpredictable.

2.2 Empirical Review

Otache (2020) examined the effects of the Covid-19 pandemic on the Nigeria's economy and possible coping strategies. In addition to the viewpoint of the author, this paper undertook a review of the related literature regarding the Covid-19 pandemic and how Nigerians and the Nigerian government can cope with the effects of the pandemic. The review reveals that the effects of the Covid-19 pandemic in Nigeria include jobs losses, a sharp drop in income of the informal workers and the poor, food insecurity, business and school closures, a steep decline in oil revenues and economic uncertainties. This paper has recommended some measures to be adopted by Nigerians and the Nigerian government in order to cope with the devastating effects of the Covid-19 pandemic and similar pandemics in future. The measures include monetary and fiscal policy measures, diversification of the economy through agriculture, revamping of the manufacturing sector, acquisition of relevant ICT skills, adoption of e-learning model by schools, adoption of e-business model by business organizations and the need to have multiple sources of income.

Abioye, Ogunniyi and Olagunju (2020).Examines the effect of COVID-19 related cases and lockdown measures on the issues related to Small and Medium Scale Enterprise in Nigeria. Using an electronic data collection approach, this study analyzes the data using the linear probability model to estimate the effect of the pandemic on the entrepreneurs and model the factors influencing coping strategies using a multivariate probit model. We found that majority of the entrepreneurs have been affected (both severely and slightly) by the COVID-19 pandemics through the partial and total lockdown and movement restrictions. We found that the COVID-19 pandemic's effect differs by sector of the economy (agriculture versus non-agriculture). For instance, partial lockdown measures had an increasing likelihood effect on low sales among the enterprises especially for the non-agricultural sector but there is a contrary result in the context of the food and agriculture sector. In addition, partial lockdown increases the likelihood of switching approaches of business (coping strategies) whereas total lockdown has a negative influence on the coping strategies. One of the policy implications of our study is the need to address social protection approaches (such as palliative measures) which can help to cushion the effect on the pandemic on the Small and Medium Scale Enterprise in Nigeria.

2.3 Theoretical Framework

2.3.1 Transaction Cost Theory

Transaction cost was first introduced by Williamson (1981). Economists have classified transactions among and within organizations as those that (a) support coordination between buyers and sellers, that is, market transactions, and those (b) supporting coordination within the firm. Figure 2 depicts a typical market hierarchy progressing from manufacturer to wholesaler, retailer, and consumer. The associatedrespective transaction costs are shown as well. Williamson (1981) points out that the choice of transaction depends on a number of factors, including asset specificity, the parties' interests in the transaction, and ambiguity and uncertainty in describing the transaction. Transactions may then be broken down into production and coordination costs (e.g., Wigand et al., 1997; Benjamin & Wigand, 1995; Malone et al., 1987). In this context, coordination costs include the transaction (governance) costs of the information processing necessary to coordinate the work of people and machines performing primary processes (Malone et al., 1987). Transaction costs may be viewed as the economic equivalent of friction in a physical system that is, if friction is too great, no or at least impeded movement will occur suggesting that if transaction costs are high, no or little economic activity is likely to occur.

These costs are comprised of the following four types; Search costs the cost of searching for products, sellers, and buyers; Contracting costs - the cost of setting up and carrying out the contract; Monitoring costs - the cost ensuring that the terms of the contract have been met and; Adaptation costs - the cost incurred in making changes during the life of the contract. Firms will choose transactions that economize on coordination costs. As information technology continues its rapid cost performance improvement, the unit cost of coordination transactions will approach zero, thus enabling the design of innovative coordination transactions to fit new business needs (Benjamin & Wigand, 1995). The ever-increasingand innovative use of the World Wide Web (WWW) to conduct business and WWW-relatedforms of electronic commerce are clear examples of firms' desires to economize ontransaction costs. Figure 1 suggests that transaction cost savings may be achieved throughthe use of information technology within the entire market hierarchy and resulting marketor industry value chain. Benjamin and Wigand (1995) present an example of the purchaseof a high-quality shirt with empirical cost figures clearly demonstrating actual savings intransaction costs resulting in lower purchase costs for the consumer. Moreover, this example demonstrates nicely how the potential elimination of entire levels within the market hierarchy (such as; wholesalers, retailers, etc) may occur.

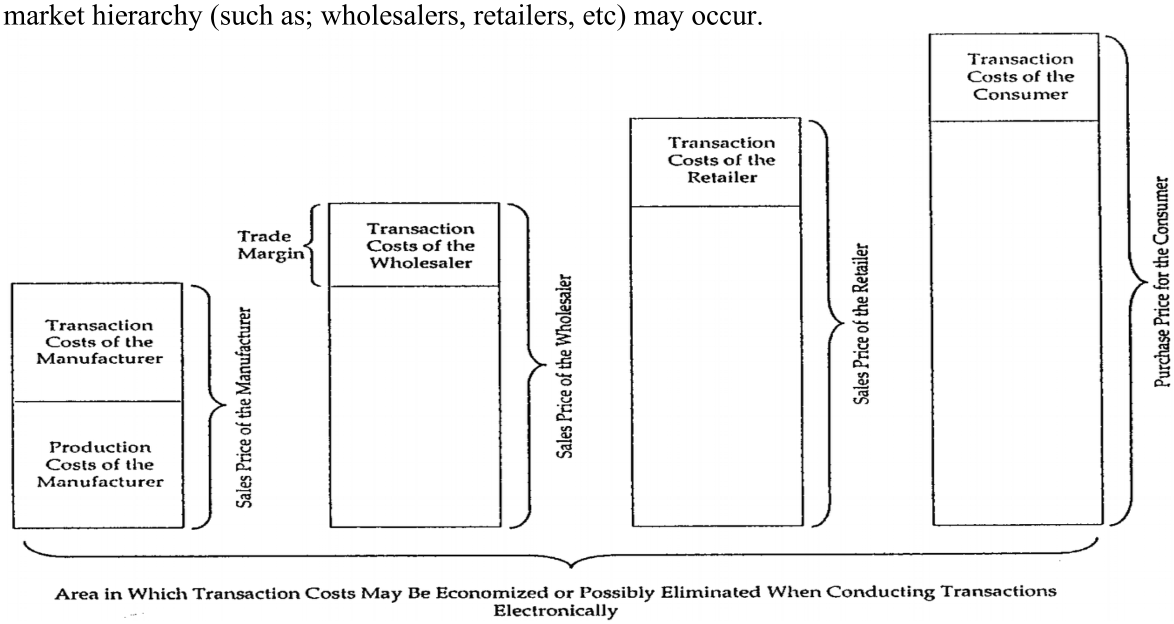

Figure 1: Market hierarchy and transaction costs in a stepwise fashion.From Wigand (1995).

The latter is clearly observable in severalmarkets and industries, as already mentioned in the discussion on disintermediationversus reintermediation. One may argue that with cheap coordinative transactions, interconnectednetworks and their strategic deployment, and easily accessible databases, therewould be a proportional shift of economic activity to cheaper electronic communicationschannels to conduct a firm's business.

METHODOLOGY

For the purpose of this study, the research design adopted is ex-post facto research design. There are at least two major parties involved in e-commerce transactions. They are thecustomerand the merchant. Some of the other parties involved are the acquirer, the issuer and theswitching/clearing house. In this research, interest is on both the customer (the individual who isinterested in purchasing goods) and the merchant (the organization or individual who is interested inselling some goods). Therefore, two separate sets of questionnaires were administered across these entities.

A total of 100 questionnaires were administered randomly among the major organizations withinthe Abuja metropolis. The organizations cut across theaviation, finance, conglomerates, petroleum, IT and private organizations. The organizations withina particular sector were randomly selected but with fair coverage and representation. 99 of thequestionnaires were returned which represents 99% of the total number administered.Pertinent questions such as web presence, Internet access, level of web patronage, level of webmarketing and the nature of problems encountered were posed to them. Similarly, a total of 150 questionnaires were administered and 139 of them were returned, which represent93% of the total. Relevant questions such as: Internet access, availability of payment cards, level ofweb commerce patronage and likely challenges were posed to them. This group is composed ofrandomly selected individuals who are predominantly working-class part-time postgraduatestudents of an institution, and some few members of the general public.

Available research has identified three major factors that impact message elaboration and messageevokedthinking as motivation, opportunity and ability (MOA) that moderate or serve asantecedents to information processing by individuals (Hallahan, 2000). Ramaswani et al (1998) presented the same model as AMO model. That is, a determinant for online purchasing characteristics by determining the customers' ability to purchase online, their motivation to do that,and the available opportunities for Internet access.Therefore, the collected data was analyzed based on the ability, motivation and opportunity (AMO)framework, and descriptive statistics using the SPSS package.

RESULT AND DISCUSSIONS

Descriptive Analysis of Data on Relevant Variables

Respondents indicated whether they "Strongly Agree", "Agree", "Undecided", "Disagree", or "Strongly Disagree" with the statements provided. Below are the statements and the tables showing the frequency and percentage distribution of responses along with their interpretations are:

Table 1: The E-commerce ability analysis table

A - S/N
B - FEATURES
C - Individuals Yes
D - Individuals No
E - Organizations Yes
F - Organizations No

A	B	C E	D F
1	Web presence	68 (49%) 88 (89%)	71(51%) 11 (11%)
2	Internet access	94(68%) 97(98%)	45 (32%) 2(2%)
3	Payment card availability	57(41% NA	82(59%) NA
4	Participation in online purchase	28(20% (***)	111(80%) (***)

(***) Most of the payment activities are limited to payment for utilities/services with ATM cards and credit cards used in supermarkets and filling stations and not for purchases on the web.

Table 2: Level of E-commerce participation table

A - Feature
B - Very High
C - High
D - Average
E – Low

A	B D	C E
Individual		
Level of E-Commerce	5 (5%) 36 (36%)	11 (11%) 47 (48%)
Organization (Merchant)		
Level of E-Commerce	9 (7%) 42 (30%)	24 (17%) 64 (46%)

Discussion of Findings

Virtually all organizations in Nigeria have online presence and Internet access. In fact, it is a status quo. Their goods and services are displayed online but no sales because of poorly embraced payment instrument. Sales are still done the traditional way. Similarly, Internet access is fairly popular among the citizens, particularly for sending mails and sourcing for information. This is primarily due to the high number of cybercafés that offers Internet access to all and sundry for a fee. Furthermore, the percentage of individuals with payment card is low (41%) considering thesample and population used (working-class part-time postgraduate students). The reason for this low result is not unconnected with the economy of the country which is cash-based coupled with the fact that the available cards are mostly ATM cards that are used for settlement of local transactions.Accordingly, the percentage of individuals that is involved in online purchase is pretty low (20%). The present study corroborated with the study of Abioye, Ogunniyi and Olagunju (2020) who in their findings found that Sales are still done the traditional way by most SMEs in Nigeria but disagreed with the study of Otache (2020) who opined that e-commerce improved Nigeria economy growth.

With respect to the motivation for E-Commerce Participation, motivation refers to availability, affordability, security and trust in the use of the medium and tt arouses the interest, willingness and readiness of customers to patronize a medium. Therefore, in addition to web presence, Internet access, and availability of payment cards, the tables aboveshow the level of web commerce. The level of web commerce as presented in table 2 above is generally low. The total percentage below average is 36% for individuals and 42% for organizations. This goes a long way to corroborate the perception that consumers source for information online but make purchases thetraditional way. Furthermore, the poor response may have been as a result of lack of popularity andlow patronage of web commerce. Therefore, there is need for awareness and sensitization campaign, motivation and availability of payment instruments for better result.

CONCLUSION AND RECOMMENDATIONS

On the basis of ability, virtually all companies in Nigeria have Internet presence and access. Thus, they have the ability to display their goods and services on the web. However, considering the location of administration of the questionnaire (Abuja), the best result is expected because of its commerce centric nature, with a lot of telecoms and cybercafé operators but the result of 68% internet access for individual is just fair and much is desired particularly in the provision of basic ICT infrastructure. Considering motivation, the level of e-commerce participation is generally low, although there are other forms of e-payment through the use of ATM and credit cards in the supermarkets and payment for utilities, which are very prevalent. However, for e-commerce, because of the rejection of payment cards that originate from the country, some individuals offer payment services through their international payment cards to consumers for a fee.

Furthermore, the available opportunities for e-commerce are very limited considering the number of PC owners, the number of Internet users and the number of available payment cards which are ridiculously low among other things. Therefore, it is recommended that government and private initiatives be encouraged to improve thissector of the economy. There is need for improved national image on the international arena and anappropriate legislation put in place to guide the operations of e-commerce. Similarly, concertedefforts are required for the provision of basic infrastructure in the areas of web presence, Internetaccess, and e-payment. The entire populace must be encouraged to embrace the e-banking culture asthis will in turn reduce the amount of cash in circulation and boost the e-commerce culture.

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Effect of Foreign Direct Investment on Nigeria's Economic Growth

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Abstract

Foreign Direct Investment has been held to provide developing nations including Nigeria with much needed capital for economic growth, Part of Foreign Direct Investment is the inflow of up to date technology and management skill. This paper investigates the effect of FDI on selected macro-economic variables of GDP, inflation and exchange.The study employed Secondary source of datafrom the Central Bank of Nigeria statistical bulletincovering the period of 1986 to 2017. It used the Least square to examine the relationship between the dependentand the independent variables.The findingsof the study reveal at the probability of interest rate at 27.27% that Foreign Direct Investment has significant effect to economic growth of Nigeria. Also, inflation rate and exchange rate were significant to influence the economic growth of Nigeria. The study therefore recommend that Government should re-strategies her policy by continuous improvement of business environment through the provision of the necessary infrastructure which will reduce the cost of doing business, increase productivity and enhance technological transfer and skill acquisition in Nigeria.

Keywords: Foreign Direct Investment, Gross domestic product, Inflation, Interest rate, Economic growth

INTRODUCTION

Foreign Direct Investment (FDI) has been recognized as a catalyst in the growth of developing countries in that it brings additional sources of capital investment and foreign savings. In addition to its primary aim as a source of capital formation, FDI also brings productive benefits which include employment creation, technology transfer, and associated spillover effects, skills development, trade and competitiveness and access to foreign markets. As such FDI is viewed in many studies as a key driver of economic growth since it enhances profitability of domestic investment, transforms the host country's ownership structure of total investment, complements funding for domestic investment and improves the productive sector of the economy. There is virtually no country in the world whose aims are not geared towards achieving economic growth and development. However, this is only possible if a country has adequate resources at its disposal (Chimobi&Igwe, 2010). In many developing countries, the resources to finance the optimal level of economic development are in short supply. This is because their economies are plagued with problems associated with vicious cycle of poverty, low domestic savings, low tax revenue, low productivity and limited foreign exchange earnings. As a result of this, developing countries inevitably resort to policy that will enhanced the flow of foreign finance to bridge the gap between the resources available to them and what is required for their advancement.

For a developing country like Nigeria, foreign direct investment is considered as a way of transferring technology and capital from other developed and even developing countries to the domestic economy. According to Yu, Ning, Tu, Younghong and Tan (2011), FDI is considered to be one of the major channels of technological transfer. Melnyk et al., (2014) believe that when foreign direct investment comes to a domestic country (in specific business), that firm receives a competitive advantage due to the usage of new knowledge, experience, ways of production and management. Adding that current successful economic growth of developing countries is explained by "catch up effect" in technological development with developed countries. According to Koojaroenprasit (2012), FDI is an important factor which contributes to economic growth through technology transfer. Capital accumulation and augmentation of human capital Rapid and sustained output growth of the domestic economy of Nigeria has since the political independence in 1960 been of paramount importance to successive governments in the country. Consequently, governments have implemented several national development plans and programmes aimed at boosting productivity, as well as, diversifying the domestic economic base. The goal of this is to attained high level of economic development that would translate into improvement in the living standards of the populace and hence a reduction in poverty through increase in the domestic output and the creation of employment, and thereby the maintenance of a favourable balance of payment position.

Attracting foreign investment is therefore crucial from a number of standpoints. First, consistent and regulated inflow of FDI provides an important source of foreign exchange earnings needed to supplement domestic savings and raise investment levels. Second, import substituting investment would serve to reduce the import bill as investments in export industries will directly increase the country's foreign exchange earnings. Probably persuaded by these overwhelmingly attractive theoretical benefits in support of FDI, authorities in Nigeria have, at various times, articulated a plethora of incentives aimed at attracting FDI into the country. According to Ayanwale (2007), the policies embarked on by the Nigeria government to attract foreign investors as a result of the introduction of the Structural Adjustment Programme (SAP) could be categorized into five: the establishment of the Industrial Development Coordinating Committee (IDCC) , investment incentive strategy, non-oil export stimulation and expansion, the privatization and commercialization programme, and the shift in macro-economic management in favour of industrialization, deregulation and market – based arrangements. Nigeria's economic development was anchored basically on agricultural and primary exports before independence. A purposive effort was made to alter the structure of the economy by increasing investment in other sectors on attainment of political independence in 1960. Since then and, specifically from the early 1950s, virtually all the productive sectors of the Nigerian economy were dominated by foreign investments and therefore ownership. Incentive measures were, thus, directly aimed at attracting foreigners, their capital, technology and skills.

The centrality of FDI as a prime mover in the growth process of the Nigerian economy has often been emphasized by the traditional neo-classical theory of the determinants of the growth process. FDI encourages the inflow of technology and skills and fills the gap between domestically available supplies of savings, foreign exchange and government revenue. It also encourages the inflow of technology and skills. Since the end of the World War II, foreign investment has been recognized as a very viable development path, especially for the developing countries (Oyeranti, 2003). The contributions of foreign investment to Japan after the World War II and in South Korea after the Korean War are of great importance. The emerging economic 'Tigers' of Asia namely Thailand, Singapore, Malaysia, Taiwan, Hong Kong and Indonesia owe their successes to heavy inflows of FDI over the years. The economic growth of these countries has been enhanced by providing the local economy with a source of foreign skill, technology, management expertise and human resource development through international training and collaboration. FDI has also substantially increased the capacity of these economies to sustain further developments from their own resources. However, Schoors, Roen, Van der Tol and Bartoldus (2002) suggest that FDI can have a negative impact on domestic economies. This could happen through repatriation of profit and market stealing effect. Also, Stanisic (2008) did not find any positive correlation between FDI inflows and economic. FDI is seen as an amalgamation of capital, technology, marketing and management. Funke and Nsouli (2003) assert that one of the pillars on which the New Partnership for African's development (NEPAD) was launched, was to increase available capital to US$64 billion through a combination of reforms, resource mobilization and a conducive environment for FDI which Nigeria is signatory. Nigeria as a country, given her natural resource base and large market size, qualifies to be a major recipient of FDI in Africa and indeed is one of the top three leading African countries that has consistently received FDI in the past decade (Asiedu, 2003). The UNCTAD World Investment Report (2003) showed Nigeria as the country second top FDI recipient after Angola in 2016 and 2017 in Africa also in 2016 UNCTAD shows that FDI inflow to West Africa is mainly dominated by inflow to Nigeria, who received 70% of the sub-regional total. However despite the enormous flow of FDI to Nigeria and the theoretical assumption that it contribute to developmental effort of the recipient country, her economy has been characterized by low manufacturing capacity utilization, high level of inflation, heavy debt burden, high unemployment rate, high level of income inequality, poverty to mention a few. Thus the objectives of this study is to; ascertain the effect of FDI on Economic growth represented by GDP in Nigeria, assess the effect of Foreign Direct Investment (FDI) on Exchange rate and to assess the effects of Foreign Direct Investment (FDI) on inflation in Nigeria.

LITERATURE REVIEW

Concept of Foreign Direct Investment

Foreign direct investment (FDI) occurs when a firm invests directly in facility to produce and/or market a product in foreign country. Foreign Direct investment can be classified into FDI stock and FDI flow, while the former is the accumulated amount of FDI at a given time, the latter refers to the amount of FDI undertaken over a given period of time usually annualized. FDI inflow is flows into a domestic economy and FDI outflows are flows away from a domestic economy. Johnson (2006) identified FDI flow to include flow of physical capital, labour, firm specific advantages (superior technology, scale economies, and management) knowledge capital (brand names, human capital, patents, trademarks and Technology) and externalities. Johnson (2006) categorized FDI into Greenfield and Brownfield, when FDI inflow results into the purchase or construction of new hitherto non existing production lines or market channels it is called Greenfield FDI, but acquisition of ownership powers of an existing production facility in a domestic economy by foreigners is called Brownfield. FDI is a key element in international economic integration. FDI creates direct, stable and long-lasting links between economies. It encourages the transfer of technology and know-how between countries, and allows the host economy to promote its products more widely in international markets. FDI is also an additional source of funding for investment and under the right policy environment it can be an important vehicle for development (OECD, 2012). The term FDI refers to the cross-border investment by a resident entity in one economy with the objective of obtaining a lasting interest in an enterprise resident in another economy. Amadi (2002) sees it as a distinctive feature of multinational enterprises. According to him, FDI is not simply an international transfer of capital but rather, the extension of enterprise from its home country. Mwilima (2003) describes FDI as investment made to acquire a lasting management interest (usually at least 10% of voting stock) and acquiring at least 10% of equity share in an enterprise operating in a country other than the home country of the investor. FDI has further been explained as the long-term investment reflecting a lasting interest and control, by a foreign direct investor (or parent enterprise), of an enterprise entity resident in an economy other than that of the foreign investor.

Expanded explanation on the meaning of FDI has been offered by Ayanwale (2007) as ownership of at least 10% of the ordinary shares or voting stock is the criterion for the existence of a direct investment relationship. Ownership of less than 10% is recorded as portfolio investment. FDI comprises not only merger and acquisition and new investment, but also reinvested earnings and loans and similar capital transfer between parent companies and their affiliates. However, the special merits of FDI and particularly the kinds of incentives offered to foreign firms in practice have begun to be questioned (Alfaro, 2003). Fueling this debate is that empirical evidence for FDI generating positive spillovers for host countries is ambiguous at both the micro and macro levels. In support of this fact, Hanson (2001) argues that evidence that FDI generates positive spillovers for host countries is weak. Although the theoretical work on FDI points to advantages, conceivably, spillovers could nevertheless be small. On the other hand it could be that we are looking in the wrong places. Feldstein (2002) argues that a number of advantages accrue to developing countries through FDI inflows. They include: FDI allows the transfer of technology especially in the form of new varieties of capital inputs, which cannot be achieved through financial investment or trade in goods and services. FDI is generally seen as a composite bundle of capital stock and technology, and can augment the existing stock of knowledge in the host economy through labor training, skill acquisition and diffusion, and the introduction of new managerial practices and organizational arrangements. Foreign direct investment can impact growth directly and indirectly. The impact of FDI can be seen to directly impact growth through capital accumulation, and the incorporation of new inputs and foreign technologies in the production function of the host country.

Empirical Review

Awolusi (2012) investigated the long-run equilibrium relationships among the international factors and economic growth, as well as, to assess the short-term impact of inward FDI, trade and domestic investment on economic growth in Nigeria from 1970 to 2010. A multivariate cointegration technique developed by Johansen and Juselius (1990) was employed to investigate the long-run equilibrium relationships. The results of the analysis affirmed the existence of cointegrating vectors in the systems of this country, during the study period. The variables in Nigeria models have a long-run equilibrium relationship with one another and were adjusting in the short-run via three identified channels. However, since the existence of cointegrating vectors (cointegration) in the system of a country only presumed the presence or absence of Granger-causality, which does not indicate the direction of causality between the variables, hence, the short-term impact of inward FDI, trade and domestic investment on economic growth in Nigeria was also tested via Granger Causality test, based on VECM. The results of the test revealed a short-run causal effect either running unidirectionally or bidirectionally among the variables for the country. Umoh, Jacob and Chuku (2012) investigated the relationship between foreign direct investment and economic growth in Nigeria between 1970 and 2008. The study makes the proposition that there is endogeneity, that is, bi-directional relationship between FDI and economic growth in Nigeria. Single and simultaneous equation systems are employed to examine if there is any sort of feed-back relationship between FDI and economic growth in Nigeria. The results obtained show that FDI and economic growth are jointly determined in Nigeria and there is positive feedback from FDI to growth and from growth to FDI. The overall policy implication of the result is that policies that attract more FDI to the economy, greater openness and increased private participation will need to be pursued and reinforced to ensure that the domestic economy captures greater spillovers from FDI inflows and attains higher economic growth rates.

Kareem et al. (2012) investigated the impacts of FDI in oil sector in Nigeria and its attendant impact on economic growth. The co-integration analysis was employed for the study. The results showed that FDI at current year is negatively associated with GDP possibly due to the fact that such investment needed to be allowed some time lag to translate to any significant impact. The impact of domestic capital formation is relatively small compared with the impact of FDI in the oil sector. This is a further evidence of the dominant role of foreign investors in the oil sector of the country. Therefore, addressing problems related to security, corruption, inadequate infrastructure and inconsistent regulations remains the key elements of Nigeria's future challenge of attracting more efficiency-seeking FDI that can promote her economic growth. The FDI is significant to the expectations of improvement of Nigeria's economy, as it is a way of growing the capital existing for savings. And the economic growth required lessens deficiency and elevate standards of living. Awe (2013) examined the impact of FDI on economic growth in Nigeria during the period 1976 – 2006, using the two-stage least squares (2SLS) method of simultaneous equation model. The findings of the study revealed a negative relationship between economic growth proxied by GDP and FDI as a result of insufficient FDI flow into the Nigerian economy. It is therefore, recommended that Nigeria should encourage domestic investment to accelerate growth rather than relying on FDI as a prime mover of the economy and develop a code of conduct on FDI to curb the restrictive business practice of multinationals and limit their repatriation of profits from Nigeria.

Adeleke, Olowe and Fasesin (2014) analyzed the impact of FDI on Nigeria economic growth over the period of 1999- 2013. The main type of data used in this study is secondary; sourced from various publications of CBN, such as; Statistical Bulletin, Annual Reports and Statement of Accounts. The regression analysis of the OLS is the estimation technique that is being employed in this study to determine the relationship between and impact of the FDI on economic growth. The findings revealed that economic growth is directly related to inflow of FDI and it is also statistical significant which implies that a good performance of the economy is a positive signal for inflow of FDI. This implies that FDI is an engine of economic growth. The study recommended that government should liberalize the foreign sector in Nigeria so that all barriers to trade such as arbitrary tariffs; import and export duties and other levies should be reduced so as to encourage investors. Uwazie, Igwemma and Eze (2015) determined the nexus between FDI and economic growth in Nigeria. The study employed VECM method of causality to analyze the annual data for the periods of 1970 to 2013. The ADF unit root test show presence of unit root at level but stationary after first difference. The Johansen cointegration test confirms that the variables are cointegrated while the granger causality test affirms that FDI and economic growth reinforce each other in the short run in Nigeria. Also, it is reported that FDI granger cause economic growth both in the short and long run in Nigeria. Based on these findings, the study advocates the adoption of aggressive policy reforms to boost investors' confidence and promotion of qualitative human capital development to lure FDI into the country. It also suggests the introduction of selective openness to allow only the inflow of FDI that have the capacity to spillover to the economy.

Ajala and Adesanya (2017) examined the impact of FDI in telecommunications on economic growth. The study uses data covering between 1985 and 2015. It employs the use of trend and descriptive analysis to show whether FDI in telecommunications has impact on the Nigeria's economic growth or not. The study found that FDI in telecommunications has a positive impact on the Nigerian economy. The study recommends that government should provide enabling environment for the investors in order to sustain the trend of inflow of FDI into the economy. Ghaith, Mohd and Zakaria (2017) investigated the impact of FDI and financial development on economic growth in Malaysia over the period of 1975-2014. According to autoregressive distributed lag bound test approach to co integration analyses, the results found that financial development plays an essential role in mediating the impact of FDI on economic growth in Malaysia. This implies that well-developed financial sectors lead to further and facilitate FDI spill over and hence yield economic growth, particularly for the case of Malaysia. Elias, Joseph and Odoh (2018) examined the effect of FDI on economic growth with specific reference in the Nigerian economy with exchange rate as an additional explanatory variable, among others. Multiple regression analysis technique was employed in estimating the model. The data used for the study were extracted from the CBN statistical bulletin from 1980 – 2012. The results of the study revealed that FDI has a positive relationship with Nigerian economic growth. The same positive relationship also exists between exchange rate and Nigerian economic growth. It was recommended among other things that the aspect of FDI which encourages transfer of technology be encouraged into the country.

Akinyemi, Muideen, Olusogo and Oluwaseun (2018) examined the sectoral impact of FDI in manufacturing, mining, oil and the telecommunications sectors on economic growth in Nigeria based on a theoretical framework founded on the standard growth accounting theory, the detailed analysis of the sectorial FDI (which is only available for over the period 1986-2009) was carried out. This involved the use of descriptive analysis, unit roots test, Johansen co-integration test, error correction mechanism, and fully modified least squares technique. The correlation analysis of aggregate FDI on sectoral GDP growth indicates that only the oil sector GDP has a significant positive correlation with aggregate FDI over the period 1981 and 2017. While the sectoral analysis revealed that only the flow of FDI into the communication sector has a positive and statistically significant impact on economic growth for the period considered. Given the positive significant growth impact for FDI in the telecommunication sector, and the negative significant growth impact of FDI in the manufacturing sector, the strategy for attracting and managing FDI in Nigeria must be sector specific and the National Bureau of Statistics must maintain a database of FDI on sectoral basis. Sokang (2018) investigated the impact of FDI on the economic growth of Cambodia by utilizing the time series data throughout 2006-2016. The correlation matrix and multiple regression analysis techniques were used to analyze the collected data. The results of the study revealed that FDI has a positive impact on the economic growth of Cambodia. The study recommends that government should bring reforms in the domestic market to attract more FDI in Cambodia.

Alabi (2019) investigated the impact of FDI on economic growth in Nigeria. Secondary source of data was employed in this study from 1986 to 2017 which were sourced from CBN Statistical Bulletin (2017) published in 2018 and World Development Indicator published in 2019. Descriptive and regression analyses were used as the estimation techniques. The findings of the study revealed that the coefficient value of LFDI is 0.633506 and its p-value is 0.0002 implying that a unit increase in LFDI will increase LGDP with the value of 0.633506. The coefficient value of RINTR is 0.004127 with p-value of 0.310 indicating that a unit increase in real interest rate will increase gross domestic product, but it is not significant. Also, LDI coefficient value is 1.758036 with p-value of 0.0688 implying that a unit increase in domestic investment will increase gross domestic product positively with the value of 1.758036 which is significant at 10% but not significant at 5% alpha level. The coefficient value of exchange rate is 0.835206 with the p-value of 0.0000 signifying that exchange rate is positive and significant to economic growth. It was concluded that foreign direct investment was positive and significant to economic growth of Nigeria while the domestic investment was also positive but not significant at 5% alpha level. Okegbe, Eejiofor and Ofurum (2019) evaluated the extent to which FDI has contributed to the GDP in Nigeria from 2000 to 2017. In the course of this study, three hypotheses were formulated in line with the objectives of the study. Ex-Post Facto research design was employed for the study. Regression analysis technique was adopted. The study revealed that FDI on financial sector has positive and significantly affected GDP in Nigeria. It also showed that FDI on oil sector has positive and significantly affected GDP in Nigeria. Another finding is that FDI on non-oil sector has positive and significantly affected Gross Domestic Product in Nigeria. The study therefore concludes that inflow of FDI into the Nigerian economy for the stipulated period this research was carried out (2000-2017), showed that FDI was a major contributor to economic growth of the nation. Based on the findings, the study recommended among other things that Policy makers should devise strategies to increase the FDI on financial sector and offer incentive for long investing and listing on the stock market so that the main objective of the government to stimulate growth will be fulfilled.

Obi-Nwosu, Ogbonna and Ibenta (2019) examined the role of FDI on manufacturing capacity in Nigeria. Secondary data were sourced from CBN Statistical bulletin of various years for foreign direct investment, exchange rate, inflation rate and manufacturing capacity for the period of 1984 to 2017 and were subjected to ADF Unit Root test, Johansen Co-integration and Multiple OLS Model. The study discovered that FDI and exchange rate were able to impact manufacturing capacity significantly while inflation rate were unable to play significant role on manufacturing capacity in Nigeria. There is also the presence of long run relationship between the variables of study within the period. Thus, the study concludes that FDI plays significant role on the manufacturing capacity in Nigeria. Hence, the study recommends improvement of the investment climate for existing domestic and foreign investors through infrastructure development, provision of services and changes in the regulatory framework by relaxing laws on profit repatriation, improve security situation, address issues that threaten the unity of the country, consider investment agenda of the economy above political interest or affiliation. Etale and Sawyerr (2020) examined the effect of FDI inflows on economic growth of Nigeria, using secondary data for the period 2001 to 2018. The study adopted GDP as the indicator of economic growth and the dependent variable, while FDI, foreign portfolio investment and exchange rate were used as explanatory variables. The data on the study variables covering the period 2001 to 2018 were collected from the CBN Statistical Bulletin. The study employed descriptive statistics and multiple regression analysis technique. The results of analysis revealed that FDI, foreign portfolio investment and exchange rate had significant positive influence on gross domestic product. Based on the results of the empirical analysis, the study concluded that foreign investment inflows have made the desired positive impact on the growth of the Nigerian economy. However, a lot still need to be done to create conducive investment climate to attract sufficient amount of foreign investors into the productive sectors of the Nigerian economy. The study recommended that the regulatory authorities should formulate policies and create the enabling environment to attract foreign investments into Nigeria.

Theoretical Framework

Dependency Theory

According to Aremu (2005), dependency theory maintains that, the poorness of developing countries is due to: imperial neglect; overdependence upon primary products as exports to developed countries; foreign investors,, malpractices, particularly through transfer of price mechanism; foreign firm control of key economic sectors with crowding-out effect of domestic firms; implantation of inappropriate technology in developing countries; introduction of international division of labour to the disadvantage of developing counties; prevention of independent development strategy fashioned around domestic technology and indigenous investors; distortion of the domestic labour force through discriminatory remuneration; and reliance on foreign capital in form of aid that usually aggravated corruption. Furthermore, the dependency theoristsalso focused on the several ways by which, FDI of multinational corporations distort developing nation's economy. Some scholars of this theory believed that, distortive factors include the crowding out of national firms, rising unemployment related to the use of capital-intensive technology, and a marked loss of political sovereignty (Umah, 2007). It has also been argued that FDI are more exploitative and imperialistic in nature, thus ensuring that the host country absolutely depends on the home country and her capital (Anyanwu, 1993). This theory from its points of analysis could be discovered that it creates negative relationship between FDI and economic growth of the developing countries. The theory is of great belief that the economic involvement of developed countries into developing nations under multinational companies and FDI will surely resort to economic disadvantages of developing nations.

Endogenous Growth Models Theory

This research work is anchored on endogenous growththeory credited to Romer (1986). Helpman (2004) argues thatendogenous growth theory emphasized two critical channelsfor investment to affect economic growth: Firstly, through theimpact on the range of available products, and secondly,through the impact on the stock of knowledge accessible forresearch and development. Economic models of endogenousgrowth have been applied to examine the effect of FDI oneconomic growth through the diffusion of technology (Khaliq & Noy, 2007).FDI can also promote economic growth through creation ofdynamic comparative advantages that leads to technological progress. Romer (1990) and Grossman and Helpman (1991)have worked on Romer's (1986) model and assume thatendogenous technological progress is the main engine ofeconomic growth. Romer (1990) argues that FDI acceleratese conomic growth through strengthening human capital, the most essential factor in Research and Development effort.

Grossman and Helpman (1991) emphasize that an increase incompetition and innovation will result in technologicalprogress and increase in productivity and, thus, promoteeconomic growth in long run.In contrast to all these positive conclusions, Reis (2001)formulated a model that investigates the effects of ForeignDirect Investment on economic growth when investmentreturns may be repatriated. She states that after the openingup to FDI, domestic firms will be replaced by foreign firm inthe Research and Development sector. This may decreasedomestic welfare due to the transfer of capital returns toforeign firms. Furthermore, Firebaugh (1992) lists severaladditional reasons why FDI inflows may be less profitablethan domestic investment and may even be detrimental. According to the study, the country may gain less from FDIinflows than domestic investment, because of multinationalsare less likely to contribute to government revenue; FDI isless likely to encourage local entrepreneurship;multinationals are less likely to reinvest profits; are lesslikely to develop linkages with domestic firms; and are morelikely to use inappropriately capital-intensive techniques.FDI may be detrimental if it crowds out domestic businessesand stimulates inappropriate consumption pattern.

Neoclassical Theory

Neoclassical theory assumes the notion that long term investment is a great determinant of the economic growth of the country, endogenous growth model theory explained that physical investment is not a measure of economic growth of a country but the effectiveness and efficiency in the use of these investments. Economic models of endogenous growth have been applied to examine the effects of FDI on economic growth through the diffusion of technology (Barro, 1991). Romer (1990) argues that FDI propels economic growth through strengthening human capital, the most essential factor in R&D effort; while Grossman and Helpman (1991) emphasize that an increase in competition and innovation will result in technological progress and increase productivity and, thus, promote economic growth in the long run. From the analyses made under this theory, it can be discovered that the theory suggests a better relationship between the FDI and economic growth of the developing countries.

METHODOLOGY

The study uses the Central Bank of Nigeria statistical Bulletin as a source of information in the quest to establishing the effect of Foreign Direct investment on Nigeria economy. Data used was in form of secondary data and the following data was used Inflation Rate, Exchange rate and GDP (Gross Domestic Product). The data was analyzed using Least Regression method and the Least Square Regression was used to establish the relationship between the Dependent variable Gross Domestic Product and the Independent variable- Exchange rate and Inflation rate.

The model specification is :
GDP = f (EXR+INFL) where
GDP = Gross Domestic Product used as proxy for FDI.
EXR Exchange Rate
INFL = Inflation Rates
The model has been expressed in an econometric function.
$GDP = a_o + a_1 + a_2EXR + a_3\ INFL + u$
Where a_o is the constant and a_1, a_2, a_3, are the coefficients of the independent variables while u is the stochastic error term.

4. RESULT AND DISCUSSIONS

Table 1: Descriptive Statistic

average

	GDP	EXR	INFR
Mean	28720.25	95.60707	20.36250
Median	9733.197	115.2551	12.55000
Maximum	113711.6	305.7901	72.80000
Minimum	202.4362	2.020575	5.400000
Std. Dev.	35400.52	79.07182	18.40563
Skewness	1.088748	0.557712	1.574602
Kurtosis	2.799582	2.852730	4.075764
Jarque-Bera	6.375543	1.687815	14.76634
Probability	0.041264	0.430027	0.000622
Sum	919048.0	3059.426	651.6000
Sum Sq. Dev.	3.88E+10	193823.0	10501.78
Observations	32	32	32

Table 1 present the descriptive statistics for both the dependent and explanatory variables of the study. The number of observations for the study reflects a value of 32 indicating that the number of observations for the study is made up of 32 years (1987-2017). The table also shows the mean of GDP EXR and INFR as 28720.25, 95.60707 and 20.36250. One important observation is that both the independent variables and the dependent variables has mean value higher than that of its standard deviation.

Table2

Dependent Variable: GDP
Method: Least Squares
Date: 03/30/21 Time: 15:00
Sample: 1986 2017
Included observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXR	350.0300	27.15157	12.89170	0.0000
INFR	-137.2340	122.8130	-1.117423	0.2727

R-squared	0.763870	Mean dependent var	28720.25
Adjusted R-squared	0.755999	S.D. dependent var	35400.52
S.E. of regression	17486.60	Akaike info criterion	22.43672
Sum squared resid	9.17E+09	Schwarz criterion	22.52833
Log likelihood	-356.9875	Hannan-Quinn criter.	22.46708
Durbin-Watson stat	0.167407		

HYPOTHESIS TESTING

The formulated hypothesis is stated below:
$H0_1$: Foreign Direct Investment does not have significant effect on exchange rate in Nigeria.
$Ho_{2:}$ (Hull) Foreign Direct investment does not have significant effect on inflation in Nigeria.

Decision Rule: if the p- value is less than 5% criticalvale the null hypothesis is rejected.
Based on the decision rule, for $H0_1$ since the p- value is greater than the critical value the null hypothesis is rejected. Based on the decision rule for $H0_2$ since the p- value is less than the critical value the null hypothesis is rejected, and we are accepting the alternative hypothesis which is that FDI have significant effect on Inflation in Nigeria. The table 2 reveals statistically insignificant relationship between interest rate, inflation rate and GDP. The test of goodness of fit reveals that the estimated relation has a positive fit. While both the R2 and adjusted R2 which stands at 76% and 75.59% respectively, reveal that about 75.59% of total variation in GDP can be explained by the regressors (EXR, INFL); the f-statistics, which reveals the joint significance of all estimated parameters in the predicting the values of GDP, Exchange rate and inflation is statistically significant with a value of 27.27 and P- value of 0.0000.

CONCLUSION AND RECOMMENDATION

The study undertook the effect of foreign Direct Investment on Nigeria Economic growth covering the period from 1986 to 2017. Related literature was reviewed as it relates to the subject matter. Based on the finding the study concluded that Foreign Direct Investment has significant effect to economic growth of Nigeria. Also, inflation and exchange rate were significant to influence the economic growth of Nigeria. The study therefore recommend that Government should re-strategies her policy by continuous improvement of business environment through the provision of the necessary infrastructure which will reduce the cost of doing business, increase productivity and enhance technological transfer in Nigeria. A related issue on the business environment is the importance of the fight against corruption. Institution such as Economic and Financial Crime Commission (EFCC) and others should be strengthened as this will convince the drivers of FDI that Nigeria is a safe place to channel their investment.

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Effect of Pension Fund Administration on Capital Market Development in Nigeria

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Abstract

This study assesses the effect of pension scheme fund administration on capital market development in Nigeria.Investments are required for the growth and the sustainable development of any economy and the capital market provides such a platform for the mobilization and allocation of savings critical to growth and development. The pension fund is a long-term retirement benefit for employee thus, the objective of the study is to examine the connection between pension fund and capital market development in Nigeria using the ex-post facto research design. Data used for the study was sourced from the CBN annual statistical bulletin. The Ordinary Least Square Regression (OLS) was used in the analysis of data. Findings from the study revealed that pension scheme fund significantly impact on the market capitalization (MCAP), all share index (ASI), volume of transaction (VOT). The study recommends the need for the use of Information Communication Technology (e-channel payments) for expansion of collection and disbursement methods.

Keywords: Pension Fund, Capital Market Development, Defined benefit, Fund management, Performance measurement

INTRODUCTION

The concept of pension has often been a subject of debate. This is primarily because pension issues are connected to many areas of economic and social policies, thus making their reform and administration a difficult task to undertake. Pension scheme was borne out of a desire to help households achieve an allocation of life resources by smoothing consumption over lifespan, thus providing payment that ensures that a retiree's standard of living is not much different from what was obtained in the period immediately preceding his retirement. This is achieved by transferring resources from one's working life to post-retirement when income dries up (Modigliani and Muralidhar, 2004). Reischaver (1988) in Ugwoke and Ogoegbunam (2013) stated that the primary reasons for a state to provide a pension scheme is the belief that many citizens are myopic, thus lacking the information necessary to enable them accumulate adequate resources for retirement. More so, there exists an absence of developed insurance markets owing to informal deficiencies and capital markets that put annuities beyond the reach of the average man. Moreover, among the low income group, their lifetime incomes may be too low to cover minimally adequate consumption levels during their retirement as well as their working years

The attention of policymakers in Nigeria is now on pension fund as a means of facilitating infrastructural development that will facilitate economic growth and development. In line with this, Ministry for Works, Power and Housing in Nigeria suggested that government should access the contributory pension for infrastructural development. The pension fund has grown to over N2 Trillion in 2016. Pension funds have been known to be one of the most important institutional investments in the world capital markets. The colonial administration introduced the administration of pension in Nigeria by 1951 through the legislation of the Pension Ordinance (retroactively from January 1946). The Ordinance provided the opportunity of gratuity and pension payment during retirement for retirees of public establishments (Ahmad,2006). In 1961, a scheme known as the National Provident Fund (NPF) was introduced as the foremost retirement benefit structure that caters to pension issues in private organizations and it made provision for single lump sum retirement benefit for the employees in the private organisations in Nigeria. In Nigeria, the pension system prior to 2004 was characterized with many problems which make the payment of the retirement benefit a failure in Nigeria. Koripamo-Agari (2009) and Yunusa (2009) pointed out that the major weaknesses of pension scheme was lack of adequate and timely budgetary provision coupled with rising life expectancy, increasing number of employers, poor implementation of pension scheme in the private sector due to inadequate supervision and regulation of the system and too many private sector employees were not even covered by the form of pension scheme. These problems associated with payment of pension in Nigeria necessitated the government during Obasanjo regime to be reformed or reviewed which gave birth to the pension reform Act of 2004. Elumelu (2005) posits the 2004 Pension Reform Act established a uniform contributory; private sector managed and fully funded pension system for both the public and private sector of the country.

According to Edogbanya, (2013), the Pension Reform Act 2004 was also established to address the manifested loopholes in the old defined benefit pension scheme and provide adequate resources to retirees after retirement from the service. The large capital pool demands that there should be sound and uniform investment decision making to ensure that value is added to Retirement Saving Account (RSA) contribution. Investment is normally done in the presence of numerous risk mostly political, markets and economic in nature. Investment and market analysis of these Pension Fund Administrators (PFAs) are always propelled to ensure that there is safeguard and safety of these pension assets. The fund accounting organ of PFAs record every bit of inflow and outflow of pension assets in and out of the entity fund. In light of the foregoing, this study seeks to assess primarily, the impact of pension scheme fund on the economic growth of Nigeria. Economies require investments for sustainable growth and development. The capital market offers the avenue for mobilization and allocation of savings and investment critical to the sustainable growth and development of any economy (Alile 1984 & 1997; Anyanwu 1998; Equakun 2005; Osaze 2000 The capital market mobilizes the savings of economic agents like pension funds and allocate such to long-term investment in the economy by providing avenue for firms and governments to sell stocks and bonds for self-sustained economic growth (Iyola, 2004; Nwaolisa, Kasie&Egbunike 2013). The market is a major institution where long-term funds from the surplus sectors are mobilised, channelled to funding firms and government programmes that can propel economic growth and development (Chinwuba& Amos 2011; Nyong 1997; Osaze and Anao 1999; Ilaboya and Ibrahim 2004). The Nigerian stock market has continued to grow from the market capitalization of ₦5billion in 1981 comprising ₦3.1billion of government stock and ₦1.9billion equities which has increased to ₦5,248billion of government bond, ₦145billion of company's bond, ₦4.5billion of Exchange Trust Fund (ETF) which was introduced in 2011 and ₦11,477.7billion of equities with a total market capitalization of ₦16,875.1billion in December 2014 (CBN, 2014).

Despite the growth of the Nigerian capital market, the expected effect on long term projects like housing scheme, power, road and medical facilities are still underdeveloped. Nigeria still lacks basic infrastructural facilities such as good road networks, portable water, affordable housing scheme, proper education and facilities, adequate power supply and medical facilities (Tule, Okafor, Obioma, Okorie, Oduyemi, Muhammad & Olaoye 2015). As a result of the foregoing discussion, the objective of the paper is to examine relationship of pension fund and capital market development to ascertain the significance of the relationship. Capital market provides the mechanism for the mobilisation and channelization of surplus funds for firms and government to foster economic growth and development while pension fund is a long term retirement benefit for the employee, pension fund can be therefore be accessed to finance long term projects. So, the contribution of the study is that it takes into account the contributory pension fund period, study the association among pension fund and capital market development in Nigeria and fills the gap of few research studies from Nigeria on pension and capital market development. The empirical model used quarterly data over the periods of 2006-2018, consisting of total pension fund assets and market capitalisation as proxy for pension fund and capital market development respectively. The study employed the Auto-Regressive Distributive Lag (ARDL) co-integration procedure to capture the long-run relationship and rate at which disequilibrium is corrected.

LITERATURE REVIEW

Conceptual Issues

The Contributory Pension Scheme (CPS) was established in 2004 to cover public and private sector employees in Nigeria. Minimum of 8% is contributed by the employee and a minimum 10% is contributed by the employer from the employee's monthly emolument. The employer may contribute to the staffs but the total contribution should not be more than or equal to 20% of the employee's monthly emolument. The scheme allows for voluntary contributions to the retirement savings account. In addition to the retirement contributions, there employer should also maintain a group life insurance policy of not less than three folds of the annual emolument of employee. The Contributory Pension Scheme came into effect in Nigeria when the pension law was reformed in 2004 with the objectives as stated in PRA 2014 and PENCOM 2007 to include the establishment of identical rules, regulations and standards for management and payment of gratuity and pension for public and private sector workers; ensure that retiree receives his/her gratuity and pension regularly; enable employees the freedom to appoint their preferred licensed Pension Fund Administrator to manage their pension assets; support workers to save for their maintenance during retirement in order to reduce old-age poverty; and ensure strong regulatory and supervisory structure for the pension industry. Every employee opens a Retirement Savings Account with an accredited Pension Fund Administrator of choice and notifies the employer of the chosen administrator which specifies a Pension Fund Custodian for the employee. The employee's monthly contribution is remitted into the retirement savings account in 7 working days after the salary payment day. Upon receiving retirement savings, the pension fund custodian will notify pension fund administrator to credit retirement savings account of the employee.

Concept of Pension scheme fund

Pension represents the amount of money paid to retirees for economic maintenance for past services rendered to the organization (Ijeoma&Nwufo, 2015). Pension is a vital social security scheme for employees in both public and private sectors of the economy. It can contribute to a better environment for economic growth and development since it connotes improvement on the welfare and standard of living of the citizens of sovereign nations by reducing poverty and under development. According to Adebayo and Dada (2012) pension consists of lump sum payment paid to an employee upon his disengagement from active service. Pension provides an employee a level of economic benefit when he or she retires from employment. Moreover, Ilesami (2006) opines that pension schemes are social security maintenance plan for workers after their disengagements as employees through retirement. In addition, Ogwumike (2008) opined that over the years, existing pension schemes in Nigeria were bedevilled by many problems; the most prominent of these problems included the inability to pay pension to retirees as and when due, and the huge preliminary and non-preliminary costs associated with the implementation/administration of the schemes which evidently made them unsustainable.

Pension Fund Operator

Pension Fund Administrators (PFAs) and Pension Fund Custodians (PFCs) are the two (2) main pension fund operators as stipulated in PRA 2014. Additionally, to cater for the previous pension arrangement, the Nigeria Social Insurance Trust Fund (NSITF) and Closed Pension Fund Administrators continue to exist under the supervision of Pension Commission and subsequent employees shall join the new scheme PRA 2014. Employees are provided Personal Identity Number (PIN) after opening their retirement savings account with a licensed pension fund administrator. Pension fund administrator will manage and invest the pension fund assets, keep related books of account on pension fund assets, provide regular information (investment, returns, account balances, statements and performance indicators) to PENCOM and beneficiaries, pay gratuity and pension to retired employees (Amoo 2008 in Gunu 2012).

Pension Fund Custodian

The pension fund custodian is a duly licensed private institution that is in-charge of the pension funds and assets on behalf of the beneficiary. Their function includes receiving of the total pension contributed and remitted by the employer, notifying the pension fund administrator of the remittance. Also, settle the transactions and perform other activities relating to the administration of pension fund investments on behalf of the pension fund administrator, provide data, information and statistical analysis of investments and returns to the PFA and PenCom.

The Concept of Capital Market

The capital market is basically a framework for exchange. In traditional Africa and in most other societies markets have precise locations, and trading activities takes place at precise times. The capital market is not really a market in the traditional sense. To Gaumnitz et al, (1995) capital market is a complex of institutions and mechanisms through which intermediate funds and long term funds are pooled and made available to business, government, and individuals already outstanding are transferred. Capital market is defined as the market where medium to long-term finance can be raised (Akingbohungbe, 1996).
The instruments traded in the market are government securities, corporate bonds and shares (stock). Capital market offers a variety of financial instruments that enable economic agents to pool, price and exchange risk. Through assets with attractive yields, liquidity and risk characteristics, it encourages saving in financial form. This is very essential for government and other institutions in need of long term funds (Nwankwo, 1999).

Empirical Review

The literature onimpact of the Pension scheme fund on the Nigerian Capital Market has been building up over time and this section reviews these existing studies in this regard. In their research, Meng and Pfau (2010) employed a panel regression model in investigating the impact of pension funds on capital market development across 32 developed and emerging market countries. The result revealed a positive relationship between pension fund and capital market development. However, their regression result went further to evidenced that the impact of pension fund on capital market development is only significant for countries with high financial development, and Pension funds do not impact capital market development in the countries with a low level of financial development. The results suggest that countries with 'low' financial development should reconsider the management approach and investment strategies for their pension funds. In Nigeria, Gunu and Tsado (2012), analyzed the contribution of pension scheme fund to economic growth in Nigeria for the year 2007-2010 using descriptive statistics, percentage and charts, they found that gradual increase in the proportion of pension fund to total market capitalization is 2.36% in 2007 and raised 4.5% in 2010, which is an indication that pension scheme fund has enhance mobilization of saving which translate to economic growth. This also agrees with submissions of the other studies.

Contrary to the findings of the other studies, Madukwe, Obinna Darlington, (2012) investigated the Effect of Pension scheme fund on Capital Market in Nigeria. Thetime series data used in this study were for a period of seven years (2006 - 2012). To capture the objective of thestudy, the researcher employed Pairwise Correlation model to determine the significance of the relationshipbetween the Pension Assets under Management (AUM) and Market Capitalization (MC), and Local OrdinaryShare (LOS) of the Pension scheme fund and Market Capitalization (MC) in Nigeria. The Coefficient ofDetermination (r2) was used to determine the actual effect of Pension Assets under Management (AUM) on MarketCapitalization (MC). It was also used to determine the effect of Local Ordinary Share (LOS) of the Pension scheme fund on Market Capitalization in Nigeria. The econometric results indicated that AUM had nosignificant effect on MC in Nigeria. The econometric result also evidenced that LOS of the Pension scheme fund had no significant effect on MC as majority of the pension fund asset is held by Federal Government as bond. The insignificance effect of AUM on MC could also be as a result of economic meltdown that strikes theNigeria economy between the periods of 2008 to 2010. From the result of the analysis, the researcher discoveredthat Pension scheme fund had no significant impact on Capital Market in Nigeria. It was establishedthat the pool of funds accumulated by the national Pension scheme fund were invested and spread amongdifferent assets, but it had no significant effect on the growth of the Nigeria Capital Market during the periodunder review.

Sule and Ezugwu (2009) sought to evaluate whether or not the application of the Pension scheme fund has an impact on employee retirement benefits of quoted firms in Nigeria. In line with this objective, a hypothesis was formulated. The population of the study was the one hundred and eighty-two (182) firms quoted on the first-tier market of the Nigeria Stock Exchange and ten (10) quoted firms selected as sample size based on judgmental sampling. The study utilized data from secondary source. Data were obtained from the annual accounts and reports of the (10) quoted firms that make up the sample of the study. The time frame for the study was ten years, covering the period 1996-2005. The technique of analysis in the study was the Student's t – test for paired observations. They concluded that even though the application of the pension scheme fund has positive impact on employee retirement benefits of quoted firms in Nigeria, the study recommends an effective monitoring/ supervision and enforcement of the provisions of the Pension Reform Act, 2004.

Madukwe (2015) investigated the Effect of Pension scheme fund on Capital Market in Nigeria. The time series data used in this study were for a period of seven years (2006 - 2012). To capture the objective of the study, the researcher employed Pairwise Correlation model to determine the significance of the relationship between the Pension Asset under Management (AUM) and Market Capitalization (MC), and Local Ordinary Share (LOS) of the Pension scheme fund and Market Capitalization (MC) in Nigeria. The Coefficient of Determination (r2) was used to determine the actual effect of Pension Asset under Management (AUM) on Market Capitalization (MC). It was also used to determine the effect of Local Ordinary Share (LOS) of the Pension scheme fund on Market Capitalization in Nigeria. The econometric results indicated that AUM had no significant effect on MC in Nigeria. The econometric result also evidenced that LOS of the Pension scheme fund had no significant effect on MC as majority of the pension fund asset is held by Federal Government as bond. The insignificance effect of AUM on MC could also be as a result of economic meltdown that strikes the Nigeria economy between the periods of 2008 to 2010. From the result of the analysis, the researcher discovered that Pension scheme fund had no significant impacted on Capital Market in Nigeria. It was established that the pool of funds accumulated by the national Pension scheme fund were invested and spread among different assets, but it had no significant effect on the growth of the Nigeria Capital Market during the period under review.

METHODOLOGY

The study used simple linear regression to define the dependent variables using the explanatory variables with the t-test statistics used to test the study's hypotheses. Data analysis here was done with the aid of Econometric view (E-views), version 9. Furthermore, descriptive statistics was utilized to summarize the collected data in a clear and understandable way using numerical approach. The study further adopts the use of correlation analysis to ascertain the relationship between the dependent and explanatory variables, and to investigate the direction of such relationship.

RESULT AND DISCUSSION

In a bid to undertake this study, various descriptive statistics of the data used were examined. The descriptive statistics of data series gives information about simple statistics such as mean, median, minimum value, maximum value and the distribution of the sample measured by skewness, kurtosis and the Jaque-Bera statistic. Table 4.2 presents the descriptive statistics of data employed in this study. It is worthy of note that all data series used for econometric investigation ranged from 1990 to 2015.

Table 4.1: Descriptive Statistics

	MCAP	ASI	VOT	PS
Mean	5100.515	208253.5	896437.8	77.64057
Median	1062.100	163150.6	536783.5	45.62303
Maximum	19077.40	605096.4	3535631.	346.2200
Minimum	16.30000	5083.900	39270.00	0.000000

Std. Dev.	6454.912	180130.1	1010800.	88.47026
Skewness	0.949897	0.693518	1.248669	1.220450
Kurtosis	2.390747	2.501211	3.726479	4.224166
Jarque-Bera	4.312104	2.353713	7.328181	8.077953
Probability	0.115781	0.308246	0.025627	0.017615
Sum	132613.4	5414590.	23307382	2018.655
Sum Sq. Dev.	1.04E+09	8.11E+11	2.55E+13	195674.7
Observations	26	26	26	26

Source: *Researcher's Computation Using E-view, Version 9*

Table 4.2 shows that all the series display a high level of consistency as their mean and median values are perpetually within the maximum and minimum values of these series. Besides, the standard deviation revealed that actual data in the series are not really different from their mean value. The skewness and kurtosis statistics provide useful information about the symmetry of the probability distribution of various data series as well as the thickness of the tails of these distributions respectively. These two statistics are particularly of great importance since they are of use in the computation of Jarque-Bera statistic, which is used in testing for the normality or asymptotic property of a particular series. As a basic assumption usually made in econometric modeling, testing for the normality or asymptotic property of data series becomes necessary since most probability distribution and other test statistics, such as t, F and x^2 are based on this assumption. From Table 4.2, all data are normally distributed at either 1% or 5% level of significance. The normality assumption is further buttressed by the nearness of the mean and median values for these series. The closer the mean and median values of a data series, the greater the probability that such series will be normally distributed.

Unit Root Test

It is not unusual to discover that most time-series variables are non-stationary in their levels and that several of these variables are therefore, represented in their first difference. These time-series are therefore said to be integrated of order one and are denoted by I(1). The level of some variables can be so large or small that they not revert to their mean as expected, hence the need for stationarity test which is also known as unit root test. In view of the fact that the stationarity of a time series affects the consistency of the estimates of the error correction model, it becomes necessary to examine the order of integration of data employed in this study. In testing for the stationarity of variables, the Augmented Dickey-Fuller unit root test was adopted. The Augmented Dickey-Fuller test adopted lag 1. The a priori expectation when using the ADF test is that a variable is stationary at zero level of stationary I(0) when the value of the ADF test statistic is less than the critical value at 1%, 5% and 10%. The table below shows that the ADF test statistics for the entire variable are less than the critical values of 1%, 5% and 10% for all the variables. This implies that all the variables are stationary at level zero (0).

Table 4.2: Summary Result of ADF Test

Variables	ADF Test	Mackinnon 1%Critical Values	Mackinnon 5%Critical Values	Mackinnon 10 % Critical Values	Order of Stationarity	Remark
MCAP	-0.077976	-3.724070	-2.986225	-2.632604	1(0)	Stationary
ASI	-1.473013	-3.724070	-2.986225	-2.632604	I (0)	Stationary
VOT	-2.099767	-3.724070	-2.986225	-2.632604	1(0)	Stationary
PS	1.465572	-3.769597	-3.004861	-2.642242	1(0)	Stationary

Source: *Researcher's Computation Using E-view, Version 9.*

Regression Result of the Estimated Models
Model 1
$MCAP_t = 249.1873 + 62.48444PS_t$
Table 4.3: Ordinary Least Square (OLS) Result.
Dependent Variable: MCAP
Method: Least Squares
Date: 01/22/17 Time: 19:11
Sample: 1990 2015
Included observations: 26

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PS	62.48444	7.689434	8.126014	0.0000
C	249.1873	895.2168	0.278354	0.7831

R-squared	0.733428	Mean dependent var	5100.515
Adjusted R-squared	0.722321	S.D. dependent var	6454.912
S.E. of regression	3401.431	Akaike info criterion	19.17558
Sum squared resid	2.78E+08	Schwarz criterion	19.27236
Log likelihood	-247.2826	Hannan-Quinn criter.	19.20345
F-statistic	66.03210	Durbin-Watson stat	1.835590
Prob(F-statistic)	0.000000		

Source: *Researcher's Computation Using E-view, Version 9.*

The regression line as shown in the result above reveals an intercept of -249.1873. This simply implies that when all the other variables are not considered, MCAP is insignificantly estimated at 249.1873 occasioned by factors not incorporated in this study. However, the estimated model reveals a positive coefficient of 62.48444 in respect to pension scheme fund (PS) indicating a positive impacts on the market capitalization (MCAP) of Nigeria. This implies that, a unit change in value pension scheme fund (PS) will lead to a significant increase in the market capitalization (MCAP) by 62.48444. On the ground of apriori expectation, the positive relationship between the slope coefficient of PS (b_1) and the intercept (b_0) goes in line with apriori expectation. The implication is that, pension scheme fund positively influence the market capitalization of Nigeria.

The coefficient of determination (R^2) is estimated at 0.733428. This suggests that 73.3% of the variation in market capitalization (MCAP) can be explained by the explanatory variable pension scheme fund (PS) while the remaining 26.7% can be explained by other variables not included in the model. Our indicator of generalizability is the adjusted R Square value, which is adjusted for the number of variables included in the regression equation. This is used to estimate the expected shrinkage in R Square that would not generalize to the population because our solution is over-fitted to the data set (Gujarati &Sangeetha, 2007).If the adjusted R Square value is much lower than the R Square value, it is an indication that our regression equation may be over-fitted to the sample, and of limited generalizability.For the problem we are analyzing, R Square = 0.733428 or 73.3% and the Adjusted R Square = 0.722321 or 72.2%. These values are very close (i.e. 73.3-72.2 = 1.1), thus anticipating minimal shrinkage based on this indicator (Gujarati &Sangeetha, 2007).

Also, the F-statistics which is used to test for stability in the regression parameter estimate when sample size increases, as well as the overall significance of the estimated regression model is estimated at 66.03210. This indicates that the predictor variable was as a whole contributing to the variation in the dependent variable and that there exist a statistically significant relationship at 0.000000 (see prob f-stat in table 4.3) between the market capitalization and the predictor variable (PS). This indicates that the overall equation is significant at 0.000% which is below the 5% generally acceptable level of significant in social sciences. This further indicates that the econometric model is fit at 5%. Finally, the Durbin-Watson statistics is estimated at 1.835590. This indicates that the assumption of independent error is not tenable for this study since this figure is less than 2. This shows that the model is not suffering from incidence of autocorrelation so there is no possibility of spurious regression (Durbin & Watson, 1951).

Model 2

$ASI_t = 857113.12 + 1578.303PS_t$

Table 4.4: Ordinary Least Square (OLS) Result

Dependent Variable: ASI
Method: Least Squares
Date: 01/22/17 Time: 19:21
Sample: 1990 2015
Included observations: 26

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PS	1578.303	262.5570	6.011276	0.0000
C	85713.12	30567.33	2.804076	0.0098

R-squared	0.600901	Mean dependent var	208253.5
Adjusted R-squared	0.584272	S.D. dependent var	180130.1
S.E. of regression	116142.4	Akaike info criterion	26.23683
Sum squared resid	3.24E+11	Schwarz criterion	26.33360
Log likelihood	-339.0787	Hannan-Quinn criter.	26.26469
F-statistic	36.13543	Durbin-Watson stat	1.226881
Prob(F-statistic)	0.000003		

Source: *Researcher's Computation Using E-view, Version 9.*

The regression line as shown in the result above reveals an intercept of -85713.12. This simply implies that when all the other variables are not considered, ASI is significantly estimated at 85713.12 occasioned by factors not incorporated in this study. More so, the estimated model reveals a positive coefficient of 1578.303 in respect to pension scheme fund (PS) indicating a positive impacts on the all share index (ASI) of Nigeria. This implies that, a unit change in pension scheme fund (PS) will lead to a significant increase in the all share index (ASI) by 1578.303. On the ground of apriori expectation, the positive relationship between the slope coefficient of PS (b_1) and intercept (b_0) goes in line with apriori expectation. The implication is that, pension scheme (PS) positively influence the all share index of Nigeria.

The coefficient of determination (R^2) is estimated at 0.600901. This suggests that 60.1% of the variation in ASI can be explained by the explanatory variable pension scheme fund (PS) while the remaining 39.9% can be explained by other variables not included in this model. Our indicator of generalizability is the adjusted R Square value, which is usually adjusted for the number of variables included in the regression equation. This is used to estimate the expected shrinkage in R Square that would not generalize to the population because our solution is over-fitted to the data set (Gujarati &Sangeetha, 2007).If the adjusted R Square value is much lower than the R Square value, it is an indication that our regression equation may be over-fitted to the sample, and of limited generalizability.For the problem we are analyzing, R Square = 0.600901 or 60.1% and the Adjusted R Square = 0.584272 or 58.4%. These values are very close, thus anticipating minimal shrinkage based on this indicator (Gujarati &Sangeetha, 2007). Also, the F-statistics which is used to test for stability in the regression parameter estimate when sample size increases, as well as the overall significance of the estimated regression model is estimated at 36.13543. This indicates that the predictor variable was as a whole contributing to the variation in the dependent variable and that there exist a statistically significant relationship at 0.000003 (see prob f-stat in table 4.4) between the all share index and the predictor variable pension scheme fund (PS). This indicates that the overall equation is significant at 0.000% which is below the 5% generally acceptable level of significant in social sciences. This further indicates that our econometric model is fit at 5%. Finally, the Durbin-Watson statistics is estimated at 1.226881. This indicates that the assumption of independent error is not tenable for this study since this figure is not more than 2 which is the standard value. This shows that the model is not suffering from incidence autocorrelation so there is no possibility of spurious regression (Durbin & Watson, 1951).

Model 3

$VOT_t = 337225.7 + 7202.575PS_t$

Table 4.5: Ordinary Least Square (OLS) Result

Dependent Variable: VOT
Method: Least Squares
Date: 01/22/17 Time: 19:23
Sample: 1990 2015
Included observations: 26

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PS	7202.575	1810.393	3.978460	0.0006
C	337225.7	210769.0	1.599978	0.1227

R-squared	0.397411	Mean dependent var	896437.8
Adjusted R-squared	0.372303	S.D. dependent var	1010800.
S.E. of regression	800829.5	Akaike info criterion	30.09849
Sum squared resid	1.54E+13	Schwarz criterion	30.19526
Log likelihood	-389.2803	Hannan-Quinn criter.	30.12636
F-statistic	15.82814	Durbin-Watson stat	1.600247
Prob(F-statistic)	0.000556		

Source: *Researcher's Computation Using E-view, Version 9.*

The regression line as shown in the result above reveals an intercept of 337225.7. This simply implies that when all the other variables are not considered, VOT is significantly estimated at 337225.7 occasioned by factors not incorporated in this study. More so, the estimated model reveals a positive coefficient of 7202.575 in respect to pension scheme fund (PS) indicating a positive impacts on the all share index (ASI) of Nigeria. This implies that, a unit change in pension scheme fund (PS) will lead to a significant increase in volume of transactions (VOT) by 7202.575. On the ground of apriori expectation, the positive relationship between the slope coefficient of PS (b_1) and intercept (b_0) goes in line with apriori expectation. The implication is that, pension scheme (PS) positively influence the volume of transactions (VOT) of Nigeria. The coefficient of determination (R^2) is estimated at 0.397411. This suggests that 39.7% of the variation in VOT can be explained by the explanatory variable pension scheme fund (PS) while the remaining 60.3% can be explained by other variables not included in this model.

Our indicator of generalizability is the adjusted R Square value, which is usually adjusted for the number of variables included in the regression equation. This is used to estimate the expected shrinkage in R Square that would not generalize to the population because our solution is over-fitted to the data set (Gujarati &Sangeetha, 2007).If the adjusted R Square value is much lower than the R Square value, it is an indication that our regression equation may be over-fitted to the sample, and of limited generalizability.For the problem we are analyzing, R Square = 0.397411 or 39.7% and the Adjusted R Square = 0.372303 or 37.2%. These values are very close, thus anticipating minimal shrinkage based on this indicator (Gujarati &Sangeetha, 2007). Also, the F-statistics which is used to test for stability in the regression parameter estimate when sample size increases, as well as the overall significance of the estimated regression model is estimated at 15.82814. This indicates that the predictor variable was as a whole contributing to the variation in the dependent variable and that there exist a statistically significant relationship at 0.00055 (see prob f-stat in table 4.4) between the all share index and the predictor variable pension scheme fund (PS). This indicates that the overall equation is significant at 0.001% which is below the 5% generally acceptable level of significant in social sciences. This further indicates that our econometric model is fit at 5%. Finally, the Durbin-Watson statistics is estimated at 1.600247. This indicates that the assumption of independent error is not tenable for this study since this figure is not more than 2 which is the standard value. This shows that the model is not suffering from incidence autocorrelation so there is no possibility of spurious regression (Durbin & Watson, 1951). This study assesses the impact of pension scheme fund on the performance of the Nigerian capital marketover the period of 1990-2015, using the Ordinary Least Square Regression (OLS) in examining the variables. The empirical results are summarily put as follows; Pension scheme fund (PS) significantly impact on the market capitalization (MCAP) of the Nigerian capital market; Pension scheme fund (PS) significantly impact on the all share index (ASI) of the Nigerian capital market and; Pension scheme fund (PS) significantly impact on the volume of transaction (VOT) of the Nigerian capital market.

CONCLUSION AND RECOMMENDATION

The study analyzes the relationship between pension scheme fund and the Nigerian capital market over the period of 1990 to 2015. The empirical findings shows that pension fund scheme significantly impact on Nigeria's capital market. The result shows that pension scheme fund (PS) significantly impact on the market capitalization (MCAP), all share index (ASI), volume of transaction (VOT) of the Nigerian capital market. It should be taken into consideration that Nigerian's capital market growth is not only influenced by pension scheme but by other factors that were not put into consideration in this research, such factors are shares, bonds etc. This study unequivocally concludes that pension scheme fund has the potential to assist in the diversification of Nigerian capital market revenue sources, thereby providing enough funds for the market growth and development. Based on the findings of this study, the following recommendations are hereby made:

i. The use of Information Communication Technology should be adopted (e-channel payments) for expansion of collection and disbursement methods.
ii. The Pension Fund Administrators (PFAs) should actively engage cooperatives and other bodies in order to lean the best ways for serving low income clients or civil servants'

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Effect of Board Meeting Frequency on Earnings Management of Listed Foods and Beverages Firms in Nigeria

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Abstract

The study is an assessment of the effect of Board meeting frequency on Earnings Management of foods and beverages firms in Nigeria. The expo-facto research design was adopted with reliance on secondary data from annual report of listed firms. The simple random sampling techniques were employed in selecting the 12 firms out of 23 firms for 2010-2019 financial year. To carry out this objective three method of panel regression estimation was used which is random effect by Hausman test which was analyzed using E-views 10. The findings show that board meeting frequency has a negative significant impact on earning management. The study concludes that the board is corporate governance mechanism that reduces earnings manipulation. 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. Finally, the SEC should encourage more frequent meetings by Board of Directors because; the empirical evidence indicates that Board Meetings are associated with low Earnings Management.

Keywords: Board Meeting Frequency, Earning Management, Firms, Board of Directors, Investor

INTRODUCTION

Recently, the modern business environment has been generally acknowledged that it is becomingriskier, more competitive and more uncertain and also it is more difficult to control or predict the factors that will influence the performance of companies (Kuratko and Morris, 2003). As the competitive force increases among companies, some managers may commit frauds for a higher company's earnings performance; hence financial scandals frequently occur due to managers' own interests. Moreover, the financial scandals and frauds cast a doubt on the reliability of the financial statements.Earnings quality has been measured by different researchers and there are many different measures to indicate the earnings quality, such as, investor responsiveness, timeliness, persistence, smoothness, restatements and accruals (Dechow, Ge, and Schrand, 2010). Corporategovernance structures are frequently seen as a major mechanism to guarantee the quality of financial statements, such as the board of directors (Cohen, Krishnamoorthy and Wright, 2002). In order to minimize the number of financial scandals and improve the earnings quality, the board seems more important function its role in organization. Roberts, McNulty and Stiles (2005) stated that the effectiveness and independence of the boards reduce the agency cost by exercising control of decision, which involves monitoring the performance of the management team. The boards should not only control or monitor the management team but also play the role in strategies that include scanning the business environment, developing the business mission, selecting and implementing the choices of the strategies (Hendry and Kiel, 2004). As the boards are increasingly important, it is necessary to classify the characteristics of the boards, and identify the characteristics which make the role of boards in controlling and monitoring more effective. This study seeks to examine the characteristics which can make the boards more effective and contribute a better financial performance for the company.

The basic objective of financial reporting is to provide information about an enterprise that isuseful to a wide range of users in making economic decision. However, the validity of this objective is being questioned by the many users of corporate financial reports because of the probable effects of earnings management on information contents of such reports. Hence, it is a growing issue of concern, threatening the credibility of both the accounting and auditing functions. While the problem of creative accounting is not new, it was one of the key themes in corporate finance and corporategovernance in the 1980s (Merchant & Rocknes; 1994). By the early 1990s, earnings management was well and truly recognized by national and international regulators as one of their major challenges of financial reporting and it has developed geographically both in its practices' complexity and in its nomenclature scarce. Thus, the term preferred in the USA and the most frequent one is that of "earnings management" where as in Europe the phrase "creative accounting" is often used. In the literature, creative accounting can still be found under the name of income smoothing, earnings smoothing, cosmetic accounting or accounting cosmetics, financial crafts or accounting crafts. According to Lin (2006), earnings management involves those techniques which are openly displayed (window dressing) as well as those which are sophisticated ones (off-balance sheet financing). Earnings management as any action from management which can distort profits and which is not a consequence of the economic reality, it actually represents the privilege of the financial engineering. Thus, the economic entity is presenting to the investors or to the prospective investors financial statement passed through the filter of some techniques capable of generating a more favorable image on the market but also the illusion of some more attractive results. A firm can intentionally alter reported financial results, i.e., income statement and statement of cash flows, or reported financial position, i.e., the statement of financial position, in some desired amount and/or some desired direction.

Earnings management is primarily accomplished through accounting transactions that are designed to achieve desired earnings level. Prior research suggests that managers have both personal and business motivations to display impressive or at the very least satisfactory performance in their reports on a consistent basis (DeFond & Park; 1997; Greenfield, Carolyn, Norman, & Wier; 2008). However, due to a variety of reason, the sustainability of such a performance is sometimes impossible. In these circumstances, managers may decide to use their discretions in the application of accounting principles and procedures which can result in alteringthe business operations to a more favorable outcome. In the Nigerian corporate environment, the presence and negative effect of earnings management on credibility of financial reporting and corporate failure has also been experienced. For example, a report of creative accounting scandal in African Petroleum PLC showed that the financial statements of the company did not fairly present the company's financial position (Oyejide & Soyibo; 2001). In November 2006, an accounting scandal in Cadbury Nigeria Plc also raised more questions than answer about creative accounting (Itsueli, 2006). Also, earnings management practice has been increasing in recent years in the Nigerian banking industry to attract unsuspecting investors, or obtain undeserved accounting-based rewards by presenting an exaggerated misleading or deceptive state of bank financial affairs. Earnings manipulation makes financial reporting to be of less quality and reduces the level of confidence of investors in their decision making process (Shehu & Abubakar, 2012). Nowadays, most users of financial statement do not count accounting earnings as a major yardstick for performance evaluation as well as for decision-making. Evidences from literature and financial scandals around the globe prove that Earnings Management reduces investors‟ confidence. On the other hand, Board of Directors are regarded as an important internal corporate mechanism responsible for mitigating agency conflicts between managers and shareholders by helping in constraining the level of Earnings Management. Therefore, one of the major roles of Board of Directors is to monitor and reduce the incidence of Earnings Management (Hashim, Ariff & Salleh, 2013). They are responsible for monitoring managers on behalf of shareholders and overseeing the financial reporting processes.

According to CBN (2006), a survey by SEC indicates that weak corporate governance accounted for the corporate failures in Nigeria, as only 40% of the listed companies recognized the code of corporate governance in place The list of recent cases of creative accounting practices seems to be growing as many more corporate bodies in Nigeria are still being investigated (Akenbor & Ibanichuku, 2012). The collapse of African International Bank, Savannah Bank, Cadbury Nigeria, the account manipulation of African Petroleum (AP) and the sack of five banks‟ managers have all been linked to Earnings Management in Nigerian public companies (Odia & Ogiedu, 2013). The objective of this study is to examine effect of board meeting frequency on earnings management of listed foods and beverages firms in Nigeria

LITERATURE REVIEW

Conceptual Framework

Concept of 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 (2012) 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).

To obtain the desired earnings level, firms could choose to manage earnings through deviating from the normal business activities although this may affect the future economic performance of the firm negatively (Rowchowdhury, 2006). Previous studies such as those of Bange and De Bondt (1998), Rowchowdhury (2006) and Pincus and Rajgopal (2002) have identified several methods to manage earnings through deviations fromnormal business activities. These methods can either be divided into deviations from operating and investing activities, and deviations from financing activities. Firms could deviate from operating and investing activities by, for example, altering the level of discretionary expenditures, such as research and development expenditures (R&D) and selling, general and administrative expenditures (SG&A). Under IFRS research and advertising costs are expensed in the period in which they are incurred. Therefore, by reducing these costs reported income is immediately affected. Developments costs are, in first instance, expensed rather than capitalized due to uncertainty issues regarding the developing product or service (IASB 1998, IAS No. 38, para. 57). Therefore, postponing development projects can increase earnings as well. Furthermore, operating and investing activities can be deviated from if firms overproduce, provide price reductions to boost sales volume and build up inventory to lower the cost of goods sold which influence earnings (Rowchowdhury, 2006). If firms overproduce, costs of goods sold per product decrease since the fixed overhead costs will then be spread over a larger number of products. Moreover, firms can also sell fixed assets to manage earnings if the assets are sold with a gain. The last option that researchers identify to alter the operating and investing activities is by restructuring them. For example, firms might enter in business acquisitions or engage either in operational or capital leases with the main objective to increase reported income (Xu. 2007; Dye, 2002).

Firms might also choose to manipulate earnings by deviating from financial activities. Stock options are granted if actual earnings are just below the earnings target as compensation through stock options does not involve cash (Matsunaga 1995). Granting these options results in a decrease of earnings per share (EPS). To avoid this decrease or dilution of EPS, stocks are repurchased which then leads to increase in EPS. Firms also acquire financial instruments to hedge themselves from earnings decreases. Debt-to-equity swaps are used as well so that the swap gain increases reported income (Hand, 1989). Several possibilities exist to alter the level of earnings through influencing the cash flow from operations. Moreover, earnings can be manipulated as well by changing the level of accruals. However, there is evidence that firms engage in earnings management (Daniel, Cohen, Aiyesha,Dey, & Thomas Z-Lys, 2008; Cohen &Zarowin, 2010; Graham, Harvey, &Rajgopal, 2005; Katherine, Ann, Gunny, 2005; Roychowdhury, 2006; Zang, 2011; Zhang, 2008; Zhu, Lu, Shan, &Zhang) and earnings management may have greater effects than accrual earnings management because it alters firms' behavior and not just their accounting records.

Earnings Management Techniques

There are three broad techniques used to manage earnings: (i) accruals-based earnings management by changing estimates and accounting policies; (ii) activities-based earnings management that has direct cash flow consequences; and (iii) classification shifting-based earnings management such as shifting the classification of core expenses to special items in the income statement.

i. Accruals-Based Earnings Management

Accruals are the difference between earnings and cash flows and are a standard component of a firm's transactions. As an illustration, if a firm makes a sale on credit, the sale is recognized as earnings regardless of whether cash has been received or not. This leads to the creation of a receivable which is cancelled when cash is received in the future (McVay, 2006). Accounting practices allow discretion for managers in the financial information provided. Managers can exploit this by recognizing revenues before they are earned or delaying the recognition of expenses which have been incurred, which results in accruals. Accruals-based earnings management occurs when managers intervene in the financial reporting process by exercising discretion and judgment to change reported earnings without any cash flow consequences. Firms can be aggressive with their accounting choices by bringing forward earnings from a future period, through the acceleration of revenues or deceleration of expenses, thereby increasing earnings in the current period. This creates what is called discretionary accruals in the literature. Since accruals reverse over time, earnings will be lowered automatically by the amount of earnings that was brought forward in the previous period.

ii. Activities-Based Earnings Management

Cohen and Zarowin (2010) explain activities-based earnings management as the actions managers take that deviate from normal business practices, and that these actions are manipulations that affect cash flows. The commonality between these different explanations is clearly the fact that activities-based earnings management is purposeful in nature and has actual cash flow consequences. 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 and Skinner, 2000). Further, managers can delay maintenance expenditures to increase reported earnings. Zang (2012) 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).

iii. Classification-Based Earnings Management

Classification-based earnings management is an earnings management technique whereby core expenses such as general and administrative expenses are shifted to specific accounts in the income statement (McVay, 2006). While this does not change bottom line net income, it does increase core earnings (i.e. earnings from the firm's main business activities less all expenses and revenues from non-core activities) since core expenses will be shifted to the special items section of the income statement and will not reduce core earnings. While this may not seem effective since bottom line net income remains unaffected, it can in fact mislead users of financial statements interested in the core earnings of a firm since recurring income is the focus of analysts and equity investors.

Concept of Board Meetings Frequency

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.

Frequency of Board 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). This inconsistency may be due to the flexibility of the code or based on the matter arises at each firms. This may also affect the magnitude of earnings management of the said firms

Empirical Literature

Garba, Ahmeh and Hamisu (2015) examined the effect of audit committee attributes on activities manipulation of listed manufacturing firms in Nigeria for a period of six years (2008-2013). The study used multiple regressions to analyze the data obtained from Annual Reports and Accounts of listed manufacturing concerns in Nigeria using the residuals of Roychowdhury (2006) to determine Activities Manipulation (AM). Audit committees attributes were used as exogenous variables of the study. The finding reveals that audit committee attributes especially financial literacy is effective in restraining AM, but other audit committee characteristics like independence, meeting, and size were found to be less effective in constraining AM practice of listed manufacturing firms in Nigeria. Therefore, it is recommended that listed manufacturing firms should increase the proportion of members with financial acumen in the audit committee, because they are viable in constraining operational manipulative behaviour. Regulatory authorities like Securities and Exchange Commission, Nigerian Stock Exchange and Financial Reporting Council of Nigeria should embark on their surveillance and monitoring and ensure that, listed manufacturing firms are producing credible and reliable financial statements free from deception and window dressing in Nigeria for the consumption of various stakeholders.

Rokiah, Noor and Kamarul (2018), examined firm characteristics and financial reporting quality; Moderating role of Malaysian corporate governance index. The principle role of financial reporting is to provide investors with useful information for investment decision makings. In this study, we examine whether corporate governance moderates the relationship between firm characteristics and financial reporting quality. We use earnings management as measure for financial reporting quality. This study uses secondary data obtained from Thompson Database. The sample is firms listed on the Main Market of Bursa Malaysia from 2012 to 2015. The results of our study reveal that there is a positive value of abnormal cash flow which indicates that companies do practice earnings management through manipulation of cash flow from operations. Large firms are practicing earnings management. Factors such as many business segments and business complexity have encouraged large firms to manage their earnings by manipulating their cash flow from operation. In contrast, firms with high leverage and firms audited by Big 4 are less likely to involve with earnings management. Interestingly, when corporate governance index is used as moderating variable, our result shows that only firms audited by Big 4 are related to earnings management. In terms of the contribution of the study, this study is important for the development of Malaysian capital market and it help investors to better understand how the impact of corporate governance mechanisms on financial reporting quality varies across firms.

Idris 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.

Uwalomwa, Daramola and Anjolaoluwa (2014) examined the effects of corporate governancemechanism on earnings management in Nigeria. To achieve the objectives of thisstudy, a total of 40 listed firms in the Nigerian stock exchange market wereselected and analyzed for this study using the judgmental sampling technique. Thechoice of the selected firms arises based on the nature and extent of corporatefinancial failures and scandals that has been witnessed in the industry overtime.Also, the corporate annual reports for the period 2007-2011 were used for thestudy. The regression analysis method was employed as a statistical technique foranalyzing the data collected from the annual report of the selected firms. Findingsfrom the study revealed that while board size and board independence have asignificant negative impact on earnings management (proxy by discretionaryaccruals); On the other hand, CEO duality had a significant positive impact onearnings management for the sampled firms in Nigeria. Hence the paper concludesthat firms with larger boards and diverse knowledge are more likely to be moreeffective in constraining earnings management than smaller boards since they arelikely to have more independent directors with more corporate or financialexpertise.

Shehu and Garba (2014) examined effect of governance attributes on real activities manipulation practices of listed manufacturing firms in Nigeria. The study used four variables for audit committee characteristic-audit committee independence, financial literacy, audit committee size and audit committee meetings and four features of board of directors- inside directors, outside directors, gray directors and women directors for the purpose of explaining and predicting real activities manipulation practice by managers in the listed Nigerian manufacturing firms. Longitudinal panel multiple regression is used as a tool of analysis. The probability of Hausman specification test became less than 5% for all regressions, fixed effect model is interpreted as a panel specification. Secondary data was extracted from the audited annual reports of the sampled firms from 2007–2012. The results reveal that outside directors; gray directors and women directors have found to be positively associated with real activity manipulation which implies that, managers' opportunistic manipulative accounting can be constrained or deter by them. While the inside directors could not prevent managers from abusive accounting. On the other hand, audit committee independence; financial literacy; audit committee size and audit committee meetings are significant in checkmating real activities manipulation. By management in preparing financial statements of the sampled firms. It is therefore recommended among others that the regulatory authorities like SEC and NSE should enforce strict compliance with corporate governance best practice for shareholders and other stakeholders' interest to be fully protected. Also, the financial reporting counsel of Nigeria should make it mandatory that board of listed manufacturing firms should increase the proportion of inside directors on the board as they appear to be efficient in deterring manipulative accounting practice of their companies.

Theoretical Review

Stakeholders Theory

Stakeholder theory is considered an extension for the agency theory. The agency theory states that there is an agency relationship between the principal (shareholders) and the agent (management) and that the agent should work on behalf of the principal for their best interest to avoid any conflict that might cause an agency problem (Jensen & Meckling 1976). However, that is a narrow focus that has now developed so managers are now expected to take into account the interests of many different stakeholder groups, like interest groups linked to social, environmental and ethical considerations (Freeman, 1984; Freeman; 2004). So a broader view is created expecting the management to care for the interests of different stakeholders group not only the shareholders in specific (Donaldson and Preston 1995). 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).

Stewardship Theory

Stewardship theory was developed by Donaldson and Davis (1991 & 1993) as a new perspective to understand the existing relationship between ownership and management of the company. Stewardship Theory has been framed as the organizational behavior counterweight to rational action theories of management (Donaldson & Davis, 1991 & 1993). The main assumptions underlying the prescriptions of stewardship theory is that behaviors of the managers are aligned with the interest of the principal. Stewardship Theory places greater value on goal convergence among the parties involved in corporate governance than on the agent's self-interest (Van Slyke, 2006). This theory holds that there is no conflict of interests between managers and owners. In stewardship theory, it stresses top of management as steward whose utility function is maximized when shareholders' wealth are maximized. The steward perceives that the utility gained from interest alignment and collaborative behavior with the principal is higher than the utility that can be gained through individualistic, self-serving behaviors (Davis et al., 1997). Stewardship theory is focused on intrinsic rewards that are not easily quantified, such as growth, achievement, and duty while Agency Theory places more emphasis on extrinsic motivation.

Agency Theory

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

METHODOLOGY

The methodology employed is the expo-facto research design. Ex post facto design is a quasi-experimental study examining how an independent variable, present prior to the study, affects a dependent variable. The target population of the study comprised twenty three (23) foods and beverage covers 2010-2019, however twelve (12) firm were randomly selected. The study employed secondary data collection. The study variables were obtained from published audited financial report of these institutions on the internet, for the financial periods stated.

Procedure for Data Analysis and Model Specification

Two method of data analysis will be used in this study. The first method is descriptive analysis. The second method is inferential statistics analysis. This analysis involve; correlation analysis which will be conducted to determine the strength of the linear association between boards meeting frequency on earnings management (EM) of quoted firms in Nigeria. The major reason for using regression and correlation analysis is to be able to model, examine and identify the relationship between the hypotheses. The inferential analyses will also involve the application the appropriate statistical technique of Panel Regression Analysis; this is due to the nature of the data. The Panel regression model consistent with Janeth P. & Swai (2016) was adopted

Pool Regression Model

$EM_{it} = \beta_0 + \beta_1 BMF_{it}, +\mu_{it}$

Where:

EM = Earning Management

BMF = Board Meeting Frequency,

μ_{it} = Error term

Measurement of variables

Earning Management = measured using discretionary accruals (DACC)

Board Meeting Frequency = Number of meetings held by the board of directors

Table 1: Descriptive Statistics Results

	BMF	DACC
Mean	4.208333	0.155840
Median	4.000000	0.117400
Maximum	6.000000	1.559500
Minimum	3.000000	0.010200
Std. Dev.	0.516872	0.171719
Skewness	2.080539	4.909285
Kurtosis	7.138417	38.69018
Jarque-Bera	172.2053	6850.967
Probability	0.000000	0.000000
Sum	505.0000	18.70080
Sum Sq. Dev.	31.79167	3.508983
Observations	120	120

Source: Computed by the Researcher (2021) employing E-Views10

The table 1 above show the mean, median, standard deviation as well as the skewness and kurtosis measures of our variables of interest are given. The mean values indicate that on the average of Board Meeting Frequency (BMF) Discretionary Accrual (DACC) in foods and beverages firm in Nigeria is 4.208 and 0.1558 billion naira respectively. The highest value for BMF and DACC are 6.000 and 1.5595 respectively during the period of study. However, the lowest value for BMF and DACC are 3.0000 and 0.1020 respectively.

Hausman Test (Test between Fixed and Random)

Correlated Random Effects - Hausman Test
Equation: Untitled
Test period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	0.204133	3	0.6582

Source: E-View 10 Output (2021)

***Decision Rule: At 5% level of Significance**

H_0: Random Effect is most appropriate

H_1: Fixed Effect is most appropriate

Based on the probability Cross-section random of 0.65982, the null hypothesis is accepted, thus random effect is most appropriate when compared to fixed effect.

Dependent Variable: DACC
Method: Panel EGLS (Two-way random effects)
Date: 04/18/21 Time: 03:53
Sample: 2010 2019
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	0.270919	0.129331	2.094773	0.0383
BMF	-0.027346	0.030502	-0.896516	0.3718
		Effects Specification		
			S.D.	Rho
Cross-section random			0.006651	0.0015
Period random			0.000000	0.0000
Idiosyncratic random			0.169799	0.9985
		Weighted Statistics		
R-squared	0.006765	Mean dependent var		0.154658
Adjusted R-squared	-0.001652	S.D. dependent var		0.171592
S.E. of regression	0.171734	Sum squared resid		3.480116
F-statistic	0.803742	Durbin-Watson stat		1.340891
Prob(F-statistic)	0.371802			

Source: E-View 10 Output (2021)

From the random effect regression results it is observed that the coefficient of determination for the regression as depicted by the R^2 value of 0.006 suggests that the systematic variation of the dependent variable is accounted for by the explanatory variables. The F-statistic of 0.8037 shows that overall the model of the study is well fitted. This can be further confirmed by the significant p-value (F-statistic) of 0.371802 which shows that the cumulative impact of the regressors was significant at 37 percent, which implies that board meeting frequency of foods and beverages firms in Nigeria has strongly and significantly impacted on the earnings management. Board meeting frequency result showed that it has negative significant effect on earnings management with p-value of 0.3718.

Discussion of Findings

Board meeting frequency have a negative significant correlation with earning management with the p-value of 0.3718, which suggest that firms which board meeting frequent do not reduces earning management. The empirical evidence revealed that board meeting has greatly reduce earning management which is consistent with the result of Garba, Ahmed and Hamisu (2015); Orjinta, Onuora&Agubata (2018) the board meeting frequency is less effective in constraining earnings management practice.

CONCLUSION AND RECOMMENDATIONS

The widespread failure in the financial disclosure has created the need to improve the financial information quality. Consequently, the factors influencing the occurrence of real earning management have been an intense and inconclusive area of research and an interesting issue of discourse. The factors have been identified to be both exogenous and endogenous to the firm. The exogenous factors have been highlighted to include the reporting standards and institutional environment, economic and financial policies and the board spectrum of variables outside of the firm's control. These factors have also not attracted considerable empirical research attention as controlling for the factors to make them amenable for empirical analysis is as a challenge especially in developing economies. The findings show that board meeting frequency has no significant impact on earning management. The study conclude that the board is corporate governance mechanism that reduces earnings manipulation. 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. Finally, the SEC should encourage more frequent meetings by Board of Directors because, the empirical evidence indicates that Board Meetings are associated with low Earnings Management.

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Effect of Capital Structure on Financial Performance of Quoted Non-Financial Companies in Nigeria

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Abstract

A great dilemma for management and investors alike is whether there exists an optimal capital structure and how various capital structure decisions, both short-term and long-term, influence business performance. This paper therefore investigates the effect of capital structure decisions on financial performance using a sample of 10 quoted Non-financial companies on the Nigerian Stock Exchange for a period of five years (2016–2020). The study used secondary panel data contained in the annual reports and financial statements of the quoted non-financial companies. The study examined the effect of debt equity (being the explanatory variable) on return on equity (ROE) and return on assets (ROA) which represents the dependent variables. The panel dataset were analysed using pooled, fixed effect and random effect models while Hausman's test were used to select the appropriate model. Correlation and regression analysis were employed in the statistical analysis that was carried out with the aid of STATA version 13. On both the ROE and ROA models, there is a positive relationship with debt equity ratio. The results showed that the financial performance of firms increases with the increase in the changes in debt in the capital structure. This implies that, the inclusion of debt in the capital structure of a firm positively affect the equity shareholders in terms of firm performance; and this thus supports debt financing in running the firms. The study recommended that firms should increase debt financing in their capital structure in order to enhance financial performance and increase value to the companies' stakeholders.

Keywords: Capital Structure, Financial Performance, ROE, Non-financial, Agency Cost Theory

INTRODUCTION

The quest for firms to expand their activities, maximise their shareholders' wealth and compete effectively in the industry where they operate cannot be over-emphasised. It is an undeniable fact that the going concern and the performance of a firm hinge on some important factors such as: qualified management board, pragmatic strategies, availability of finance, among others. Therefore, for firms to achieve their goals and objectives, taking into cognisance their limited resources, they necessarily need to strategize on how to finance their activities. Basically, the sources of finance available to an entity include: equity, debt, and earnings. Equity refers to the fund invested into a firm by its shareholders. Equity includes paid-up share capital, sharepremium and reserve and surplus (retained earnings) (Pandey, 2010). While debt is the fund sourced from other capital providers, which crystallised at a specified date. Earnings on the other hand, refer to the profit generated by a company in its business activities. However, since earnings may not always be sufficient for an organisation to run its activities due to tax and dividend dependability on it, hence, the major sources of fund available to a firm is equity and debt. The choice of a company's capital structure helps in determining how the operating cash flows can be allocated for every period between the shareholders and debt holders. There has been an unresolved debate over the significance of the choice of capital structure for a company that has been on-going for quite some time. However, in essence, it is about the effect on the total market value of the firm, (the combined value of its equity and debt) of dividing the cash flow stream between debt and equity components. In the past, financial and economic experts believed that increasing leverage of a firm would increase the value up to a certain point. However, beyond that point, any other increases in leverage would also increase the overall cost of capital and decreases its total value in the market, Abor (2007; as cited in Muyundo et al., 2020).

Capital structure refers to the mix of long-term sources of funds, such as debentures, long-termdebt, preference share capital and equity share capital including retained earnings. Capital structure is one of the most complex areas of financial decision making because of itsinterrelationship with other financial decision variables. Effective capital structure decisions can lower the cost of capital, resulting in higher net present value and more projects that are acceptable and thereby, increasing the value of the firm (Abdur, 2015). Empirical evidences assert that firms will select the mix of debt and equity that maximises the value of the firm (Modigliani & Miller, 1958). When an organisation intends to expand its investments, the need to raise funds is inevitable, which may alter its capital structure. An appropriate capital structure is a critical decision for any business organisation. The decision is important not only because of the need to maximise returns to various organisational stakeholders, but also because of the impact such decision has on the survival of the business (Mykhailo, 2013).

LITERATURE REVIEW

Conceptual Framework

Strength of financial position of an organization is called financial performance. Financial analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing relationship between the items of the balance sheet and the profit and loss account. In financial analysis a ratio is used as a benchmark for evaluating the financial position and performance of a firm. Ratio is defined as “The indicated quotient of two mathematical expression” and as “The relationship between two or more things”. Ratios help to summarize large quantities of financial data and to make qualitative judgment about the firm’s financial performance (Jude, 2013). Capital structure is the mixture of debt and equity that a firm uses in financing its business. It is also regarded as a very significant financial variable because it is highly linked to the capacity of the firm to meet its obligations to stakeholders such as shareholders, community, employees and others. Equity finance is the finance that is contributed by the owners of the business towards the capital. It is the one with the most risk. Shareholders are entitled to the shares of the company’s profit, referred to as dividend, and this is following the number of shares held. It is not compulsory, however, to carry dividend payments every time because the company can at times hold part of the profits to support future expansion or use of its business activities. Besides, shareholders also share business risks that may occur and are also the last ones to benefit in the case of company liquidation after settling all debts (Mutegi, 2016).

For quite a long time, financial performance is a measure of how best a company uses the resources available in the generation of revenue. In most cases, it provides the guidelines that direct how decisions will be made in future as far as business development, managerial control and asset acquisition are concerned. It also assists in reflecting on what the management has achieved in monetary terms over a certain period. Such achievements can also be used in carrying out comparisons of similar firms. In addition, financial performance provides a way for the evaluation of business activities in monetary terms that are objective. It helps in showing how well shareholders are at the end of an accounting period as compared to the beginning. This can be well realized through clear analysis of market data or financial ratios taken from financial statements (Zeitun, & Tian, 2007). There are various ways of measuring financial performance. There are therefore many varying absolute and relative indicators that include expenses, revenues, and earnings before interest and tax, net income levels, return on equity and return on assets among many others. In most studies, the frequently used measures of performance are ROA and ROE. ROA explains the return on assets of the company. Firms majorly use it as the overall indicator of financial performance. ROA is arrived at through computation whereby Net Income after Taxes is divided by Total Assets. ROA is, therefore, used in measuring the financial performance of companies. On the other hand, ROE indicates a return on shareholders capital and is arrived at by dividing Net profit after Taxes by Total Equity capital. Furthermore, it explains the level of profitability of companies considering the total sum of invested shareholder capital (Saeedi & Mahmoodi, 2011). Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested (Khatab, Masood, Zaman, Saleem, & Saeed, 2011). It is often viewed as a hybrid measure of firm performance because it incorporates profit which is accounting based and equity which is market based.

Empirical Framework

Several authors across the globe have made attempt to ascertain the impact of capital structure on firms' performance. Lucy et al. (2014) investigates the relationship between capital structure on the performance of non-financial companies listed in the Nairobi Securities Exchange (NSE), Kenya. The study employed an explanatory non-experimental research design, using a census of 42 non-financial companies listed in the Nairobi Securities Exchange. The study used secondary panel data contained in the annual reports and financial statements of listed non-financial companies with data extracted from the hand books for the period 2006-2012. The study applied panel data models (random effects). The regression results from the study revealed that financial leverage had a statistically significant negative association with performance as measured by return on assets (ROA) and return on equity (ROE). The study recommended that managers of listed non-financial companies should reduce the reliance on long term debt as a source of finance. Similarly in Nigeria, Osuji and Odita (2012) examines the impact of capital structure on financial performance of Nigerian firms using a sample of thirty (30) non-financial firms listed on the Nigerian Stock Exchange during the seven (7) year period, from 2004 to 2014. Panel data for the selected firms were compiled and analysed using the ordinary least squares as a method of estimation. The result of their study showed that a firm's capital structure has a significantly negative impact on the firm's financial performance. Lawal *et al.* (2014) in their study of the effect of capital structure on firm's performance among sampled firms in the Nigerian manufacturing industry, observed that capital structure variables are negatively related to firms performance they however recommend that firms should use more of equity than debt in financing their operation.

Jude (2013) also provides evidence in his investigation of the relationship between capital structure and the financial performance of listed manufacturing firms in Sri Lanka from 2008 to 2012. Financial performance was measured in terms of accounting profitability by Return on Equity (ROE) and Return on Assets (ROA). 30 listed manufacturing firms were selected as sample. The data were analyzed and hypotheses were tested through correlation and regression analysis by using SPSS. The findings revealed that, there was a significant negative relationship between leverage and return on equity. And there was no significance relationship between leverage and return on assets. In addition to the foregoing, divers authors, Mustafa and Osama (2013), Bokhtiar et al. (2014), Varun (2014), Onaolapo and Kajola (2010), Ebaid (2009), Shan and Khan (2007), Zeitan and Tian (2007), and Haung and Song (2006) have all concluded that capital structure statistically and negatively impact firm's performance, using the different methodologies and country data. Contrariwise in Pakistan, Mubeen and Kalsoom (2014) in their investigation of the impact of capital structure on financial performance and shareholders' wealth sampling 155 firms in the Pakistan Textile Sector concluded that capital structure positively impact firms financial performance and shareholders' wealth. Other authors have also concluded that capital structure has a mixed effect on firms performance. (Zeitan & Tian, 2007), Berger and Bonaccorsi (2006), in their study of the impact of capital structure on firm's performance concluded that neither higher leverage nor lower equity capital ratio are connected with higher profit efficiency for all range of data. Also, Phillips and Sipahioglu (2004) in their study of the impact of capital structure on firm's performance using the UK lodging firms as sample concluded that there is no significant link between capital structure and firm's performance.

Theoretical Framework

The theory of corporate capital structure has been a study of interest to finance economists since the publication of the Modigliani and Miller's (1958) work on the irrelevance of capital structure. Over the years, different theories of capital structure have been propounded which diverge from the assumption of perfect capital markets under which the "irrelevance model" is working. However, the commonest among these theories include; agency cost theory, static trade-off theory, and pecking order theory.

Static Trade-off Theory

Static trade-off theory asserts that there is a trade-off between the benefits of taking on more debt and the costs of higher indebtedness. The benefits of taking on debt (rather than equity) are mainly in the tax relief while the marginal costs of extra debt relate to the greater risks from financial distress. The theory therefore postulate that companies should have an optimal level of gearing and that the optimal gearing level for a company is reached at a point where the marginal benefits of taking on additional debt capital equals the marginal costs of taking on the extra debt.

Pecking Order Theory

This theory attempts to criticise the static trade-off theory. The pecking order theory says the most preferred source of finance for firms is retained earnings follow by debt capital and lastly equity capital (Myers, 1984). The rationale behind this order is that, using retained earnings to finance investment is convenient and cheaper than any other sources of finance. However if retained earnings is unavailable or inadequate, debt capital will be used because of its relative tax advantage. The less preferred source of finance in this theory is equity capital due to the high cost of raising such capital.

Agency Cost Theory

Agency Cost theory which was propounded by Jensen and Meckling (1976) discussed the conflict of interest between principals (shareholders) and decision makers (agents) of firms (managers, board members, etc.), this conflict stems from the differences in behavioror decisions by point out that the parties (agents and shareholders) often have different goals, and different tolerances toward risk. In thiscase, the managers whom are responsible of guiding the firm towardto achieve them personal goals rather than maximizing benefits tothe shareholders. Hence, the main conflict that shareholders face is to ensure that managers (agents) do not invest the free cash flow inunprofitable projects. In another hand, increasing the debt to equityratio would assist firms to make sure that managers are running thefirm more efficiently. Theagency cost theory only buttress the submission of the static trade-off theory by submitting that optimalcapital structure for a company is obtained by trading off not just the marginal benefits and costs of extra debt but also the agency costsof additional debt and/or that of additional equity.

METHODOLOGY

The population of this study encompasses some of the quoted non-financial firms on the Nigerian Stock Exchange (NSE) market. A sample of 10 quoted companies was randomly selected for this study. The companies are spread across conglomerates, consumer goods, oil & gas, manufacturing and trading industries. Data were extracted from audited annual reports and accounts of these companies, which spanned between 2016 and 2020. Evaluation captured the global pandemic period in which data was available. The collected data was sorted, edited and verified for accuracy while preparing it for analysis. STATA version 13 was used in analysing the data. This was through the use of descriptive statistics to show the measures of tendencies that include means, tables, standard deviations and percentages. Correlation and regression analyses were also carried out to find out the relationship between debt capital and financial performance. In order to capture the impact of capital structure on firm performance, we specify a model conforming to the agency theory.A business that has a high return on equity is more likely to be one that is capable of generating cash internally. For the most part, the higher a company's return on equity compared to its industry, the better. The formulated hypothesis is as follows:

> H_0: Capital Structure has no significant effect on Financial Performance of Non-financial companies in Nigeria.

The variables that will be used in the analysis are as follows:

Dependent variables:

- Return on Equity (ROE) = (Profit After Tax ÷ Shareholders Fund)×100
- Return on Assets (ROA) = (Profit Before Tax ÷ Total Assets)×100

Independent variable:

- Debt to Equity Ratio (DER) = Ratio of Total Debt to Shareholders Fund

The hypothesis is divided into two models represented by the dependent variables as stated above.

RESULT AND DISCUSSION

Table 1 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Return on Equity (ROE)	50	0.156	0.1463	-0.13	0.62
Return on Asset (ROA)	50	0.095	0.1177	-0.15	0.57
Debt to Equity ratio(DER)	50	2.75	8.8214	-3.58	59.24

Source: STATA 13 Output Results based on study data

Table 1 presented the descriptive statistics for the dependent and independent variables (Return on Equity (ROE), Return on Assets (ROA), and Debt to Equity Ratio (DER). The standard deviation of the variables ranges from 0.1177 to 8.8214. Returns on Asset have the lowest standard deviation of 0.1177 followed by Return on Equity with a standard deviation of 0.1463 debts to equity ratiohas the highest standard deviation of 8.8214. The relatively low standard deviation for all the study variables may be an indication that the sampled data for the study is normally distributed. The Table also indicated an average value of 0.156 for return on equity. The minimum and maximum values of return on equity during the study period are -0.13 and 0.62 respectively. These values implied that all the sampled companies actually have values for return on equity during the study period. The Table further revealed an average value of 0.095 for return on asset. The minimum and maximum values of return on asset during the study period were -0.15 and 0.57 respectively. Similarly, the Table showed that debt equity ratio had a mean value of 2.75, with minimum and maximum value of 59.24 and -3.58.

Table 2 Correlation Matrix of Dependent and Independent Variables

Variable	ROE	ROA	DER
Return on Equity (ROE)	1.0000		
Return on Asset (ROA)	0.6238	1.0000	
Debt to Equity (DER)	0.3886	0.5101	1.0000

Source: STATA 13 Output Results based on study data

From Table 2, it is observed that the independent variables of the study correlate well with the independent variables. There is no relationship among the variables that is large enough (greater than 0.7) to pose the problem of singularity of data. The extent of relationship among all the variables is therefore minimal and negligible. The Table revealed a positive correlation coefficient of (0.3886) between return on equity and debt equity ratio of the companies during the period under study. The positive correlation coefficient is an indication that debt equity ratio is associated with increase in return on equity of the sampled companies during the study period. Similarly, debt to equity ratio is positively associated with return on asset of the sampled companies (0.5101). The positive relationship showed that debt to equity ratio is associated with increase in return on asset of the companies.

Table 3 Breusch- Pagan/ Cook- Weisberg test for heteroskedasticity

Variable	Chi^2	Prob.> chi^2
Return on equity (ROE)	3.35	0.0674
Return on asset (ROA)	0.05	0.8185

Source: STATA 13 output Results based on study data

Heteroskedasticity Test–A pooled– OLS regression result was generated based on the dataset. After the OLS regression result, this test was conducted using Breusch–Pagan/Cook- Weisberg test of heteroskedasticity to check if the variability of error terms is constant. The presence of heteroskedasticity indicates that the variation of the residuals or error terms may not be constant and could affect inferences made from beta coefficients, coefficient of determination (R^2) and F-statistics of the study model. The result of the test showed that there is no presence of heteroskedasticity as the chi-square value of 3.35 and 0.05 with corresponding probability value of 0.0674 and 0.8185 for return on equity and return on asset respectively are greater than 0.05. This was corrected by running a panel corrected standard error regression.

Table 4 Fixed effect, Random effect regression, Hausman test and Lanrangian multiplier test.

Model one	$Chibar^2$	Prob.> chi^2
Fixed effect	5.82	0.0206
Random effect	7.43	0.0064
Hausman test	0.52	0.4716
Breusch and Pagan Lanrangian multiplier	19.23	0.0000

Source: STATA 13 output Results based on study data

The result of the Hausman test showed a chi-square value of 0.52 and probability value of 0.4716 indicating that random effect regression model is most appropriate for the sampled data. However The Breusch and Pagan Lanrangian multiplier test for random effect was conducted to determine between the pooled OLS and random effect regression which is most appropriate. The results in table 4 above showed a $Chibars^2$ of 19.23 with a corresponding prob>chibar of 0.0000 therefore the study rejected the null hypothesis and accept the alternative hypothesis and conclude that random effect is the most appropriate model. Therefore the random effect regression results was used to analyse and interpret model one:

Model One

$H0_1$: Debt equity ratio has no significant effect on Return on Equity of quoted non-financial companies in Nigeria.

Table 5 Random Effect Regression Results

ROE	Coef.	Std. Err.	t-value	P-value
-Cons	0.1420	0.3463	4.10	0.000
Debt to Equity (DER)	0.0051	0.0019	2.73	0.006
R2				0.1510
Prob> chi2				0.0064

Source: STATA 13 Output Results based on study data

The F-statistics value of 0.0000 and a corresponding Prob.>F of 0.0001 indicated that the model is fit to explain the relationship expressed in the study and further suggests that the explanatory variable are properly selected, combined and used. The nature and extent of relationship between the dependent variable and each of the independent variables of the study in terms of coefficients, z-values and p-values are explained further:

The regression result for the sampled companies as presented in table 5 above showed that there is a positive relationship between return on equity (ROE) and Debt equity ratio (DER) as explained by a coefficient value of 0.0051 and a t- value of 2.73 with a corresponding P value of 0.006. This revealed that a one unit rise in debt equity ratio lead to 0.0051 unit increase in return on equity. The p-value of 0.006 is less than 0.05; therefore the study rejects the null hypothesis and accepts the alternative hypothesis that capital structure (proxy by debt equity ratio) has significant effect on financial performance (proxy by return on equity)

Model Two

$H0_2$: Debt equity ratio has no significant effect on Return on Asset of quoted non-financial companies in Nigeria.

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

Model Two	Chibar^2	Prob.> chi^2
Fixed effect	82.27	0.0000
Random effect	80.22	0.0000
Hausman test	2.12	0.1456
Breusch and Pagan Lanrangian multiplier	50.20	0.0000

Source: STATA 13 output Results based on study data

The result of the Hausman test showed a chi square value of 2.12 with a probability value of 0.1456 indicating that random effect regression model is most appropriate for the sampled data. However The Breusch and Pagan Lanrangian multiplier test for random effect was conducted to determine between the pooled OLS and random effect regression which is most appropriate. The results in table 6 above showed a chi bars^2 of 50.20 with a corresponding prob>chibar of 0.0000 therefore the study rejected the null hypothesis and accept the alternative hypothesis and conclude that random effect is the most appropriate model.

Table 7 Random Effect Regression Results

ROA	Coef.	Std. Err.	t-value	P-value
-Cons	0.0705	0.0009	8.96	0.000
Debt to Equity (DER)	0.0089	0.0300	2.35	0.019
R2				0.1510
Prob> chi2				0.0064

Source: STATA 13 Output Results based on study data

The results in table 7 revealed that there is a positive relationship between debt equity ratio (DER) and return on asset of the companies during the study period. This is explained by a coefficient value of 0.0089 and t-value of 2.35 with a corresponding P-Value of 0.019. This showed that a unit increase in debt equity ratio (DER), lead to 0.0089 unit increase in return on asset. The p-value of 0.019 is less than 0.05; therefore the study rejects the null hypothesis and accepts the alternative hypothesis that capital structure (proxy by debt equity ratio) has significant effect on financial performance (proxy by return on asset)

CONCLUSION AND RECOMMENDATIONS

This paper examines the effect of capital structure on financial performance using a sample of ten (10) quoted non-financial firms in Nigeria between 2016 and 2020. The study seeks to evaluate the validity of agency theory in the Nigeria context. The study therefore concluded that the Agency theory which postulates that financial leverage mitigates against the agency problem is applicable among non-financial companies quoted in Nigerian Stock Exchange. The study established that as a company increases financial leverage the performance as measured by ROE and ROA increases in agreement with the expectations based on the agency theory. The regression result for the sampled companies showed that there is a positive relationship between return on equity (ROE) and Debt equity ratio (DER) as explained by a coefficient value of 0.0051 and a t-value of 2.73 with a corresponding P value of 0.006. This revealed that a one unit rise in debt equity ratio lead to 0.0051 unit increase in return on equity.

Similarly, a coefficient value of 0.0089 and t-value of 2.35 with a corresponding P-Value of 0.019showed that a unit increase in debt equity ratio (DER), lead to 0.0089 unit increase in return on asset, which revealed that there is a positive relationship between debt equity ratio (DER) and return on asset (ROA) of the sampled companies during the study period. The p-value of 0.006 and 0.019 for ROE and ROA respectively is less than 0.05, therefore the study rejects the null hypothesis and accept the alternative hypothesis that capital structurehas significant effect on financial performance. These findings lend credence to the agency theory, but contrast the conclusion of Varun (2014) who studied the Indian firms and concludes that leverage has negative impact on firms' performance, however, it is consistent with Mubeen and Kalsoom (2014) which indicated capital structure to positively impact both firm performance and shareholders wealth using Pakistan data. Considering that the research found a positive correlation between capital structure and financial performance, the research study recommends that financial managers and administrators should increase financial leverage (debt) they employ in their capital structure to increase the value of the firms.

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Effects of Risk Management on Financial Performance of Deposit Money Banks in Nigeria

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Abstract

Risk management in the banking sector have greater effects on performanceof banks, and also on national economic growth and general business development. The study examines the risk management implications on the performance of deposit money banks in Nigeria. Risk management is a core of lending function in the banking industry. So many Nigerian banks had failed in the past due to inadequate risk exposure. The risk management comes from those risks which can lead to underperformance. This study focuses on those risk management practices and bank's financial performance in Nigeria. Secondary data sourced was based on a 7year progressive annual reports and financial statements of 5 banks and a panel data estimation technique adopted, was found to be positive and significant. Similarly it suggests the higher the managed funds by banks the higher the performance. The study concludes a significant relationship between banks performance and risk management. Hence, the need for banks to practice prudent risks management in order to protect the interests of investors.

Keywords: Risk management, Credit Risk, Financial Performance, Bank, Deposit Money Bank

INTRODUCTION

Many financial institutions have either collapsed and or are facing near collapse because of badly functioned subprime mortgage lending to firms and people with bad and unreliable credit. Banking crises in Nigeria have shown that not only do banks often take excessive risks but the risks differ across banks. Most banks quality of assets has deteriorated as a result of significant dip in equity market indices. The CBN governor in 2009 maintained that some banks were faced with liquidity constraints. Thus their activities were reduced because of their response to the perceived risk of lending to each other making profits and returns to suffer. This led to liquidity and credit shortages and a significance loss of public confidence in banks andalso negatively affects the entire financial system and the economy. The fact remain that banks have a dominant position in developing economic financial systems and are engines of economic growth (King and Levine, 1993; Levine, 1997). Risk management is the quality control of finance. It is a broad term used in different senses in different organisations but basically it involves identification, analysing and taking measures to reduce or eliminate the exposures to loss by a business organisation.Frank Knight (1921), the most famous scholar to formalize definition of risk and make a distinction between risk and uncertainty. (Holton, 2004) defines risk as situations where the outcome of a given action is unknown but the odds are measurable. Recent global economic crisis has revealed that, it is difficult for institutions to accurately capture the riskiness of their activities.

It is important to manage risks, rather than trying to hedge against risk, there is a strategic step to determine the risks to avoid, the ones to reduce or eliminate and those ones to exploit in order to take advantage of opportunities to achieve the objectives of the organisation. Increasing exposures to some risk is an integral part of business success and any entity that wants large rewards must be ready to take considerable amount of risk (Damodaran, 2017). For any business venture of which the DMBs are part of, Audu (2014) submitted that it is difficult to ignore risk altogether because without taking some level of risk, the returns from operations will no doubt be compromised and therefore Audu advocated avoidance of risks as much as it is feasible saying that the rational approach to risk, is at the very least to restrict exposure to it. Financial risks are subset to the overall firm risk. One of the main reasons for financial risk management is to reduce the instability of earnings and cash flow due to financial risk exposure (Dhanini, 2007). The reduction enables the firm to perform better forecasts (Vaughan & Vaughan, 2008). This would guaranteethe availability of sufficient funds in the company for investment and dividends payment (Sarkis, 1998). Another reason for management of financial risks is to avoid financial distress and the costs connected with it (Triantis, 2000; Drogt& Goldberg, 2008). Lastly, the interest of management towards risk management may be directed to stabilizing earnings or keeping a constant tax level (Dhanini, 2007). Risk management can be structured, focussing either on minimizing volatility or avoiding large losses (Sarkis, 1998). Reduced instability in cash flows or earnings and prevention of losses allow better planning of liquidity needs (Eichhorn, 2004). The main aim of management of firms is to maximise expected profits taking into account its volatility. Risk management is important because organisations want to avoid low profits, which force them to seek external investment opportunities. When this happens, it results in sub-optimal investments and hence lower shareholders' value since the cost of such external finance is higher than the internal funds due to capital market imperfections.

Organisations are faced with risks such as credit risk (which is the analysis of the financial soundness of borrowers); interest rate risk (which is founded on the variations of interest rates); foreign exchange risk (which occurs when a firm engage in international business transactions leading to cash flows been influenced by exchange rates); capital management risk (associated with the cost of investment financing); and liquidity risk (arising as a result of the inability of a firm to efficiently accommodate the redemption of deposits and other liabilities and to cover funding increases in loan and investment portfolio) (Ogilo, 2012). Thus, the minimization of these risks in business could place the firm on the track of performance improvement. Financial performanceon the other hand consists of many different methods to assess how well an organization is managing its assets to generate income (Richard, 2009). Financial performance comprises of operating income, earnings before interest and taxes, and net asset value. It is very importance to note that a single measure of financial performance is not sufficient to draw conclusion of risk affecting the performance. Rather, a thorough evaluation of a company's performanceand many other measures of its performance. The two most popular measures of financial performance are return on equity (ROE) and return on assets (ROA). ROE measures accounting earnings for a period per naira of shareholders' equity, while ROA measures return of each naira invested in assets. Thus, risk management could therefore be in correspondence with the improving the financial situation of the firm. Thus, this study seeks to investigate the effect of risk management on the financial performance of deposit money banks (DMBs) in Nigeria, considering their susceptibility to risks as a result of the lending nature of the industry, which could amount to huge losses.

LITERATURE REVIEW

Concept of Risk

Risk has diverse meanings; scholars have described risk in numerous ways. Hansel (1999), sees risk as likelihood of loss; odds of casualty. Mordi (1989) posits risk to be the chances of inaccuracy, odds of an event occurring or not. These descriptions point to a particular direction (loss or mishap). With respect to this research work, we express risk as the likelihood of financial loss. In every country, the health of the financial sector is very crucial to its survival, growth and development as its failure can disrupt economic development of the country (Das &Ghosh, 2007). Firms in the financial sector are said to be performance financially well if they are able to generate new resources, from daily operations over a given period of time and it is gauged by net income and cash from operation. However, risk may be a hindrance towards effective financial performance hence; adequate management of risk is inarguably the quality control of finance. Risk management involves the identification of risks, analyses of same, and taking into consideration measures to reduce or eliminate the exposures to loss by an organisation.

According to Stulz (1984) and Froot, Scharfstein and Stein (1993), managers should concern themselves with the active management of risks in their organizations (especially those in the banking industry) to maximise expected profits taking into consideration their variability/volatility. Risk management is pursued because banks want to avoid low profits which force them to seek external investment opportunities. When this happens, it results in sub-optimal investments and hence lower shareholders' value since the cost of such external finance is higher than the internal funds due to capital market imperfections. Financial risks are classified into credit risk, interest rate risk, foreign exchange risk, capital market risk and liquidity risk.

Credit Risk

The analysis of the financial soundness of borrowers has been at the core of banking activity since its inception. This analysis refers to what nowadays is known as credit risk, that is, the risk that counterparty fails to perform an obligation owed to its creditor. It is still a major concern for banks, but the scope of credit risk has been immensely enlarged with the growth of derivatives markets. Another definition considers credit risk as the cost of replacing cash flow when the counterpart defaults. Greuning and Bratanovic (2009) define credit risk as the chance that a debtor or issuer of a financial instrument whether an individual, a company, or a country will not repay principal and other investment-related cash flows according to the terms specified in a credit agreement. Inherent to banking, credit risk means that payments may be delayed or not made at all, which can cause cash flow problems and affect a bank‘s liquidity.

Interest Rate Risk

Interest rate risk is founded on variations on interest rates and can be perceived in different forms. The first methods refer to variation in interest rates in joining with variable loans and short-term financing. An increase in the interest rate leads to higher interest payments for the variable rate loan and more expensive follow-up funding. These decreases the company’s earnings and can in worst case lead to financial distress. Secondly, the vice versa case refers to cash positions of the company with a variable interest rate. A fall in this rate leads to a loss in earnings.. It can be summarized that the more corporate debt and especially short-term and variable rate debt a company has, the more vulnerable it is to changes in the interest rate (Dhanini, 2007).

Foreign Exchange Risk

Exchange risk occurs when a company is involved in international business and the cash in or outflows are in a foreign exchange rate. As this rate is not fixed and cannot be fully anticipated a possible change in a foreign exchange rate leads to the risk of changes in the amount of a payable / receivable and by that a change in the amount of money the company has to pay / will receive. This risk is measured by the concept of transaction exposure (Okotha, 2003).

Liquidity Risk

According to Greuning and Bratanovic (2009), a bank faces liquidity risk when it does not have the ability to efficiently accommodate the redemption of deposits and other liabilities and to cover funding increases in the loan and investment portfolio. These authors went further to propose that a bank has adequate liquidity potential when it can obtain needed funds (by increasing liabilities, securitising, or selling assets) promptly and at a reasonable cost. The Basel Committee on Bank Supervision consultative paper (June, 2008) asserts that the fundamental role of banks in the maturity transformation of short-term deposits into long-term loans makes banks inherently vulnerable to liquidity risk, both of an institution-specific nature and that which affects markets as a whole, (Greuning and Bratanovic, 2009).

Capital Management Risk

Capital requirement is of great importance under the Basel Accords and these set the guide lines for the financial institutions. It is internationally accepted that a financial institutions should have capital that could cover the difference between expected losses over some time horizon and worst case losses over the same time horizon. Here the worst case loss is the loss that should not be expected to exceed with the some high degree of confidence. This higher degree of confidence might be 99% or 99.9%.The reason behind this idea is that expected losses are normally covered by the way a financial institution prices its products. For instance, the interest charged by a bank is designed to recover expected loan losses. The firm wants to be flexible and at the same time lower the costs for financing .The period of loans is significant in joining with the assets, which are funded with the loan. Here, often a disparity between the durations can be detected. Long-term assets are then funded with short-term and regulating rate loans, leading to a shortfall in cash flows in times of rising interest rates. This element again can lead to an inferior ranking of the company and inferior conditions to get future problems regarding follow-up financing over the rest of the lifetime of the asset can occur. Vice versa long-term financing of short-term assets might lead to access financing when the asset is no longer existing. This causes of needless interest payments for the company (Vickery, 2006).

Concept of Financial Performance

According to Husni (2011) the determinants of banks financial performance are normally consisting of factors that are within the control of commercial banks. They are the factors which affect the revenue and the cost of the banks. Some studies classified them into two categories namely the financial statement variables and non-financial variables. External factors are said to be the factors that are beyond the control of the management of commercial banks. The external determinants of commercial banks profitability are indirect factors, which are uncontrollable, but have an enormous impact on bank's profitability. According to Anthony and Ameyaw (2010) macro-economic variables have been major components of the external profit determinants in most studies. The most external factors that have been presented in most studies include competition, market share, firm size, inflation, gross domestic product (GDP), growth and interest rate (Sudin, 2004).

Financial Risk Management

Financial risks can be of different forms. On one hand there are external financial risks depending on changes on financial markets. On the other hand there are internal financial risks, where the company itself is the source of the risks (Eichhorn, 2004).External financial risks are based on the risk factors of exchange and interest rates as well as commodity prices (Schönborn, 2010).
Financial risk management has received increased attention over the past years (Okotha, 2003). The reasons for this is that financial risks, though they are not a core competency of non-financial firms, also influence their business operations to a large extend (Triantis, 2000). The five types of financial risks that will be assessed include credit risk; interest rate risk; foreign exchange rate risk; capital management risk and liquidity risk.

Empirical Review

Several empirical studies conducted by many scholars in this area of study revealed the relationship between risk management factors and financial performance of deposit money banks showing variability of these findings from various contexts and perspectives. Tanveer, Muhammad and Sadaf (2017) examined the impact of risk management practices on banks' financial performance in Pakistan for the period 2004 to 2016 using panel data regression analysis revealed a significant effect of risk management practices on financial performance of Pakistani banks categorised into large, medium and small banks. It was found to be statistically significant at 5% and positively impactful on ROE, while Liquidity risk (measured by interest sensitive asset/total asset), NPLR, interest rate risk was statistically significant at 5% and influence ROE negatively. However, for small banks, liquidity risk impacted ROE positively. Adeusi et-al (2013) investigated RM and FP of banks in Nigeria. They employed secondary data based on ten selected DMBs for a period of four years. Panel data was employed and least squares estimation served as the method of data analysis. The results show that financial performance of banks was negatively related to doubtful loans. Consequently, they concluded that banks` financial performance is significantly related to risk management. In the work of Harelimana (2017) on The Role of Risk Management on Financial Performance of Banking, Institutions in Rwanda: case study Unguka Bank Limited, both quantitative and qualitative techniques were employed. The result of the interviews from

43.3% response rate identified the key determinants of risk management as credit risk, operational risk, interest rate risk and liquidity risk. Findings from the multiple regression analysis of the secondary data showed that there is a strong positive relationship between risk management indicators (credit risk, liquidity risk, interest rate risk, operational risk and loan default risk) and financial performance. Same result was obtained from the research work of Li &Zou (2014) on the impact of credit risk management on profitability of commercial banks in Europe which showed a positive relationship between credit risk management and profitability.

Another study was conducted by Olusanmi, Uwuigbe&Uwuigbe (2015) to investigate the Effect of Risk Management on Bank's Financial Performance in Nigeria using ordinary least squares regression model on data obtained from audited financial statements of 14 banks listed on the Nigerian Stock Exchange. The period of study was from 2006 to 2012. The result gave a non-significant, indirect relationship between risk management and financial performance measured by ROE.Specifically, non-performing loan, loan to deposit, risk disclosure, and total asset showed an inverse non-significant relationship with ROE, while capital risk revealed a positive, insignificant relationship with ROE. A study was carried out by Bassey& Moses (2015) on bank profitability and liquidity management of some selected deposit money banks in Nigeria.The period covered was 2010 to 2012. Using ordinary least squares (OLS) technique, the empirical results revealed a statistically significant relationship between bank liquidity and ROE. However, the relationship between bank liquidity and profitability became insignificant when ROA was used. Specifically, the results showed a negative relationship between cash to deposit ratio and ROA, and a positive relationship between loans to deposit ratio and ROE. Similar results were obtained when ROA was used as a measure of profitability.Some observed gaps in literature show that despite the attraction of many scholars in this area of study, their approaches have come from different perspectives. Generally, focus was more on few risk factors and their effects on financial performance without considering the interplay of those risks (Li &Zou, 2014; Hussain, Ihsan&Hussain, 2016;Harelimana, 2017; Ofosu, 2016; Olusanmi, Uwuigbe&Uwuigbe, 2015; Adebisi&Oladunjoye, 2014). Such factors like risk asset diversification, interbank funding, and asset-liability maturity mismatch and the effects they have on interest rate spread and consequently profitability was not considered. Risk assets are the most profitable assets of a bank since bulk of reported profit comes from interest income. In order to achieve higher profit, banks need to increase their interest margin and a key factor to achieving this is to reduce as much as possible their cost of funds. An optimal mix of asset and liability portfolios within regulatory constraints is important to minimize cost of funds and increase income.

Some empirical work understands risk management as an organizational and social practice, and has compiled sufficient evidence to suggest that risk management practices vary considerably across firms, even within an industry (Stulz, 1996; Richard, 2009). In some firms, risk management takes the form of complex financial transactions (Pagano, 2001) in others, it follows a more holistic assessment of financial and non-financial risks (Nassauer&Pausenberger, 2000) bridging functional silos. However, most of these studies concentrated on credit risk and liquidity risk as the majors concerns of banks and thus examined risk management from the point of view of liquidity and credit risk management. Given that the principles guiding bank operations are, profitability, liquidity and solvency, the authors of this article believe that the exclusion of solvency risk from the previous studies is a significant omission. The desire to bridge this gap in knowledge formed the basis of this study.

METHODOLOGY

The methodology used was a longitudinal study of the financial performance indicators of commercial banks in Nigeria using Access Diamond Bank, United Bank for Africa Plc, Guarantee Trust Bank, First Bank and Zenith Bank as focus. Since the study relied solely on secondary data, all the data requirements were obtained from the relevant secondary sources. Specifically, the secondary data used were the annual reports of Access/Diamond Bank, UBA, GT Bank, First Bank and Zenith Bank for the period 2013 – 2020. Thus, a panel data of 5 cross sections for 8 years was employed. The key information include Earnings after Tax, loans and advances, non-performing loans, total assets, equity, total deposits, current assets, current liabilities and net sales, which are all integral components of the financial statements. From these, liquidity, loans to deposit, capital adequacy, non-performing and profitability ratios were computed.

Financial performance of banks is measured by return on average assets (ROaA) and return on average equity (ROaE). Three major risk indicators were used; the risk indicators and their proxies (ratios) are: Liquidity risk (loans to deposit and current ratio), credit risk (Non-performing loans ratio) as well as leverage risk (capital adequacy ratio). Leverage risk was measured by capital adequacy ratio because capital inadequacy is stimulated by excess leverage. The model specifications of this study are as follows:

ROaA = f (LDR, CR, CAR, NPLR) and
ROaE = f (LDR, CR, CAR, NPLR)

Specifically, the model Equations are:

$$ROaA = bo + b1LDR + b2CR + b3CAR+b4NPLR+e1 \quad (1)$$
$$ROaE = \alpha o + \alpha 1LDR + \alpha 2CR + \alpha 3CAR + \alpha 4NPLR+et \quad (2)$$

Where:

ROaA = return on average assets (Profitability)
ROaE = return on average equity (Profitability)
LDR = loans to deposit ratio
CR = Current ratio
CAR = Capital Adequacy Ratio
NPLR = non-performing loans ratio (credit risk)
b0 = proportion of the change in return on average Assets (ROaA) that is not explained by changes in the explanatory variables, LDR, CR, CAR and NPLR
b1 = Slope of LDR; b2 = Slope of CR; b3 = slope of CAR and b4 = slope of NPLR and e = random error.
Also αo = proportion of the change in return on average equity (ROaE) that is not explained by changes in the explanatory variables, LDR, CR, CAR and NPLR α1 = Slope of LDR; α2 = Slope of CR; b3 = slope of CAR and b4 = slope of NPLR.

Bearing in mind that the efficacy of any Time Series analysis is conditioned on stationarity of the data; the research data were adjusted for stationarity. Specifically, since most non-stationary time series data become stationary after integrating them once (Engel & Granger, 1987; Iyoha&Ekanem, 2004; Inegbedion, Obadiaru&Adeyemi, 2020), the variables were tested for panel stationarity using the augmented Dickey Fuller test and the two dependent variables were stationary at level while all the independent variables were stationary at first difference. Panel cointegration test was further carried out using Johansen`s technique and the variables were found to be cointegrated. Arising from the model specification, generalized method of moments (GMM) was used to analyze the research data owing to its suitability in the context of semi parametric models for finite-dimensional parameters whose distribution function are unknown. Vector error correction modelling was also employed following the long run relationship between the variables revealed by the results of the cointegration test.

RESULTS AND DISCUSSION

The panel statistic had a calculated value of -5.095 and a significant probability of $P < 0.001$, thus indicating that the null hypothesis of no cointegration be rejected at the 99% level of confidence. The implication is that a long run relationship exists between financial performance of commercial banks in Nigeria (measured by ROaA and ROaE) and the risk factors - liquidity, leverage, capital adequacy and leverage. (see Table 1)

Table 1. Cointegration Test Pedroni Residual Cointegration Test
Alternative hypothesis: common AR coefs. (within dimension)

Weighted				
Statistic		Prob.	Statistic	Prob.
Panel PP- Statistic	-5.094723	0.0000	-5.519753	0.0000
Panel ADF-Statistic	NA	NA	NA	NA

Phillips-Peron results (non-parametric)

Cross ID AR(1) Variance HAC Bandwidth Obs
1 -0.488 6.857606 1.279871 6.00 7
2 -0.112 6.118028 6.593982 2.00 7
3 -0.191 10.07294 2.980355 6.00 7
4 -0.604 10.26784 3.273493 6.00 7
5 -0.488 2.987080 0.893354 6.00 7

Results of the test of financial performance (using ROaA) and risk factors show that the calculated Durbin-Watson statistic is 1.6, which is within the permissible range of du- 4-du for "no serial correlation. The adjusted R-square value is 0.483 thus suggesting that 48.3% of the variation in return on average assets is explained by variation in the explanatory variables (loans to deposit ratio, liquidity risk, capital adequacy risk and credit risk). Furthermore the t test for significance of the model parameters shows that the calculated t values and associated asymptotic significant probabilities were -0.04 [0.94]; -0.21 [0.83]; 3.01 [0.0047] and -3.53 [0.0011] for LDR, CR, CAR and NPLR respectively. The results indicate an inverse relationship between ROaA and three of the explanatory variables (Loans to deposit ratio, liquidity ratio, and Non-performing loans ratio) but only the Non-performing loans ratio was significant among the ratios that are inversely related to return on average assets. Furthermore, there is a direct relationship between ROaA and capital adequacy ratio; the direct relationship was significant (see Table 2).

Table 2. Return on average assets and financial risks Dependent

Variable: ROaA
Method: Panel Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LDR	-1.66E-05	0.000236	-0.070159	0.9445
LQR	-0.006003	0.028113	-0.213547	0.8321
CAR	0.166338	0.055241	3.011156	0.0047
NPLR	-0.209877	0.059386	-3.534117	0.0011

R-squared	0.483142	Mean dependent var	1.861350
Adjusted R-squared	0.440070	S.D. dependent var	2.184282
S.E. of regression	1.634465	Akaike info criterion	3.915148
SS resid	96.17312	Schwarz criterion	4.084035
Log likelihood	-74.30295	Hannan-Quinn criter.	3.976212
D-W stat	1.59250		

Results of the test of financial performance (using ROaE) and risk factors show that the calculated Durbin-Watson statistic is 1.7, which is within the permissible range of du - 4-du for "no serial correlation. The adjusted R-square value is 0.38.13 thus suggesting that 38.13% of the variation in return on average equity is explained by variation in the explanatory variables (liquidity risk, capital adequacy risk and credit risk). Furthermore the t test for significance of the model parameters shows that the calculated t values and associated asymptotic significant probabilities were -0.25 [0.81]; 2.03 [0.0496]; 0.89 [0.38] and -3.26 [0.0024] for liquidity risk (LDE, CR), leverage risk (CAR) and credit risk (NPLR) respectively. The results indicate an inverse relationship between ROaE and two of the explanatory variables (Loans to deposit ratio and Non-performing loans ratio) but only the Non-performing loans ratio was significant among the two ratios that are inversely related to return on average Equity. Furthermore, there is a direct relationship between ROaE and two of the explanatory variables, liquidity ratio and capital adequacy ratio but only the relationship between ROaE and Liquidity ratio was significant (see Table 3).

Table 3. Return on average equity and financial risks
Dependent Variable: ROAE
Method: Panel Least Squares
Cross-sections included: 5
Total panel (balanced) observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LDR	-0.000341	0.001385	-0.246372	0.8068
LQR	0.334950	0.164821	2.032203	0.0496
CAR	0.289201	0.323866	0.892966	0.3778
NPLR	-1.135163	0.348168	-3.260390	0.0024

R-squared	0.381319	Mean dependent var	14.16848
Adjusted R-squared	0.329762	S.D. dependent var	11.70488
S.E. of regression	9.582558	Akaike info criterion	7.452406
Sum squared resid	3305.715	Schwarz criterion	7.621294
Log likelihood	-145.0481	Hannan-Quinn criter.	7.513470

Results of the error correction model present the long run equilibrium relations. The first cointegration equation is estimated as: ROaA–1.682 - 0.227 LDR – 0.5493 CR + 0.225 CAR + 0.073NPLR = 0;

Thus, ROaA = 1.682 + 0.227 LDR + 3.549 CR - 0.225 CAR - 0.073 NPLR
The second cointegration equation is estimated as:
ROAE–17.03 - 3.477 LDR – 1.512 CR + 3.47 CAR - 0.264NPLR = 0;
Thus, ROAE = 17.03 + 3.477 LDR + 1.512 CR + 3.47 CAR - 0.264 NPLR
The results show that liquidity risk (LDR, CR), leverage risk (CAR) and credit risk (NPLR) are significant long-run predictors of ROaA and ROAE.

Discussion of Findings

The results indicate that there is significant inverse (negative) relationship between ROaA (dependent variable) and liquidity risks, leverage risk and credit risk and all the relationships were significant. The implication is that increases in credit risk leads to reduction in a bank's investible funds and hence reduction in its average assets. This is not unconnected with the fact that increases in a firm's credit risk reduce its liquidity and thus impact on its ability to acquire assets. The implication is that credit risk is very significant to ROaA. Also, increases in liquidity risk lead to reduction in a bank's investible funds and hence reduction in its average assets. There is also a significant positive relationship between ROaA and CAR. This implies that the more a bank is able to absorb the debt component of its capital structure through equity capital, the higher it is able to generate funds for investment in assets and hence adequate ROaA. The results are consistent with the findings of Oyedele, Adeyemi and Fasesin (2018), Okere, Isiaka and Ogunlowore (2018), Chukwunulu, Ezeabasili and Igbodika (2019), Etale and Ujuju (2018), Olaleye and Wan, 2016), Kolapo, Ayeni, and Oke (2012), Oluwafemi, Adebisi, Simeon and Olawale (2013) and Obalola, Akpan and Abass (2014)

The results further indicate that there is significant inverse (negative) relationship between ROaE (dependent variable) and liquidity risk and credit risk and the two relationships were significant; thus implying that increases in credit risk and liquidity risk lead to reduction in a bank's ability to reward equity shareholders and that liquidity risk and credit risk are very significant to ROaE. There is a significant positive relationship between ROaE and CAR. This implies that the more a bank is able to absorb the debt component of its capital structure through equity capital, the higher it is able to generate funds to reward equity shareholders. Again, the results are consistent with the findings of Oyedele, Adeyemi and Fasesin (2018), Okere, Isiaka andOgunlowore (2018), Chukwunulu, Ezeabasili and Igbodika (2019), Etale and Ujuju (2018), Olaleye and Wan, 2016), Kolapo, Ayeni, and Oke (2012), Oluwafemi, Adebisi, Simeon and Olawale (2013) and Obalola, Akpan and Abass (2014). A comparison of the panel GMM test with the ECM shows some slight differences. While the GMM shows that NPLR and CAR are predictors of ROaA, the ECM shows that LDR, NPLR, CAB and CR significantly influence ROaA in the long run while CR significantly influences it in the short run. On the other hand, GMM shows that NPLR and LQD have significant influence on ROAE while the ECM shows that LDR, CR, CAR and NPLR influence ROaE in the long run while only CR influences ROAE in the short run. Given the fact that ECM is applicable to time series analysis when the variables under investigation are cointegrated, the results of the ECM supersede those of the GMM. Again LDR does not influence financial performance in the long run while current ration does; this shows that not all facets of liquidity have a short-run influence on financial performance

In view of the findings, a model of risk management and financial performance was suggested. The model indicated that effective management of liquidity risk in the short run as well as management of credit risk, leverage risk, capital adequacy risk and liquidity risk in the long run is what banks require to enhance performance. The implication is that liquidity risk is critical to bank performance since its management is required in the short run and in the long run. The results indicate the need for stakeholders to take cognisance of the short-term and long-term impact of liquidity risk (measured by current ratio) on financial performance (ROaA and ROaE) of banks as well as the long-term influence of solvency risks measured by LDR, CAR and NPLR on financial performance of banks. While a short-term effect may trigger technical insolvency, a long-term influence may precipitate bankruptcy directly or indirectly through a poorly managed state of technical insolvency. Due cognisance by concerned stakeholders will enable them take proactive steps towards risk management and prevent them from being taken unaware.

CONCLUSION AND RECOMMENDATION

The research conclusions are: liquidity risk has significant short-term influence on financial performance of banks; Liquidity risk (current ratio and Loans to deposit ratio), lavage risk (capital adequacy ratio) and credit risk (non-performing loans ratio) have significant long-run influence on financial performance. To this end, adequate risk management, especially management of liquidity risk, leverage risk and credit risk will serve to enhance financial performance in the banking sector. This study has made significant contribution to knowledge in management science and financial management literature. Although several studies have attempted to explain the relationship between risk management and financial performance of banks, the point of departure of this study from most previous studies is the conspicuous observation that while most of such studies identified relationships between financial performance and risk factors, it is doubtful if any of them segregated such effects into short run and long run effects. This study has been able to show that liquidity risk (measured by current ratio) has a short-term and long term influence on financial performance (ROaA and ROaE) of banks while leverage risk and credit risk have long run influence on financial performance of banks. Furthermore, most previous studies on the research problem employed least square method in data analysis, thus ignoring the short-run and long-run influence of the predictors. This study bridged this gap by employing vector error correction model. Lastly, this study showed that all facets of liquidity do not exert the same influence as seen in the long-run effect of loans to deposit ratio on financial performance while current ratio has short-run and long-run influence on financial performance.

The study is not without some limitations that suggest the need for further studies. The performance indicators (return on average assets and return on equity) as well as the risk proxies that served as explanatory variables (loans to deposit ratio, current ratio, capital adequacy ratio and non-performing loans ratio) included in the study were randomly selected from a host of financial performance indicators and risk factors. The extent to which these variables are or are not exhaustive representatives of the actual performance indicators and risk factors respectively poses some limitations. Besides, the choice of the five banks used in this study was largely influenced by the availability and accessibility of their annual financial statements for the period studied. The inability of the researcher to include other banks in the study owing to non-availability of their financial reports for some of the period investigated poses some limitation because of incomplete randomization in the choice of banks. The above limitations indicate the need for further studies to include some other performance and risk variables. Of particular importance is the need to enlarge the scope by including more banks in order to find out whether there will be any significant deviation from the results of this study.

In view of the problem definition and research findings, it is suggested that strategic managers in banks take risk management as a priority, especially liquidity, leverage, and credit risks. They should be mindful of the short-run and long-run influence of liquidity risk on financial performance. Effective management of risks will enhance their performance and hence their ability to properly manage their assets and equity shareholders. Furthermore, policymakers in government should formulate economic and financial policies with due cognisance of factors that can affect a bank's performance. This requires a holistic view to policy formulation to ensure that cost trade-offs are considerably minimized in all strata of the economy. Specifically, macroeconomic policies that impact on banks' performance, especially interest and inflation rates should be formulated with the interest of the banks and other financial institutions in mind.

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Impact of Credit Management of the Financial Performance of Quoted Manufacturing Firms in Nigeria

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Abstract

This study examines the impact of credit management of the financial performance of quoted manufacturing firms in Nigeria for the period of five years; from 2015 – 2019 and the basis of the study is to determine if credit management, credit policy, credit granting policy, have impact on financial performance of manufacturing firm. Measured by Return on Asset (ROA) and Return on Equity (ROE), the data utilized, which are secondary data in nature. The data collected was tabulated and analyzed using the statistical package for the social science software package (SPSS) 21 these includes mean and standard deviation, descriptive statistic was used to analyze the data. The finding reveals that the measure of financial performance of manufacturing companies ROA and ROE. For the time of the study showed that they are affected negatively by the measure of capital structure. The study therefore recommends that there is need for manufacturing companies to maintain adequate liquid assets, and eliminate bad debt losses and other associated costs of credit. Furthermore, manufacturing companies should intensify efforts to engage the services of factoring agents, as it will reduce the incidence of bad debts losses and other associated costs of credits.

Keywords: Credit management, Credit policy, Credit granting policy, Financial performance, Return on assets

INTRODUCTION

Credit management is one of the most important activities in any company and cannot be overlooked by any economic enterprise engaged in credit irrespective of its business nature. It is the process to ensure that customers will pay for the products delivered or the services rendered. According to John and Sollenberg (2017) credit management as procedures adopted by organization to ensure that they maintain an optimal level of credit and its effective management. It is an aspect of financial management involving credit analysis, credit rating, credit classification and credit reporting. Frank (2016) views credit management as simply the means by which an entity manages its credit sales. It is a prerequisite for any entity dealing with credit transactions since it is impossible to have a zero credit or default risk. The higher the amount of accounts receivables and their age, the higher the finance costs incurred to maintain them. If these receivables are not collectible on time and urgent cash needs arise, a firm may result to borrowing and the opportunity cost is the interest expense paid. Myers and Brealey (2017) opined that credit management greatly influences the success or failure of commercial banks and other financial institutions. This is because the failure of deposit banks is influenced to a large extent by the quality of credit decisions and thus the quality of the risky assets. He further notes that, credit management provides a leading indicator of the quality of deposit banks credit portfolio. A key requirement for effective credit management is the ability to intelligently and efficiently manage customer credit lines. In order to minimize exposure to bad debt, over-reserving and bankruptcies, companies must have greater insight into customer financial strength, credit score history and changing payment patterns.

Credit management starts with the sale and does not stop until the full and final payment has been received. It is as important as part of the deal as closing the sale. In fact, a sale is technically not a sale until the money has been collected. It follows that principles of goods lending shall be concerned with ensuring, so far as possible that the borrower will be able to make scheduled payments with interest in full and within the required time period otherwise, the profit from an interest earned is reduced or even wiped out by the bad debt when the customer eventually defaults. Credit management is concerned primarily with managing debtors and financing debts. The objectives of credit management can be stated as safeguarding the companies‟ investments in debtors and optimizing operational cash flows. Policies and procedures must be applied for granting credit to customers, collecting payment and limiting the risk of non-payments. According to the business dictionary financial performance involves measuring the results of a firm's policies and operations in monetary terms. These results are reflected in the firms return on investment, return on assets and value added. Stoner (2003) as cited in Turyahebya (2018), defines financial performance as the ability to operate efficiently, profitably, survive, grow and react to the environmental opportunities and threats. In agreement with this, Sollenberg and Anderson (2015) assert that, performance is measured by how efficient the enterprise is in use of resources in achieving its objectives. Credit management is the method by which you collect and control the payments from your customers. It is an aspect of financial management involving credit analysis, credit rating, credit classification and credit reporting.

A proper credit management will lower the capital that is locked with the debtors, and also reduces the possibility of getting into bad debts. According to Edwards (2014), unless a seller has built into his selling price additional costs for late payment, or is successful in recovering those costs by way of interest charged, thenany overdue account will affect his profit. In some competitive markets, companies can be tempted by the prospects of increased business if additional credit is given, but unless it can be certain that additional profits from increased sales will outweigh the increased costs of credit, or said costs can be recovered through higher prices, then the practice is fraught with danger. Most companies can readily see losses incurred by bad debts, customers going into liquidation, receivership or bankruptcy. The writing-off of bad debt losses visibly reduces the Profit and Loss Account. The interest cost of late payment is less visible and can go unnoticed as a cost effect. It is infrequently measured separately because it is mixed in with the total bank charges for all activities. The total bank interest is also reduced by the borrowing cost saved by paying bills late. Credit managers can measure this interest cost separately for debtors, and the results can be seen by many as startling because the cost of waiting for payment beyond terms is usually ten times the cost of bad debt losses. Sound credit management is a prerequisite for any manufacturing company's stability and continuous profitability, while deteriorating credit quality is the most frequent cause of poor organization performance and condition. According to Gitman (2017), the probability of bad debts increases as credit standards are relaxed. Firms must therefore ensure that the management of receivables is efficient and effective Such delays on collecting cash from debtors as they fall due has serious financial problems, increased bad debts and affects customer relations. If payment is made late, then profitability is eroded and if payment is not made at all, then a total loss is incurred. On that basis, it is simply good business to put credit management at the front end" by managing it strategically. The hypothesis underling this study is stated thus:

Ho$_1$: There is no significant relationship between Credit policy and return on assets of manufacturing companies in Nigeria.
Ho$_2$: There is no relationship between credit policy and return on equity of manufacturing companies in Nigeria

LITERATURE REVIEW

Conceptual framework

Concept of credit management

Credit management is a concept that is receiving serious attention all over the world especially with the current financial situations and the state of the world economy. The concern of business owners and managers all over the world is to devise a strategy of managing their day to day operations in order to meet their obligations as they fall due and increase profitability and shareholder's wealth (Owolabi & Ibida, 2016).The importance of credit management as it affects financial performance in today's business cannot be over emphasis. The crucial part in managing credit is required in maintaining its liquidity in day-to-day operation to ensure its smooth running and meets its obligation (Eljelly, 2014). Credit management plays a significant role in the successful functioning of a business firm. A firm should ensure that it does not suffer from lack-of or excess liquidity to meet its short-term compulsions. A study of credit management is of major importance to both the internal and the external analysts because of its close relationship with day-to-day operations of a business (Bhunia, 2017). Dilemma in credit management is to achieve desired tradeoff between credit and profitability (Raheman & Nasr 2017). Credit policy of a firm depends on the peculiar nature of the firm and there is no specific rule on determining the optimal level of liquidity that a firm can maintain in order to ensure positive impact on its profitability.

Accordinging to Pandey (2014), bad debt losses arise when the firm is unable to collect its accounts receivable. The size of bad debt losses depends on the quality of accounts accepted by the firm. In the words of Uchegbu (2015), it is wise to discourage bad debts and efforts should be made to encourage discount more importantly cash discount. Donald and Penne (2017) posited that debtors or accounts receivable in a firm are claims held against others in the operating circle. Trade debtors are further classified into trade debtors and nontrade debtors. The amount which is owed by customers for goods and services sold in the course of carrying on a business is termed trade debtors while on the other hand any amount owed by customers arising from a variety of transitions that are oral or written promises to pay other than goods at a later date is called non-trade debtors. A company's credit policy refers to the actions taken by a business to grant, monitor, and collect the cash for outstanding accounts receivable (Maysami, 2014). The credit policy of a typical organization contains the following variables: collection policy, cash discount, credit period and credit standard, while Miller (2016), classified it as credit limits, credit term, deposits, customer information and documentation. And each of the components of a company's credit policy is used as a tool for monitoring account receivables which is the outcome of credit sales; it covers from the kind of customers that credit may be extended to when actual collections would be made (Ojeka, 2015). Credit policy is the most popular medium of managing and regulating receivables. To ensure optimal investment in receivables, a business is required to have an appropriate credit policy.

Krueger, (2015) believes credit policy is designed to minimize costs associated with credit while maximizing the benefits from it. Credit policy refers to guidelines that spell out how to decide which customers are sold on open account, the exact payment terms, the limits set on outstanding balances and how to deal with delinquent accounts According to (Pandey, 2017; Atkinson, Kaplan & Young, 2017) credit policy is defined in the manner as the combination of such terms as credit period, credit standards, collection period, cash discounts and cash terms. Therefore, despite the fact that organizations have different credit policies, the content of these policies must touch on credit period, credit standards, collection period and credit terms. A lenient credit policy tends to give credit to customers on very liberal terms and standards such that credit is granted for longer periods even to those customers whose credit worthiness is not well known. A stringent credit policy on the other hand is restrictive and allows credit only to those customers whose credit worthiness have been ascertained and are financially strong. There are no two organizations with a similar credit policy. Whether lenient or stringent credit policy is adopted by an organization, it must ensure that it attracts and retains good customers, without having a negative impact on the cash flow (Kalunda, Nduku & Kabiru, 2014).

Credit Policy

Credit Policy can be viewed as written guidelines that set the terms and conditions for supplying goods on credit, customer qualification criteria, procedure for making collections, and steps to be taken in case of customer delinquency. This term can also be referring to as collection policy. It is also the guidelines that spell out how to decide which customers are sold on open account, the exact payment terms, the limits set on outstanding balances and how to deal with delinquent accounts. Lawrence (2016), the objective of managing accounts receivable is to collect receivable without losing sales from high-pressure collection techniques. Accomplishing this objective encompasses; credit selection and standard which involve the application of technique for determining which customer should receive credit. This process involves evaluating the customer's creditworthiness and comparing it to the firm's credit standard, its minimum requirements for extending credit to customers and credit monitoring which involves ongoing review of the firm's account receivable to determine whether customers are paying according to the stated credit terms. Slow payments are costly to a firm's investment in account receivable. Debtor management means the process of decisions relating to the investment in business debtors. In credit selling, it is certain that we have to pay the cost of getting money from debtors and to take some risk of loss due to bad debts. To minimize the loss due to not receiving money from debtors is the main aim of debtor management. Economic conditions and firms credit policies are the chief influence on the level of a firm's account receivable (James, 2016). The trade-off between increase in the market share through credit sales and the collectability of the account receivable affects firm's liquidity and its eventual profitability. Credit and credit granting policy encompasses the quality of accounts accepted, the credit period extended, the cash discount given, certain special terms and the level of collection expenditure. In each case, the credit decision involves a trade-off between the additional profitability and the cost resulting from a change in any of these elements. Receivable management begins with the decision of whether of whether or not to grant credit.

Where goods are sold on credit, a monitoring system is important, because without it, receivable will be built up to excessive levels, cash flow (liquidity) will decline and bad debts will offset the profit on sales. Corrective action is often needed and the only way to know whether the situation is getting out of hand is to set up and then follow a good receivable control system (Eugene, 2014). Eugene, (2014), states that optimal credit policy, hence the optimal level of accounts receivable, depends on the firm's own unique operating conditions. A firm with excess capacity and low variable production cost should extend credit more liberally and carry a higher level of receivable than a firm operating at full capacity on slim profit margin.Manufacturing companies in Nigeria feel the necessity of granting credit for several reasons. According to Pandey (2014) companies sometimes extend credit to dealers to build long-term relationship with them or to reward them for their loyalty. Efficient credit sales management is necessary for achieving liquidity and profitability of a company (Reddy & Kameswarri, 2014).According to Rogers (2016), he opined that a firm's investments in receivables are affected by some external factors such as the general economic conditions: - Industry norms, competitive activities, political regulations and Technological change. Management naturally wants to make efficient use of the available capital in the business and is also interested in rapid turnover of accounts. Given the circumstance, a firm should formulate a policy suitable for the firm and the commercial environment upon which credit sales will be based. There are three major credit policy variables (factors):

i. credit standards
ii. credit limit
iii. collection period/policy.

The implication of the above policy is many, for instance, it will result to less bad debt losses and cost of credit administration. But such a firm adopting the policy may not be able to expend sales. That is, the profit sacrificed on lost sales may be more than the cost saved by the firm on the contrary, if credit standards are loose, the firm may have large sales volume.

But the firm will have to carry large receivables (debtors). The cost of administering credit and bad debts losses will also increase; thus, the choice of optimum credit standards involves a trade-off between incremental return and incremental cost. Weston and Brigham (1986), they enumerated the different types of cost associated with credit sales.

Measures of credit Management

The credit management of a company is measured with use of some financial ratios refers to as liquidity ratios. This group of ratios measures the ability of the firms to meet its current obligations (Liabilities). Analysis of liquidity needs the preparation of cash budgets and cashflow statement; but liquidity ratio, by establishing a relationship between cash and other current assets to current obligations, provided a quick measure of liquidity (Pandy, 2015). The most common ratios, which indicate the extent of liquidity or lack of it, are:

Debtors Collection Period (DCP)

DCP ratio is calculated by dividing Trade debtors by Turnover and multiplies by 365 days, thus

$$\frac{averagetradedebtors * 365\,days}{turnover * 1}$$

This ratio shows number of days it takes an organization to recover it credit sales, the shorter the period the better for the organization. Account receivable with longer recoverable period possesses the risk of bad debt for the company and also affects liquidity in the short run.

Creditor Payment Period (CPP)

CPP ratio is calculated by dividing Average Trade Creditors by Cost of Goods Sold and multiplies the result by 365.

$$\frac{averagetradedebtors * 365\,days}{costofgoodssold * 1}$$

This ratio shows the number of days the company is required to settle it short term obligations. The longer the period the better for the company as it gives the company leverage to recover it receivables. Where the period is shorter than the debtor's collection period, its exerts pressure on the liquidity of the company. Liquidity according to Pringle (2014) liquidity refers to the ability of a firm to meet its current liabilities as they fall due out of its current assets. Some common ratios connected with evaluating liquidity are the current ratio, the quick or acid ratio, debtor's turnover and inventory turnover.

Measures of financial performance (Profitability)

Profitability is the ability to make profit from all the business activities of and an organization, company, firm, or an enterprise. It measures management efficiency in the use of organizational resources in adding value to the business. Profitability may be regarded as a relative term measurable in terms of profit and its relation with other elements that can directly influence the profit. Profitability is the relationship of income to some statement of financial position measure which indicates the relative ability to earn income on assets. Irrespective of the fact that profitability is an important aspect of business, it may be faced with some weakness such window dressing of the financial transactions and the use of different accounting principles.

Empirical Framework

Nagarajan (2018) in his study of credit management in firms in Mozambique found that credit management is a dynamic process that could ideally be developed during normal times and tested at the wake of risk. It requires careful planning and commitment on part of all stakeholders. It is encouraging to note that it is possible to minimize risks related losses through diligent management of portfolio and cash-flow, by building robust institutional infrastructure with skilled human resources and inculcating client discipline, through effective coordination of stakeholders. Pyle (2016), in his study on credit management strategies in manufacturing firms need to meet forthcoming regulatory requirements for risk measurement and capital. However, it is a serious error to think that meeting regulatory requirements is the sole or even the most important reason for establishing a sound, scientific credit management system. It was held, managers need reliable risk measures to direct capital to activities with the best risk/reward ratios. They need estimate of the size of potential losses to stay within limits imposed by readily available liquidity, by creditors, customers and regulators. They need mechanisms to monitor positions and create incentives for prudent risk taking by divisions and individuals. Achou and Tenguh (2016) also conducted research on financial performance and credit management of firms in Thailand and found that there is a significant relationship between firms' performance (in terms of profitability) and credit management. Better credit management results in better performance. Thus, it is of crucial importance that firms practice prudent credit management and safeguarding the assets of the institutions and protect the investors "interests. This is also true for micro finance institutions.

Matu (2018) carried out a study on sustainability and profitability of manufacturing companies and noted that efficiency and effectiveness were the main challenges facing Kenya on service delivery. Soke Fun

Ho and Yusoff (2017), in their study on credit management strategies of selected manufacturing firms in Malaysia the majority of manufacturing firms stem from outright default due to inability of customers to meet obligations in relation to lending, trading, settlement and other financial transactions. Credit risk emanates from a firm dealing with individuals, corporate, financial institutions or sovereign entities. A bad portfolio may attract liquidity as well as credit risk. The aim of credit management is to maximize a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable boundary. The efficient management of credit risk is a vital part of the overall risk management system. It is therefore important that credit decisions are made by sound analyses of risks involved to avoid harms to firms' profitability.

Theoretical Discussion

Asymmetric Information Theory

Information asymmetry refers to a situation where business owners or manager know more about the prospects for, and risks facing their business, than do lenders (PWHC, 2002) cited in Eppy. I (2005). It describes a condition in which all parties involved in an undertaking do not know relevant information. In a debt market, information asymmetry arises when a borrower who takes a loan usually has better information about the potential risks and returns associated with investment projects for which the funds are earmarked. The lender on the other hand does not have sufficient information concerning the borrower (Edwards and Turnbull, 2014). Binks *et al.,* (2016) point out that perceived information asymmetry poses two problems for the banks, moral hazard (monitoring entrepreneurial behavior) and adverse selection (making errors in lending decisions). Banks will find it difficult to overcome these problems because it is not economical to devote resources to appraisal and monitoring where lending is for relatively small amounts. This is because data needed to screen credit applications and to monitor borrowers are not freely available to banks.Bankers face a situation of information asymmetry when assessing lending applications (Binks and Ennew, 2016). The information required to assess the competence and commitment of the entrepreneur, and the prospects of the business is either not available, uneconomic to obtain or difficult to interpret. This creates two types of risks for the Banker (Deakins, 1997). The risk of adverse selection which occurs when banks lend to businesses which subsequently fail (type II error), or when they do not lend to businesses which go on to become" successful, or have the potential to do so (type I error) Altman (1999).

Transactions Costs Theory

First developed by Schwartz (1974), this theory conjectures that suppliers may have an advantage over traditional lenders in checking the real financial situation or the credit worthiness of their clients. Suppliers also have a better ability to monitor and force repayment of the credit. All these superiorities may give suppliers a cost advantage when compared with financial institutions. Three sources of cost advantage were classified by Petersen and Rajan (2017) as follows: information acquisition, controlling the buyer and salvaging value from existing assets. The first source of cost advantage can be explained by the fact that sellers can get information about buyers faster and at lower cost because it is obtained in the normal course of business. That is, the frequency and the amount of the buyer's orders give suppliers an idea of the client's situation; the buyer's rejection of discounts for early payment may serve to alert the supplier of a weakening in the credit-worthiness of the buyer, and sellers usually visit customers more often than financial institutions do.

Aggressive Theory

This theory is applied where the firm plans to take high risk and where short-term funds are used to a very high degree to finance current and fixed assets. This approach is characterized by low interest rates. However, it's important to note that that the risk associated with short term debt is higher than long term debt. This applies mostly to companies/ firms operating in a stable economy and is quite certain about future cash flows. A company with an aggressive working capital policy offers short credit periods to customers, holds minimal inventory and has a small amount of cash in hand. This policy increases the risk of defaulting due to the fact that a company might face lack of resources to meet short term liabilities but

METHODOLOGY

The ex-poste investigative type of research design was adopted in this study. The data required are obtained from appropriate sources and analyzed accordingly. The technique was appropriate as it involved a careful in-depth study and analysis on the effect of credit management on the financial performance of manufacturing firms in Nigeria. Ibeaja (2015) defines "population as all elements, subsets, or observations that are of primary interest to a research or a study". Thus, the population of the study consists of quoted manufacturing firms in Nigeria. Currently, there are 13 manufacturing firms quoted in the Nigerian Stock Exchange (NSE). This population of is hence, considered as a whole. They are Austin Laz & Company Plc, Berger Paints Plc, Beta Glass Plc., Cap Plc, Cement Co. Of North.Nig. Plc., Cutix Plc., Dangote Cement Plc., Greif Nigeria Plc., Lafarge Africa Plc., Meyer Plc., Notore Chemical Ind Plc., Portland Paints & Products Nigeria Plc., and Premier Paints Plc. For the purpose of meeting the set aim of the study, secondary data was used in analyzing and making inferences in this report.

This research makes use of secondary data such as Credit Sales, Credit Limit, Returns on Assets and Returns on equity. These data are gotten from annual financial statements of respective manufacturing firms and Nigeria stock exchange for a period of 5 years (2015 to 2019).

The data thatcollected was tabulated and analyzed using the Statistical Package for the Social Sciences software package (SPSS) 21 these includes mean and standard deviations. Descriptive statistics was used to analyze the data. Furthermore, descriptions were made based on the results of the tables. In analyzing the relationship between the independent and dependent variable of the study based on data collected, the Pearson Product Moment Correlation was used. The Pearson Product Moment Correlation co-efficient denoted by r is calculated as follows:

r = $n \sum xy -$ ¿¿¿

n= number of samples

x and y = variables under consideration

For this study, the researcher was interested in establishing the impact of Credit Management on financial performance of manufacturing firms in Nigeria. Hence, Ordinary Linear Regression Technique was induced. The model used in the study took the form below:

$Y1= \alpha+\beta1X1+ \beta2X2+$ ȩ

$Y2= \alpha+\beta1X1+ \beta2X2+$ȩ

Where: Y= financial performance as measured by ROA and ROE α= Constant Term

β= Beta Coefficient –These measures how many standard deviations a dependent variable will change, per standard deviation increase in the independent variable.

X1= Credit policies X2= Credit granting policy ȩ= Error term
Y= Independent variable
X= Dependent variable
Model specification refers to the determination of which independent variables should be included in or excluded from a regression equation. The model specification for this research is given below:
Functionally;

$$ROE = F(CL, CS)$$
$$ROA = F(CL, CS)$$

Mathematically;

$ROE = b_0 + b_1 CL + b_2 CS$

$ROA = b_0 + b_1 CL + b_2 CS$

It is stated econometrically;

$ROE = b_0 + b_1 CL + b_2 CS + e$

$ROA = b_0 + b_1 CL + b_2 CS + e$

Where $b_0 = y - intercept\ at\ time\ zero$

$b_1 \wedge b_2 = regression\ coefficients$

$E = random\ error \in prediction$

CL = Credit Limit

$CS = Credit\ Sales$

ROA=Return on Assets

ROE=Return on equity

Summary of variables and measurement

Variable	Definition	Formulae
Y1	Financial performance	ROA= Return on Assets = net operating income-taxes/ average total assets
Y2	Financial performance	ROE= Return on Equity = net income/total assets
X1	Credit policy (Credit Limit)	Credit limit refers to the internally agreed maximum amount of credit a company extends to a client
X2	Credit grant policy (Credit Sales)	Credit Sales = Total sales – (Sales Returns + Sales Allowances + Cash Sales)

Validity can be defined as the extent to which data collection methods accurately measures what they were intended to measure. Validity refers to the extent to which a test measures what we actually want to measure. The validity of the research was tested using face validity method. The reliability of a research instrument refers to the degree to which the instrument is able of yielding similar/consistent results overtime. The reliability of the data was tested using the Cronbach al

RESULTS AND DISCUSSIONS

Table 4.1. Descriptive Statistics of data.

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Credit Sales	65	1.85	33.39	13.2954	8.86042	.472	.297	-1.021	.586
Credit Limit	65	.34	8.50	2.4472	1.89348	1.575	.297	2.108	.586
Returns on Asset	65	.20	4.45	2.1326	.98054	.368	.297	-.193	.586
Returns on Equity	65	-1.46	30.79	13.1789	6.10800	.086	.297	.674	.586

Valid N (listwise)	65								

From the table above, it is seen that the minimum credit sales and credit limit are 1.85 and 0.34 million naira respectively for the time frame of study. The maximum values of the variables for the time frame are respectively 33.4 and 8.5 million naira respectively. Their mean values are 13.3 and 2.4 respectively. The data is seen to be platykurtic for Credit sales and Credit limit. Also, they are seen to be skewed to the right with positive kurtosis value. Both measures of financial performance, Returns on Assets and Returns on Equity are seen to have minimum values of 0.2 and a negating value of 1.46. The indicator of maximum values for both measures shows their values to be 4.45 and 30.79 respectively. The mean of both variables are 2.1 and 13.18 respectively. Both variables are platykurtic since their kurtosis values are below 3. While ROA is seen to be positively skewed, ROE is seen to be an approximately normal distribution.

Table 4.2 Correlation analysis of data

Correlations

		Credit Sales	Credit Limit	Returns on Asset	Returns on Equity
Credit Sales	Pearson Correlation	1	.394**	.639	.540
	Sig. (2-tailed)		.001	.017	.027
	N	65	65	65	65
Credit Limit	Pearson Correlation	.394**	1	.554	.357
	Sig. (2-tailed)	.001		.055	.021
	N	65	65	65	65
Returns on Asset	Pearson Correlation	.639	.554	1	.185
	Sig. (2-tailed)	.017	.055		.140
	N	65	65	65	65
Returns on Equity	Pearson Correlation	.540	.357	.185	1
	Sig. (2-tailed)	.027	.021	.140	
	N	65	65	65	65

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

Credit sales has a strong correlation with Returns on assets and returns on equity. These results, with the dependent variables, are seen to be significant with the p values lesser than the 0.05 level of significance. Also, Credit is seen to have weak correlation with ROE and has a strong one on ROA. This finding with ROE, is seen to be significant with at 0.05 level of significance since the significant value is lesser than 0.05. However, the result is seen to be insignificant with Returns on Assets.

Table 4.3: Regression Analysis of ROA against CS and CL

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.861	.240		7.762	.000
	Credit Sales	-.017	.015	-.156	-1.150	.025
	Credit Limit	.027	.070	.033	.241	.811

a. Dependent Variable: Returns on Asset

Table 4.4 above shows the regression coefficient of Returns on Assets against Credit Sales and Credit Limit. And from deductions made, it is seen that as credit sales increases, there is seen to be a decrement in ROA by 0.017. Also, as credit limit increases, there is seen to be an increment in ROA by 0.027. These results are seen to be significant only with Credit Sales and not significant with Credit Limit at 0.05 level of significance.

Table 4.4: Regression Analysis of ROA against ATM and POS.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.976	1.492		10.040	.000
	Credit Sales	-.063	.094	-.092	-.677	.040
	Credit Limit	-.390	.438	-.121	-.889	.037

a. Dependent Variable: Returns on Equity

There is observed to be a 0.063 decrement in Returns on Equity as Credit Sales increases by a unit. Also, ROA decreases by 0.39 as Credit Limit increases by 1. These findings are seen to be significant at the 0.05 level of significance.

Discussion of Results

The data gathered for the purpose of this research work was analyzed and several depictions were made which are tailored to meet the aim of the study. These are hence discussed. Both ROA and ROE which are measures for financial performance for the time frame of study showed that they have strong correlation values with the respective credit management. These results shown in Table 4.3, are significant except for the relationship between Credit Limit and ROA which is insignificant. This is because their correlation values are the ones that are below the 0.05 level of significance. The regression analysis of ROA against credit sales and credit limit depicts that there is a negative effect of ROA on financial performance of banks. This is because CS is seen to seen to cause significant decrement in ROA as they increase by a unit while Credit limit causes an insignificant increment in ROA. Also, both ATM and POS numbers have fair effect on ROA as they both correlate it with a coefficient of 0.172. They are both seen to affect ROA by 30% as shown by the r squared value (Appendix Table 1). The regression linearity, measured by the F statistics is seen to affirm linearity between the measured variables as the p value is seen to be lesser than 0.05 which is the set level of significance (Appendix Table 2).

Also, the regression analysis of ROE against Credit Sales and Credit limit depicts that there is a negative effect of the both independent variables on the financial performance of banks with ROE as the considered variable. This is because they cause significant decrement in ROE during the time frame of study. Also, credit sales and credit limit together have weak effect on ROE as they both correlate it with a coefficient of 0.178. They are both seen to affect ROE by 32% as shown by the r squared value (Appendix Table 3). The regression linearity, measured by the F statistics is seen to affirm the linearity between the measured variables as the p value is seen to be lesser than 0.05 which is the set level of significance (Appendix Table 4).

CONCLUSIONS AND RECOMMENDATIONS

The measures of financial performance of insurance companies, ROE and ROA, for the time frame of study, showed that they are affected negatively by the measures of capital structure. These effects are generally significant but can depend on the variable of financial performance tested. Also, there is seen to be a generally weak relationship between the factors of credit management. We may say this is so as there are other managerial determinants that can dictate the eventual financial performance of industries. However, the changes they cause are significant meaning they are factors to be considered well in managerial planning and decision making. From the overall study, there are certain depictions that were made to satisfy the aim of the research. These findings are made to ensure they conform to the set aim of the study. effective management of credit grant has a positive relationship with the organizational performance of the companies in the corporate organizations. This implies that for companies to maximize their profit, they should grant credit to trustworthy customers with an appropriate credit control mechanism. It was discovered that credit sales decreases turnover and profitability in the domains of effective implementation of optimum credit policy in the firms. Hence, sales in credit should be reduced and proper recall for debts should be made annually. From the findings made during the course of study, the following recommendations are hence made to manufacturing companies, basically to bring about increment in productivity of manufacturing companies in Nigeria:

i. There is need for Manufacturing companies to maintain adequate liquid assets and eliminate bad debt losses and other associated costs of credit.
ii. Manufacturing companies should intensify efforts to engage the services of factoring agents. This will reduce the incidence of bad debts losses and other associated costs of credit.
iii. Manufacturing companies should increase the rate of credit sales to trustworthy customers only despite the fact that credit sales are a marketing tool to maintain or expired sales.

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Effect of Credit Management on Financial Performance of Deposit Money Banks in Nigeria

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Abstract

This research work was undertaken to assess the effect of credit management on the financial performance of deposit money Banks in Nigeria. This work was intended to achieve the following objectives; to appraise and determine the lending procedure of banks, to achieve good credit management system minimizes the amount of capital tied up with debtors. Relevant data were collected from secondary source. Secondary data were sourced from the annual reports of all the existing Deposit money banks. DMBs studied. The study employed multiple regression techniques in analyzing the data that gathered from various relevant publications upon the analysis of data, the following conclusions were drawn that sound lending requires a clear- well articulated and easy accessible policy document which spells out the philosophy of lending. On the basis of the above findings, it was recommended that bank should ensure that loans given out to customers should be backed by adequate collateral security.

Keywords: Credit Management, Financial Performance, Deposit Money Bank

INTRODUCTION

A bank exists not only to accept deposit from the savers but also to grant credit facilities. Credit creation is the main income generating activity for the banks and this intermediation function of banks gives rise to credit risk. Credit risk in turn is one of the most common causes of bank failures (Dolapo, Ayemi and Oke, 2012). Bank failures in Nigeria and other emerging economics have been attributed to improper lending practices, lack of experience, organizational and informational systems to adequately assess credit risk in the falling economy among others. High incidence of non-performing loans in the balance sheet reduces banks profitability and there by affect performance of banks (Uwalomwa, Uwuigbe, and Oyewo, 2015, Obule and Eze 2016, kolapo, Ayemi and Oke, 2012). Bessis 2001 asserted that credit risk management is important to bank management because banks are risk machines' they take risks and transform them to banking products and services.Risks are uncertainties due to variations in expected returns. The dictum in finance says that; therefore, risk can be opportunity or threat. In order to get higher returns, bank can either take an increased risk or lower operating costs. Thus, managers must evaluate and balance the tradeoffs between risk and returns. Managing credit is a complex task for any financial organization, and increasingly important in a world when economic events and financial systems are linked. Credit problems, especially weakness in credit management have been identified to be a part of the major reasons behind banking difficulties. Poor loan quality has its roots in the information processing mechanism. Brown (1998), Observed that these problems are at their acute stage in developing countries. The problem often begins right at the loan application stage and increase further at the loan approval, monitoring and controlling stages, especially when credit Risk management guidelines in terms of policy and strategies/procedures for credit processing do not exist or are weak or incomplete. Loans that constitute a large proportion of the assets in most banks' portfolios are relatively illiquid and exhibit the highest credit risk (Koch and Macdonald, 2000). Adverse selection and moral hazards have led to substantial accumulation of non-performing accounts in bank Bester, 1994.

Apparently aware of the inadequate of his decision base, the lending bankers have often sought solace in tangible and marketable assets as security giving the banker complaint with his loan portfolio. The increase tend of provision for bad and doubtful debts in most money deposit banks is a major source of concern not only to management but also to the shareholders who are becoming more aware of the dangers posed by these debts. Bad debts destroy part of the earning assets of banks such as loans and advances which have been described as the main source of earning and also determine the liquidity and solvency which generate two major problems, that is profitability and liquidity, has to earn sufficient income to meet its operating cost and to have adequate return on its investments. One of the major problems confronting the banking industry today is the increasing incidence of loan defaults and consequent loan losses which manifested on the profitability of the banks. sequel to increasing incidence of huge bad debts in the Nigeria banking industry, insiders abuses, management competence have called to question Bad debts, it must be noted occur due to the inability of the banks management to recovers loans granted to customers. The main objectives of the study are to examine the effect of credit management on the financial performance of deposit money banks in Nigeria.

LITERATURE REVIEW

Credit management is the process of monitoring and collecting payments from customers. A good credit management system minimizes the amount of capital tied up with debtor. It is very important to have good credit management for efficient cash flow. There are instances when a plan seems to be profitable when assumed theoretically but practically execution is not possible due to insufficient funds. In order to avoid such situations, the best alternatives are to limit the livelihood of bad debts. This can only be achieved through good credit management practices.

Theoretical Framework

Loan Pricing Theory

Banks cannot always set high interest rates. Banks should consider the problems of adverse selection and moral hazard since it is very difficult to forecast the borrower type at the start of the banking relationship. If banks set interest rates too high, they may induce adverse selection problems because high-risk borrowers are willing to accept these high rates. Once these borrowers receive the loans, they may develop moral hazard behaviour or so called borrower moral hazard since they are likely to take on highly risky projects or investments. From this reasoning, it is usual that in some cases we may not find that the interest rate set by banks is commensurate with the risk of the borrowers.

Firm Characteristics Theory

These theories predict that the number of borrowing relationships will be decreasing for small, high quality, opaque in terms of information and constraint firms, all other things been equal. Robert and Gary (1994) state that the most obvious characteristics of failed banks is not poor operating efficiency, however, but an increased volume of non-performing loans. Non-performing loans in failed banks have typically been associated with regional macroeconomic problems. DeYoung and Whalen (1994) observed that the US Office of the Comptroller of the Currency found the difference between the failed banks and those that remained healthy or recovered from problems was the caliber of management. Superior mangers not only run their banks in a cost efficient fashion, and thus generate large profits relative to their peers, but also impose better loan underwriting and monitoring standards than their peers which result to better credit quality, Kargi (2011).

Theory of Multiple-Lending

It is found in literature that banks should be less inclined to share lending (loan syndication) in the presence of well developed equity markets. Both outside equity and mergers and acquisitions increase banks‟ lending capacities, thus reducing their need of greater diversification and monitoring through share lending. This theory has a great implication for banks in Nigeria in the light of the recent 2005 consolidation exercise in the industry. 2.1.4. The Signaling Arguments The signaling argument states that good companies should provide more collateral so that they can signal to the banks that they are less risky type borrowers and then they are charged lower interest rates. Meanwhile, the reverse signaling argument states that banks only require collateral and or covenants for relatively risky firms that also pay higher interest rates.

Credit Market Model

A model of the neoclassical credit market postulates that the terms of credits clear the market. If collateral and other restrictions (covenants) remain constant, the interest rate is the only price mechanism. With an increasing demand for credit and a given customer supply, the interest rate rises, and vice versa. It is thus believed that the higher the failure risks of the borrower, the higher the interest premium. The theoretical framework for this study factors the degree of openness of an economy in the analysis of the influence of both internal and external factors on interest rate movements in a semi-open economy like Nigeria. Suppose we have a closed economy, in which there is no inflow or outflow of capital and the demand for money is the demand for real money. In such an economy, money is held by the economic units purely to finance transactions and increase the demand for money with real output. However, it is worthy of note, that holding money has an opportunity cost that is measured by the nominal rate of interest, with higher interest rates discouraging the holding of wealth in the form of money. If M is assumed to be the nominal stock of money and P is the price level, real money demand is defined as M/P, which is a function of the interest rate, i and the output, Y. Short run equilibrium in the money market exists, when the demand for money is equal to the supply of money.

Concept of credit

According to onyeagocha; (2001) the term credit is used specifically to refer to the faith place by a creditor; lender; in a debtor; borrower; by extending a loan usually in the form of money, goods or securities to debtors. Essentially, when a loan is made, the lender is said to have extended credit to the borrower and he automatically accepts the credit of the borrower. Credit can therefore be defined as a transaction between two parties in which the creditor or lender supplies money, goods and services or securities in return for promised future payments by the debtors or borrowers. There are three major types of credit. These are commercial credit, consumer credit and investment credit. Commercial credit can be bank credit such as overdraft, loans and advance; trade credit from supplies; commercial paper; or note; invoice discounting; bill finance; hire purchase; factory e.t.c. Consumer credit is a kind of permission granted to an individual or a household to purchase goods like refrigerator, television, car, electronic sets, which could not be paid for immediately but for which installment payment are made over a period of time.

Credit risk

According to Obalemo; 2004;. Credit risk is an assumed risk that a borrower won't pay back to lender as agreed. The various types of credit risk include management risk, geographical risk, business risk, financial risk and industrial risk. The probable occurrence of partial or total default requires a through risk assessment prior to granting loans.

Credit risk management

Credit risk management greatly influence or prevent the failure of a bank. This is because the failure of a bank is influenced to a large extent by the quality of great decisions and thus the quality of banks credit portfolio (Naugton 1994). The key element is an effective credit management includes;

- well developed credit policy framework and procedures;
- strong portfolio management;
- effective credit control and;
- well trained human resources to implement system

Bank management must conduct a market definition as a starting point in credit risk management. This also includes the determination of the target markets. The credit policies are a necessary guide for the determination of the target market, and customers, and defined the acceptable and inacceptable risks. Credit origination usually is at the instance of the customer. The credit officer must identify the reason why the borrower needs the loan and cross check all facts about the proposal and thus have all relevant information for evaluating the proposal. The credit officer should also evaluate the proposal as to the management and nature of business. Thereafter the officer must be certain on the source of repayment, ascertain of the proposal fits into the banks objectives and the government policies in place, assess the government policies in place, assess the business risk that could inhibit repayment and then conduct a financial analysis. All the issues here are assessed under the credit analysis. In addition, the collateral package is appraised. Approval is then sought from the deciding authorities. Banks usually adopt either a committee or a sequential process of credit approval in the committee system. The ultimate approval of accredit proposal is done by a committee consisting of members of a senior management and sectional heads. It could also be a board committee made up of members of the board of directors. The sequential process is applied in smaller loans and consists of approval chains of individual loan officers with ascending level of authority.

Credit Risk Management Strategies

The credit risk management strategies are measures employed by banks to avoid or minimize the adverse effect of credit risk. A sound credit risk management framework is crucial for banks so as to enhance profitability guarantee survival. According to Lindgren (1987), the key principles in credit risk management process are sequenced as follows; establishment of a clear structure, allocation of responsibility, processes have to be prioritized and disciplined, responsibilities should be clearly communicated and accountability assigned. The strategies for hedging credit risk include but not limited to these; i. Credit Derivatives: This provides banks with an approach which does not require them to adjust their loan portfolio. Credit derivatives provide banks with a new source of fee income and offer banks the opportunity to reduce their regulatory capital. The commonest type of credit derivative is credit default swap whereby a seller agrees to shift the credit risk of a loan to the protection buyer. Frank Partnoy and David Skeel in Financial Times of 17 July, 2006 said that "credit derivatives encourage banks to lend more than they would, at lower rates, to riskier borrowers". Recent innovations in credit derivatives markets have improved lenders‟ abilities to transfer credit risk to other institutions while maintaining relationship with borrowers. ii. Credit Securitization: It is the transfer of credit risk to a factor or insurance firm and this relieves the bank from monitoring the borrower and fear of the hazardous effect of classified assets. This approach insures the lending activity of banks. The growing popularity of credit risk securitization can be put down to the fact that banks typically use the instrument of securitization to diversify concentrated credit risk exposures and to explore an alternative source of funding by realizing regulatory arbitrage and liquidity improvements when selling securitization transactions.

A cash collateralized loan obligation is a form of securitization in which assets (bank loans) are removed from a bank's balance sheet and packaged (tranched) into marketable securities that are sold on to investors via a special purpose vehicle (SPV). iii. Compliance to Basel Accord: The Basel Accord is an international principles and regulations guiding the operations of banks to ensure soundness and stability. The Accord was introduced in 1988 in Switzerland. Compliance with the Accord means being able to identify, generate, track and report on risk-related data in an integrated manner, with full audit ability and transparency and creates the opportunity to improve the risk management processes of banks. The New Basel Capital Accord places explicitly the onus on banks to adopt sound internal credit risk management practices to assess their capital adequacy requirements (Chen and Pan, 2012). iv. Adoption of a sound internal lending policy: The lending policy guides banks in disbursing loans to customers. Strict adherence to the lending policy is by far the cheapest and easiest method of credit risk management. The lending policy should be in line with the overall bank strategy and the factors considered in designing a lending policy should include; the existing credit policy, industry norms, general economic conditions of the country and the prevailing economic climate (Kithinji, 2010). v. Credit Bureau: This is an institution which compiles information and sells this information to banks as regards the lending profile of a borrower. The bureau awards credit score called statistical odd to the borrower which makes it easy for banks to make instantaneous lending decision. Example of a credit bureau is the Credit Risk Management

System (CRMS) of the Central Bank of Nigeria (CBN). vi. Policy Strategy: Banks and other financial institutions should endeavour to have a credit policy manual which should be updated regularly to meet the changing business environment. Such credimanuals should provide rules and regulations guiding the important aspect of work being performed within their credit department. The reason for the manual is to understand and recognize important issues and to ensure consistent thinking and action on these issues by people inside the department. One of the fundamental things to remember is that the work being done by the credit department affects many people and departments within the organization. Graham suggested that the credit policy manual should be detailed and provides guidelines in terms of the following: documentations required; department of credit analysis and format to be used; statutory requirements; approval process; credit procedure; Communication channels between headquarter, the branches and customers; Penalties for defaulters, etc.

Non- performing loan

A non- performing loan ;NPL; is a loan in which the borrower is in default and has not paid the monthly principal and interest repayments for a specified period. Non-performing loans occur when borrowers run out of money to make repayment or get into situations that make it difficult for them to continue making repayments towards the loan. Usually, banks classify loans as non-performing loans when the repayments of principal and interest and due for more than 90 days or depending on the terms of the loan agreement. As soon as a loan is classified as an NPL, it means that the livelihoods of receiving repayments are significantly lower. However, a borrower may start making repayments to a loan that has already been classified as a non- performing loan. In such cases, the non-performing loan becomes a re- performing loan. Generally, non- performing loans are considered bad debts because the chances of recovering the defaulted loan repayments are minimal. However, having more non- performing loans in the company's balance hurts the bank's cash flows, as well as its stock price. Therefore, banks that have non- performing loans in their books may take action to enforce the recovery of the loans they are owed. One of the actions that lender can take is to take possession of assets pledged as collateral for the loan. For example, if the borrower provided a motor vehicle as collateral for the loan, the lender will take possession of the motor vehicle and sell it off to recover any amounts owed by the borrower. Banks sell the non-performing loans at significant discounts, and the collection agencies attempt to collect as much of the money owed as possible. Alternatively, the lender can engage a collection agency to enforce the recovery of a defaulted loan in exchange for a percentage of the amount recovered.

Deposit Money Banks in Nigeria

Central Bank of Nigeria (2010), under the Prudential Guidelines, non-performing credit facilities were subject to classification into three categories, namely; sub-standard, doubtful or lost on the bases of certain criteria below: (1) Sub-Standard: The following objective and subjective criteria could be used to identify substandard loan: Objective criteria: facilities on which unpaid principal and/or interest remain outstanding for more than 90 days but less than 180 days. Subjective criteria: facilities which display well defined weaknesses which could affect the ability of borrowers to repay, such as inadequate cash flow to service debt, under capitalization or insufficient working capital, absence of adequate financial information or collateral documentation, irregular payment of principal and/or interest, and inactive accounts where withdrawals exceed repayments can barely cover interest charges. (2) Doubtful: The following objective and subjective criteria should also be used to identify doubtful credit facilities: Objective criteria: facilities on which unpaid principal and/or interest remain outstanding for at least 180 days but less than 360 days and are not secured by legal title to leased assets or perfected realizable collateral in the process of collection or realization. Subjective criteria: facilities which in addition to the weakness associated with sub standard credit facilities reflect that full repayment of the debt is not certain or that realizable collateral values will be insufficient to cover bank's exposure. (3) Lost Credit Facilities: The following objective and subjective criteria should be used to identify lost credit facilities: Objective criteria: facilities on which unpaid principal and/or interest remain outstanding for 360 days or more and are not secured by legal title to leased assets or perfected realizable collater al in the course of collection or realization. Subjective criteria: facilities which in addition to the weakness associated with doubtfulcredit are considered uncollectable and are of such little value that continuation as a bankable asset is unrealistic such as facilities that have been abandoned, facilities secured with unmarketable and unrealizable securities and facilities extended to judgement debtors with no means or fore closable collateral to settle debts.

Loan loss provision

A loan loss provision is an income statement expenses set aside as an allowance for uncollected loans and loan payments. This provision is used to cover different kind of loan losses such as non- performing loans, customer bankruptcy and renegotiated loans that incur lower – than – previously –estimated payments. Loan loss provisions are then added to the loan loss reserve, a balance sheet item that represents the total amount of loan losses subtracted a company's loans. The findings of the study revealed that loan loss provision; LLP; non- performing loans; NPL; and capital adequacy; CA; had a positive effect on profitability whilst loans and advances rather had an inverse relationship with financial performance in the period under study. Sharma; 2012; explores various parameters pertinent to credit risk management as it affect banks financial performance.

Profitability of deposit money banks

Banking profitability may also show managers attitude toward risk. Banks that make huge profits are not scared when venturing into risky activities. In a similar fashion, banks that are not effective in management encounter higher bad debt. Profitability measure is important to the investors. The level of profitability is predominant. ROA and ROE are use as main profitability measures in most organizations including banks and financial institutions. The ROA demonstrates the level of net income produced by the bank and also determines how the assets utilized by banks generate profit over the years. On the other hand, the return on equity ;ROE; is the ratio of net profit income to total equity indicating returns to shareholders on the book value of their investment.

Empirical Review

Taiwo and Abayomi (2013), evaluated the impact of credit risk management on bank Profitability of some selected DMBs in Nigeria. The result from Panel Least Square (PLS) Estimate found that credit risk management has a significant impact on the profitability of Nigerian banks. Poudel (2012) studied the factors affecting commercial banks performance in Nepal for the period of 2001-2012 and used a linear regression analysis technique. The study revealed a significant inverse relationship between commercial bank performances measured by ROA and credit risk measured by default rate and capital adequacy ratio. In this study, the a priori assumption is that credit risk (non-performing loans, loan loss provisions, loans and Advances) has a negative impact on profitability. Additionally, there are other internal Variables such as capital adequacy, bank size and age that could affect the profitability (ROA and ROE) of a bank. The 2015 Credit Management and Bank Performance of Listed Banks in Nigeria revealed that ratio of non-performing loans and bad debt does not have a significant negative effect on the performance of banks in Nigeria. While secured and unsecured loan ratio and banks performance was not significant (Uwalomwa, Uwuigbe and Oyewo, 2015). Saeed and Zahid 2016) studied the impact of credit risk on profitability of the commercial Banks and the result showed that credit risk indicators had a positive association with Profitability of the banks. Moreover, sound management of credit risk is a significant element of an all-inclusive method to risk management as a whole and vital to the future progress of any financial institution. Banks play a major role in the credit market because they assemble deposits from the various surplus units and make them available to the deficit unit for development activities. This implies that banks give out loan to borrowers from deposits made by the public with the objective of increasing their profitability. Now, since banks make huge profit through their role as financial intermediaries, it beholds on them to find pragmatic ways of managing credit risk and thereby guarding and enhancing their profitability (Muhammad & Garba, 2014).

Alalade, Binuyo & Oguntodu (2014) examines the impact of managing credit risk and Profitability of banks in Lagos state. The research hypothesis was tested and analyzed in relation to credit risk and its significant effect on banks'' profitability. It was also the aim of this research to evaluate how effective it is for a bank to manage its credit risk effectively to enhance profitability. Data for the study was an obtained through the administering structured questionnaires which were answered by respondents. Correlation coefficient was used to decide whether or not credit risk management has an impact on profitability. The results revealed that credit risk reduces the profit and therefore management of credit risk should be of great importance to management of bank in Lagos state. More comprehensively, Kolapo et al. (2012) used panel data analysis in studying the effect of credit risk on banks'' performance using ROA as a measure for performance. The result was that an increase in nonperforming loans or loan losses provision diminishes profitability (ROA), while an increase in total loan and advances enhance profitability.

Theoretical Review

Anticipated Income Theory

Under this theory, bank's management can plan its liquidity based on the expected income of the borrower and this enables the bank to grant a medium and long-term loans, in addition to short-term loans as long as the repayment of these loans are linked by the borrowers expected income to be paid in the periodic and regular premiums, and that will enable the bank to provide high liquidity, when the cash inflows are regular and can be expected. Deposit money banks can manage its liquidity through appropriate credit management that is directing of granted loans, and ensuring that these loans are collected as at when due in a timely manner and minimize the possibility of delays in repayment at the maturity date (Okoh, Nkechukwu & Ezu, 2016).

Shift ability Theory

Shift ability is the approach to keep the banks liquid by supporting the Shifting of assets. When a bank is short of ready money, it is able to sell its assets to a more liquid bank. The approach allows the banking system run more efficiently: with fewer reserves or investing in long-term assets. Under shift ability, the banking system tries to avoid liquidity crises by enabling banks to always sell or repo at good prices (Okoh, Okechuku, and Ezu 2016)

METHODOLOGY

The research method applied in this study is quantitative. Besides, both historical and descriptive research design adopted. The study investigates the relationship between the dependent variable (performance) and the independent variables (credit risk) from 1989 to 2014. Annual time series data obtained from CBN statistical bulletin, Stock Exchange fact book and the World Development Indicators (WDI) shall be used.

Research Design

It explains the nature of the pattern the research intends to follow. This is the overall plan or strategy for conducting the research. The main purpose of the study was to evaluate the relationship between credit management and the profitability of deposit money banks in Nigeria. The research was conducted through a Historical Research Design. Historical research design is where the researcher explores, explains and understands past phenomenon from already existing data. This helped the researcher to arrive at conclusions about the effect of credit management on the profitability in order to explain the present and predict and control the future. The study adopted quantitative research approach which answered the ''How many?'' questions in the study, thus allowed the measurement of relaships between variables in a systematic and statistical method.

Description of Variables

The Dependent Variable In this study, performance is the dependent variable represented by return on assets (ROA), defined as profit after tax divided by total assets and return on equity (ROE), defined as profit after tax divided by equity. The above performance indicators have been used extensively in previous studies and with satisfactory results (Aziz, Ibrahim and Isa, 2009). We have therefore chosen to use return on equity (ROE) and return on assets (ROA) as measures of performance representing the dependent variable.

Independent Variables

Credit risk is the risk of counter-party failure in meeting the payment obligation on the specific date. Credit risk management is an important challenge to deposit money banks in Nigeria and failure on this front leads to failure of banks. In modelling the influence of credit risk, the ratios of total loan to deposit (LDR), non-performing loans to total loans (NLTL) and total loans to total assets (TLTA) are used.

Model specification

The empirical models to be estimated in this study are specified functionally as: ROA = F (LDR, NLTL, TLTA) -- equation 1
ROE = F (LDR, NLTL, TLTA) --- equation 2
Econometrically, the regression models are transformed as:
$ROAt = \beta o + \beta 1LDRt + \beta 2NLTLt + \beta 3TLTAt + Ut$ -------------------------------- equation 3
$ROEt = \beta o + \beta 1LDRt + \beta 2NLTLt + \beta 3TLTAt + Ut$ -------------------------------- equation 4

Where:

ROA = Return on Assets
ROE = Return on Equity
LDR = Total loans and advances-to-total deposit ratio
NLTL = Non-performing loans-to-total loans ratio
TLTA = Total loans and advances-to-total assets ratio
t= Time series data
$\beta 0$ = Intercept
$\beta 1, \beta 2, \beta 3$ = Parameters of the coefficients
U = Error or disturbance Term $\beta 1, \beta 2, < 0; \beta 3 > 0$

RESULT AND DISCUSSION

Various descriptive statistics are calculated from the variables under study in order to describe the basic characteristics of these variables. As can be seen from table 4.1, all the variables are asymmetrical. More precisely, skewness is positive for all the variables except the ratios of total loans and advances to deposit and total loans and advances to total assets. Kurtosis value of all the variables also shows data is not normally distributed as the values of kurtosis are deviated from 3. The Jacque Berra statistics and p-values accept the normality assumption at 5% level of significance for all the variables.

Table1. Descriptive Statistics

	ROA	ROE	LDR	NLTL	TLTA
Mean	529.6319	402.7062	63.88115	23.51962	0.382077
Median	543.2500	401.4250	64.93000	21.50000	0.380000
Maximum	684.5600	478.2200	85.66000	45.40000	0.530000
Minimum	410.0200	326.2900	36.25000	3.000000	0.210000
Std. Dev	69.06888	36.57816	12.81796	13.98437	0.079570
Skewness	0.087669	0.173143	-0.475953	0.045553	-0.137823

Kurtosis	2.663357	2.825027	2.497870	1.775412	2.488850
Jarque-Bera	0.156078	0.163073	1.254782	1.633575	0.365359
Probability	0.924928	0.921699	0.533983	0.441849	0.833035
Sum	13770.43	10470.36	1660.910	611.5100	9.934000
Sum Sq. Dev.	119262.7	33449.05	4107.505	4889.066	0.158284
Observations	26	26	26	26	26

Source: Author's compilation from Eviews

Table2. Correlation matrix

	ROA	ROE	LDR	NLTL	TLTA
ROA	1				
ROE	0.7557	1			
LDR	0.3257	0.3332	1		
NLTL	-0.6555	-0.6073	0.2147	1	
TLTA	0.3144	0.4461	0.3233	-0.6295	1

Source: Author's compilations from Eviews

Table 2 above shows that the variables are among themselves both positively and negatively correlated.

Table3. Unit root result

Variables	At level	1 st difference	Order of integration
ROA	-2.545	-4.278	I(1)
ROE	-2.778	-7.081	I(1)
LDR	-3.846	0	I(0)
NLTL	-1.527	-6.122	I(1)
TLTA	-1.334	-4.810	I(1)

Critical values: 1%: -3.738
5%: -2.992

Source: Author's compilations from Eviews

Table 3 above presents the summary results of the ADF unit root tests. All the variables are tested at levels and first difference for stationarity using the ADF test. The result shows that all the variables are stationary at first difference except the ratio of total loans and advances to total deposit which is stationary at level. This indicates that the regression is no more spurious but real. That is to say, all the variables are individually stationary and stable.

Table4. Johansen cointegration test results

Model	Variables		No. of Co-integrating equation @ 5%		
	Dependent Variable	Independent Variables	Trace test	Maximumeigenvalue	Lag Intervals
1	ROA	LDR, NLTL, TLTA	2	2	1to2
2	ROE	LDR, NLTL, TLTA	2	2	1to2

Source: Authors compilations from Eviews

Table 4 shows the summary results of the Johansen Co-integration test employed to test for the long run co-integration relationship between bank performance represented by return on assets (ROA) and return on equity (ROE); and asset quality management of deposit money banks represented by the ratios of total loans and advances to total deposit, total non-performing loans to total loans and advances and total loans and advances to total assets. There are two co-integrating equations each for both the trace tests and the maximum-eigenvalue test with one to two lag intervals taken at 5 percent significant level

CONCLUSION AND RECOMMENDATION

This work is an analysis of the impact of credit risk management on the performance of deposit money banks. In summary, the findings demonstrate succinctly, that the selected credit risk management indicators under study significantly affect the performance of deposit money banks in Nigeria. But the measure of relationship differs according to the different performance indicators. Therefore, the result of our econometric tests leads us to conclude that there is a significant relationship between the various credit risk management indicators employed in this study and the performance of deposit money banks in Nigeria. The following strategies are recommended in other to improve banks performance and profitability in Nigeria. (i). Management need to be cautious in setting up a credit policy that will not negatively affect the operations of their banks in order to ensure judicious utilization of deposits and maximization of profit. (ii) CBN for policy making purpose should regularly assess the lending attitudes of deposit money banks and effective cash management policies to avoid insolvency in the financial system. (iii). Determining the credit worthiness of a customer whether individual or corporate organization must be carefully planned. A rush into the approval of loan without sourcing adequate and relevant information on the prospective borrowers must be avoided if the bank wishes to circumvent delays in the recovery of debt. (iv). To increase credit volume, the interest rate policy must be considered within the frame of economic circumstances of the time for low interest rate does facilitate quick repayment and drastically minimize debt failure.

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Impact of Microfinance Banks on the Nigerian Economic Growth

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Abstract

Micro financing has been hailed as a veritable tool for the socio-economic growth of less developed economies in the past few years. The role of these institutions has been said to encompass a wide range of the economic life. The study examines the impact of microfinance banks on the Nigeria economic growth. This study adopts the expo-facto research design. In carrying out this study, secondary data was used ranging from 1991 to 2020 a period of 30years for estimation. The time series data were source from the central bank of Nigeria statistical bulletin gotten from various issues, the national policy framework for microfinance in Nigeria, World Bank data for various years and issues, World Bank national accounts data, OECD National Accounts data, CBN annual reports and statement of accounts for various years. The empirical analysis perspective of this study employed the descriptive statistic, Augmented Dickey-Fuller Unit Root Test and multiple regression techniques with the help of E-view 10 package. The study found that there exists a positive significant relationship between microfinance bank credit growth and microfinance bank deposit growth on Nigeria economic growth while microfinance bank investment growth and microfinance bank assets growth does not have significant impact on real gross domestic product (economic growth) as reported by the result from the multiple regression analysis. The study recommended that microfinance banks should improve investment and other capital accumulation. It is these channels of participation in the economy that will ensure optimal use of the microfinance resources in the country with the target of achieving sustainable growth.

Keywords: Microfinance banks, Investment, Economic growth, Inflation

INTRODUCTION

The role of finance in the development of a nation cannot be overemphasized. Finance serves as a lubricant for every business activities, be it a sole trader, partnership, corporate or for running of an economy, such a finance can either be a short term, medium term and long term in nature. Finance in the form of microfinance plays a very vital role in alleviating poverty among people (Ahmeti, 2014). The history of microfinance sector is as old as when man started using money. People have always been borrowing, lending and saving, for as long as there has been money. This has always been done within communities, using their own system and methods without any external assistance or services. The micro finance scheme has primarily developed as a response to the inability or apathy of commercial banks and the formal financial system to serve the needs of low-income households and micro enterprise. According to the central Bank of Nigeria (2005), the formal financial system provides services to about 35% of the economically active population, while the remaining 65% are excluded from access to financial services.

Microfinance banking today in Nigeria and the world over, occupies a very strategic position in the enhancement of the socio-economic well-being of the poor who are typically self–employed low income entrepreneurs such as traders, street vendors, small farmers, hairdressers, barbers, GSM commercial operators, artisans and a host of others. Microfinance literally means building finance system that effectively and efficiently serves the needs of the poor. It is a powerful tool for fighting poverty the world over. This is true because when poor people have access to financial services, they can earn more, build their assets and cushion themselves against external shocks as they arise (Drechsel et al., 2012). According to Central Bank of Nigeria (2013), microfinance bank is the provision of a broad range of financial services such as savings, loans payment services, money transfers and insurance to the poor and low income persons, households and their microenterprises. According to Robinson (2002), microfinance enables clients to protect, diversify and increase their incomes as well as to accumulate assets and reduce vulnerability to income and consumption shocks. Seibel (2001) sees microfinance banking in a wider term as comprising banking and non-banking, formal and non-formal financial institutions with financial services of a small scale mostly to low income people and that the term micro banking is used for regulated microfinance institution belonging to the banking sector. According to Osamwonyi and Obayagbona (2012), the role of microfinance banking in the growth and development of the Nigerian economy cannot be underestimated in view of the astronomically growing population, coupled with the rising unemployment rate and youth restiveness; the government is facing a lot of challenges in providing enough jobs for the populace. One sure way to combating unemployment is to empower people with the necessary microfinance loans and services that will enable them start up or run business ventures of their choice.

The failure of conventional banking in Nigeria to meet the socio-economic complexities (needs) of the rural communities that consequently experience rapid growth and changes as well as government desire to reach rural areas with development gave rise to the emergence of community banks (now microfinance banks) as a way of providing financial answers to the low income earners or people so as to finance and improve their income generating activities, i.e. productive activities. Microfinance banks can be seen as an economic growth method intended to advantage the low income class of a given country like Nigeria, both rural and urban poor. Looking back into history, one would see that Nigerians have always engaged in economic activities, but such activities continued for a long time on subsistence basis. Agriculture, for instance was in most cases carried out simply to feed the immediate family. Other activities such as pottery, weaving, etc were for personal needs and market within the locality (Oladele, 1988). Currently, these traditional rural occupations such as pottery, basket making, cloth dying, local brewing etc which used to keep people employed, have escaped the reach of small scale undertakers. This is because, these poor entrepreneurs do not have access to financial services, which will support their activities to enable them to succeed in business and consequently reduce poverty and possibly bring about economic growth and development. Furthermore, UNDP Human Development Report (1997) estimated that 40% of Nigerians live in absolute poverty, with 80% of them living in the rural areas. The significance of this is that most of these rural dwellers have been denied access to banking facilities to enable them engage successfully in agriculture, handicraft etc. The aggregate micro credit facilities in Nigeria accounts for about 0.2 percent of GDP and less than one percent of total credit to the economy. Most microfinance funding go to the commercial sector to the detriment of the more vital economic activities, especially agricultural and manufacturing sectors which provide the foundation for sustainable growth and development. Currently, only about 14.1 and 3.5 per cent of total MFI funding went to these sectors, respectively, while the bulk, 78.4 percent, funded commerce (Anyanwu, 2004).

Microfinance according to the Central Bank of Nigeria (2005) is about providing financial services to the poor who largely constitute the 65% excluded from access to financial services of conventional banks. More so, lack of access to credit has been identified as the reason behind the growing level of poverty in many developing countries. This further emphasizes the crucial role microfinance institutions play in economic growth especially in their service for unserved and underserved markets (economically active person in rural and urban areas) to help meet economic and development objectives which include to reduce poverty (considered as the most important). Create employment, help existing businesses to grow or diversify their activities, empower women and other disadvantaged groups and even encourage the growth of new businesses (Khander, 2003). In 2005, the Central Bank of Nigeria (CBN) formulated a new policy framework to enhance the access of financial services to micro-entrepreneurs and low income households who require such facilities (soft loans and investable funds) to expand and modernize their operations and their contribution to economic growth and development in Nigeria. The objective is in line with the institution's policy in ensuring financial inclusion for all, such that financial services reach the poor whether in rural or urban communities as this would help improve their productivity level and also help contribute to the nation's gross domestic product (GDP). In 2004, the Central Bank of Nigeria asserts that the emergence of microfinance institution has been largely due to the inability of the formal financial institutions to provide financial services to both the rural and urban poor. In view of the need for financial inclusion, both the government and non-governmental agencies have, over the years, implemented series of microfinance programmes and institutions as well as governmental agencies providing policy strategies needed to improve the productivity of micro, small and medium scale enterprises. Community banks which have been transformed into microfinance banks were developed as self-sustaining financial institution owned and managed by local communities such as community development associations, town unions, cooperative societies, farmer's group, social club whose sole aim or objective is to promote rural development and enhance economic growth as well as economic development at the grassroots level by improving the saving habits of the people. Microfinance banks serves as part of the veritable vehicles for channeling funds for rural development. The total assets of microfinance banks grew from ₦981.0 million to ₦15,463.5 million in the year 2002. The number of microfinance banks, which was 66 in 1991, peaked at 1355 in 1995 but fell drastically to 769 in the year 2002, and in 2006 it further fell to 750. The number however, increased to 801 as at the end of 2010 (CBN Statistical Bulletin 2010). Microfinance banks in promoting and enhancing economic growth in Nigeria economy is faced with stiff difficulties like repayment problems, inadequate finance (poor financing). In a bid or in an attempt to resolving the above identified problems salvaging microfinance banks in Nigeria, this research work is intended to provide answers to the following questions: how have credit institutions, especially microfinance banks, been able to impact positively on the level of economic growth in Nigeria in the midst of the aforementioned problems; do the rural and urban poor really use the loans and advances from microfinance banks for productive activities that will promote and enhance economic growth or do they use it for their personal needs i.e. getting married, build houses; how has financial inadequacy or insufficiency in microfinance banks affected or limited the availability and affordability of soft loans to aspiring entrepreneurs in Nigeria. It is therefore imperative to investigate the role of microfinance banks in promoting economic growth in Nigeria

LITERATURE REVIEW

Conceptual Review

The microfinance banking model was formally introduced in Nigeria in December 2005 to drive inclusive participation of all economic units towards achieving rapid economic growth. The policy thrust of this banking model was to improve access of micro entrepreneurs and low income households to microcredit and other financial services necessary for the expansion and modernization of their operations. The rationale for a paradigm shift from conventional to the microfinance model for integrating this segment of the economic strata into mainstream economy is the uniqueness of their operations which include smallness of loans and savings, de-emphasis on collateral as a condition for credit delivery, and the simple nature of their operations.

Micro financing sometimes is mis-conceptualized to be financing from microfinance banks alone. Not only that, but it has also been misconstrued to be related to microcredit. This is a wrong assumption found in the extant literature as this type of finance can be provided by the government, NGO's and all deposit money banks such as commercial banks, microfinance banks and merchant banks. More so, it is not only limited to credit as microcredit is a component part of micro financing. This was supported by Sinha (1998) as cited in Khan and Karim (2016) who also argued that, microcredit refers to small loans whereas, microfinance has microcredit as one of its components. They said microfinance includes loans and other non-credit financial services such as savings insurance, pensions and payment services. Also, from Sultan and Masir (2016) point of view, microfinance was defined as financial institutions that provide financial services to the poor, unbanked population. The study argued that most of those that access this type of finance are those who have no account with formal financial institutions. As such were denied accesses to any financial services, however, microfinance institutions makes credit and other nonfinancial services accessible to them. This definition is a bit confusing as microfinance institutions are also formal institution legislated and established under the law. Also, the notion that microfinance is majorly for the unbanked population is far from the truth as many small scale traders have an account with the formal institutions. Sudan (2018) defined microfinance as the system that supplies loans, savings and other essential financial services to the deprived sector. The study explained the vital financial services to mean working capital loans, consumer credit, savings, pensions, insurance, and money transfer services. However, deprived sector here is those individuals who have no access to credit from the commercial banks, though, not because they don't have a bank account but because they couldn't meet up with the stringent loan conditions or criteria as stipulated by banks. It was also supported by Kimotha (2005) as cited in Sudan (2018) that, microfinance is the provision of minimal loans to the poor to help them in their business activities and also to expand the existing ones. The poor, mentioned here were elaborated to mean, those who lacked access to loans to improve their business activities. According to Luyirika (2010), microfinance meant to be a form of credit facility given to poor people to either start a business or expand the existing ones. It was also stated that these funds or loans are not only targeted to run business activities but can also be used to pay the school fee and get health care. This assertion pointed out that, these financial services are targeted at the poor people who have good intention to engage in trade of any kind or towards their livelihood by having a good standard of living. It was further explained by Christen, Rosenberg and Jayadeva (2004) explain the child microfinance of providing financial services and customers of basic necessities, including independent consumers and travelers, who traditionally deal with banking and related services. All traditional banking services are proportionate to commercial banking, deposit banking and banking mayors who establish preamplification policies and conditions for market tests and customer experiments together with the necessary requirements for questions and answers.

Microfinance institution comprises of all those who make financial services available to the targeted people, and they can be categorized as regulated and unregulated institutions. The regulated institutions are the microfinance banks, commercial banks, merchant banks while unregulated are cooperatives' society, thrift society, credit unions, non-governmental organization, and the local money collectors. Also, the government through its developmental functions formulated and implemented different programs that can enable the targeted people to access soft loans and investible funds to expand their businesses (Apere, 2016) Hence, microfinance institutions in one way or the other contributed to the economic development as it helped in reducing the rate of poverty among the rural dwellers and create jobs through its financial services to many, it has also helped the economic activities to boom as a result of the credit facilities, it increases the productivity and indirectly has enhanced the standard of living of many individuals. Micro financing can bring about economic development through the innovation of the entrepreneurs as they have been regarded as the agent of growth and economic development. Therefore, the right channeling of these funds to the micro small and medium enterprises in the right quantity can help the nation achieve its economic objectives. Economic development can be defined as a general improvement in all the economic sectors and most especially the overall wellbeing of the citizen. According to Dudley (1969), economic development occurs when poverty, unemployment and inequality are reduced while income per capita increases. This definition pointed out that, a nation where poverty, unemployment and inequity are reduced to the barest minimum could experience economic development, and it evidences itself when income per capita increases. From another point of view, Haller (2012) defined economic development as the process that generates economic and social quantitative, particularly, qualitative changes which cause the national economy to cumulatively and durably increase its real domestic product. It is different from economic growth which is limited in senses and could be defined as the process of increasing the sizes of the national economies, the macroeconomic indicators, especially the GDP per capita, in ascending order but not necessarily linear direction, with a positive effect on the economic, social sector. This asserts that development is broader and show total improvement in a quantitative and qualitative sense of it on the economy and the standard of living of people, but economic growth on the other hand only shows an increase in the total production in the economy. Therefore, it can be submitted that development evidence on how economic growth impacted on the society by increasing the standard of living of people.

To better understand the term economic development, Kindleberger and Bruce (1958) called it "improvement of material well-being, especially for low-income people, eradication of mass poverty with its correlation with illiteracy, disease and premature death, changes in the composition of inputs and products which generally include changes in the underlying production structure from agricultural activities to industrial activities, the organization of the economy so that productive employment is general among the working-age population rather than the situation of a privileged minority and the corresponding greater participation of large-scale groups in management decision-making processes, economic and non-economic, in which they should shift their well-being ". This definition provides a detailed explanation of economic development.It explains that economic development entails a total improvement in economic wellbeing which could propel economic growth and good standard of living to the populace. Increase in economic growth is not equivalent to economic development because, several countries have records of economic growth without such a country recording development in the real sector, social and welfare of people. Microenterprises in Nigeria have not made the desired impact on the economy (Nwachukwu, 2012). This may not be unconnected to the numerous challenges facing the enterprises, among which is finance. Olorunshola (2001) rightly observed that the major gap in Nigeria's industrial development process is lack of long and in some cases short term finance for Microenterprises. Microenterprises usually raise their finance through informal sources. The sources comprise owners' savings/retained earnings, contributions/borrowing from friends, relations etc (Ango, 2011). In most cases finance generated from informal sources fall short of the required capital for Microenterprises (Okungwu and Saleh, 2004). To raise the balance of the required finance, entrepreneurs look up to the formal sources, which comprise banks, other financial institutions, cooperative societies and government loans agencies (Ango, 2011). There are a lot of challenges for Microenterprises in raising finance through the formal sources, especially as it affects banks and other financial institutions (Lawal, 2010).

Microfinance bank deposits are products of customers'savings which are a source of loans to microfinance customers. Ogunleye and Akanbi (2014) asserted that the low level of microfinance deposit can be attributed to the general low level of income and the low confidence of the saving public in microfinance institution. Taiwo (2005) found that the saving habits of microfinance customers improved with the provision of microfinance services and their monthly income increased as loan facilities were granted. With advances in technology, banks have continued to change their method of operations and service delivery in line with changing customer needs and sophistication (Okoye, Omankhanlen, Okoh and Isibor, 2018). Microfinance banks (MFBs) are not by any means an exception. Information and communication technology (ICT) devices are increasingly being deployed by deposit money and microfinance banks to enhance access by financially excluded members of the society to financial services, a practice which according to Okoye, Adetiloye, Erin and Modebe (2016) supports the growth of economic activities. Dauda (2007) evaluates the performance of Nigeria's community banking scheme and observes that deposits generated significantly grew over the period of evaluation (1992 – 2004). The study attributes the deposit growth to improved grass root banking habit. Although their aggregate loan portfolio to agriculture and rural based real sector activities increased nominally over the period, the credit exposures are relatively much lower than their exposure to general commerce, (19.2% against 47.6%). The study remarks that this trend is counter-productive to policy efforts at boosting real sector growth and sustainable economic development in Nigeria. Oluyombo (2011) attempt to investigate the contributions of microfinance banks to Nigeria's economic growth and employs credits disbursed by the microfinance institutions as a proxy for their operational activities. The study employs the Ordinary Least Squares (OLS) regression technique and finds a weak, though positive relationship between Nigeria's microfinance banking operations and the nation's economic growth. Consequently, it recommends that microfinance institutions should channel very high proportion of their credits to the productive and real sectors of the economy for valuable impact of their operations on Nigeria's economic growth. Babajide (2012) studied the effects of micro financing on micro and small enterprises (SMEs) in South West Nigeria using Diagnostic Test Kaplan-Meier Estimate, Hazard Model and Multiple Regression Analysis. The study indicates that microfinance enhances survival of small business in South West Nigeria; that microfinance does not enhance growth and expansion capacity of MSEs in Nigeria; that microfinance impacts significantly on the level of productivity of MSEs operators in South West Nigeria and that the provision of non-financial service by microfinance institutions enhances the performance of micro and small enterprises (MSEs) in South West Nigeria.

Ajagbe and Bolaji (2013), access the impact of Microfinance bank on the socioeconomic standard of living of commercial motorcycle riders in Ilorin-west Local Government Area of Kwara State, Nigeria. From the results obtained, the study concludes that there is a significant relationship between the microfinance bank loans and economic growth by improving the standard of living of commercial motorcycle riders in Ilorin west local government area of Kwara State, Nigeria. Nwele, Ogbonna and Uduimo (2014), in their study, examined the extent to which the lending activities of microfinance institutions (MFIs) have impacted the performance of the Nigerian economy. They reported that micro-financing activities of MFIs did not significantly impact the performance of the rural economy, hence the spill-over effect on the national economy is quite minimal. Ayodele and Arogundade (2014) investigated the response of Nigeria's economic growth to the credit delivery role of microfinance institutions. They adopted microfinance banks' loan portfolio, assets and deposit liabilities as explanatory variables while economic growth was measured by movements in GDP. Model estimation was based on the method of ordinary least squares. The study showed that microfinance bank lending has strong positive impact on economic growth. It however showed that assets and deposits did not significantly drive growth. Agbola, Acupan and Mahmood (2017) estimated the capacity of microfinance to reduce poverty using education, health and living standards as proxies for poverty. A survey of 211 households in Philippines was undertaken out of which 105 were clients and 106 were nonclients of the selected rural (microfinance) bank. Empirical investigation was based on the method of analysis of variance (ANOVA). Though there was evidence that non-client households are poorer than client households, the result was not significant.

Donou-Adonsou and Sylwester (2017) conducted an impact assessment of the lending activities of MFIs and conventional banking institutions to determine how they affect economic growth using a panel of 85 developing countries. The study period covered 2002- 2013 while empirical investigation was based on system-GMM technique. The study showed that microfinance loans significantly drive growth but there is no evidence of strong positive impact of bank loans on growth. In Murad and Idewele (2017), the authors investigated how economic growth in Nigeria is affected by the lending activities of microfinance banks using annual data for 1992-2012. The study produced significant short-run positive effect of microfinance loans and deposits on economic growth. However, in the long-run, only microfinance deposits showed strong positive impact on growth. Tripathi and Badugu (2015) examined how major activities of MFIs (deposit taking and credit creation) affect economic growth in India. The study which was based on exploratory research design showed that credit delivery and deposit mobilization activities strongly influence growth process. Okpara (2010) examines the critical factors that induce poverty among the enterprising poor in Nigeria and the extent to which micro credits have assisted in alleviating poverty. The study's selected causative factors for poverty include low profit, high cost of start-up or expansion funds for business and low rate of business growth. Employing two-stage regression technique within a quadratic equation framework, the study finds that in the first or take-off stage of microfinance banking, poverty was observed to have increased, though at a declining rate with increase in micro credits. In the second stage of the study which started from the year 2001, persistent increases in disbursed micro credit facilities are observed to have significantly lowered the poverty index in Nigeria. Consequently, the study calls for policy measures to establish microfinance institutions in every community in Nigeria.

Empirical Review

Boateng and Agyei (2013) evaluated microfinance in Ghana by focusing on its development, success factors and challenges. Primary data were collected through questionnaire from the 12 selected microfinance institutes, and their respective financial manager and data were analyzed using descriptive statistics. Findings revealed that micro finances pond to the questionnaires. The study showed that the development of microfinance in the past five years has been with the sole purpose of, providing income to low-income households who operate their businesses. It further revealed that the success factors are the provision of services which were appropriate and consistent with customers' situation and needs, character-based lending, frequent visit of credit officers to customers. Nasim (2014) studied the socioeconomic impact of microfinance in Pakistan. The study assessed how microfinance was able to affect borrowers. Two types of borrowers found in the study, the poor non-borrower and the poor borrower. The data collected by the Pakistan Poverty Alleviation Fund were used for the analysis. It was revealed that 30% of the borrowers were poor, while 70% were not. However, the impact on the state of poverty has been marginal. In addition, the study found that poor non-borrowers performed better in terms of trading on most of their assets than poor borrowers, an indication that microfinance does not have a major impact on the socio-economic development of borrowers in Pakistan. Ademola and Arogunde (2014) studied the protection of microfinance on economic growth in Nigeria. The domestic product was used as a dependent variable, the activities of the microfinance banks, the deposit responsibilities of the microfinance banks and the loans and advances of the microfinance banks. He gave me they were purchased from the CBN Statistical Bulletin and were analyzed through regression. This is the contract that microfinance bank assets and liabilities have a negligible impact on economic growth, while bank loans and advances on microfinance have a significant impact on economic growth. In total, banking microfinance activities have had a significant impact on Nigeria's economic growth. Apere (2016) in the study examined the impatience of the microfinance bank with the Nigerian economic company over a period of time from 1992 to 2013. The independent variant was presented by the gross domestic product, while the microfinance bank loans, investments and inflation have been used as alternative representatives. Secondary data were sourced from CBN statistical Bulletin of various editions and was analyzed using cointegration test and error correction model. Findings showed that there is an existence of a long-run relationship between microfinance proxies and economic growth. It further revealed that microfinance bank loan and investment significantly and positively impacted on economic growth in Nigeria. Khan and Karim(2016), in their study, examined the impact of microfinance activities on the economic development of Bangladesh. The study is a position paper but with the trend analysis of the economic development indicators and the finances revealed by the borrowers, mostly the self-employed individuals from the microfinance institution. Their status before and after the borrowings was also evaluated. The study found that microfinance is playing a significant role in the development of Bangladesh by providing financial assistance to lower-income people. Hence, this has impacted their lives, and it has brought down poverty level mostly from a rural area and has also increased their household income.

Sultan and Masih (2016) tested the theoretical relationship between microfinance and growth, and it uses a period from 1983 to 2013. The model was specified using real GDP per capita as the dependent variable while microfinance loans were used as the independent variable. Control variables used in the study are real interest rate, inflation rate and exchange rate. Secondary data were sourced from the World Bank Database, IMF- World economic outlook and IMF international financial statistics while the analysis was done using an autoregressive distributed lag. It was found that there is a significant impact of microfinance on domestic growth. It was further found that a bidirectional relationship exists between microfinance and growth. Sudan (2018) examined the impact of microfinance institutions on the economic growth of Nepal between 2012 to 2017. The dependent variable was proxied by gross domestic product and GDP per capita. In contrast, the independent variable was proxied by a total number of staffs, a total number of members, microenterprises credit, total assets, total loan, total deposit, inflation and broad money supply. Secondary data were sourced from the Bank Supervision Report, Nepal Rastra Quarterly Economic Bulletin and Economic Survey 2016/17 published by the Ministry of Finance while data sourced was analyzed by multiple regressions. It was found that the total number of staffs, total number of members, the ratio of microenterprises loan, total assets, total loan, total deposit and broad money supply growth are positively related to economic growth.

Theoretical Framework

Impact of Microfinance Banks on the Nigerian Economic Growth

The underpinning theory of this study is Schumpeter (1911) on economic development. The theory postulated that a well-developed financial sector or system is a catalyze of innovation and economic growth through the provision of financial services and resources to those entrepreneurs who have the highest probability of promoting successful innovative product and processes. Here Schumpeter envisaged the importance of finance as a veritable tool of development when the financial system (the financial institutions, financial products, financial market, financial instruments and assets, regulatory authorities and statutory enactment) are developed. It means that when the financial system is developed, more financial services would be available to the entrepreneurs to improve their business activities. Hence, microfinancing which can be viewed as varieties of financial services either from government, commercial banks or microfinance bank to the entrepreneurs can have a long-run effect in reducing poverty, unemployment, over dependency, thereby helps to bring about economic growth and development. This was also the argument of McKinnon and Shaw (1973). Both were of the view that financial repression would retard growth hence advocated for financial liberalization where market forces would determine the rate of interest which can help in the growth of savings and investment needed for economic growth and development.

METHODOLOGY

This study adopts the expo-facto research, encompassing time series expo-facto research design and battery of econometrics techniques. The expo-facto research design is a method of research that can truly test hypotheses concerning cause-and-effect relationships, as well as combines the theoretical consideration with empirical observation. In carrying out this study, secondary data was used for estimation from the central bank of Nigeria statistical bulletin gotten from various issues, the national policy framework for microfinance in Nigeria, World Bank data for various years and issues, World Bank national accounts data, OECD National Accounts data, CBN annual reports and statement of accounts for various years. The empirical analysis perspective of this study employed the descriptive statistic, Augmented Dickey-Fuller Unit Root Test and multiple regression techniques with the help of E-view 10 package. Thus, the data for the empirical study are the annual time series data ranging from 1991 to 2020 a period of 30years. The model adopted for this study is in line with the theoretical framework following the work Wachukwu, Onyema, Amadi (2018) which investigates the effect of Microfinance bank and economic growth in Nigeria. Time series regression model is as follows;

$$\text{Log}GDP_t = \beta_0 + \beta_1\text{logMFBCG}_t + \beta_2\text{logMFBDG}_t + \beta_3\text{log}MFBIG_t + \beta_4\text{log}MFBAG + e_t \ldots\ldots(i)$$

RESULT AND DISCUSSION

Table 1: Descriptive Statistic Result

	MFBCG	MFBDG	MFBIG	MFBAG	RGDP
Mean	57402.58	55752.89	7730.421	124311.5	1827.630
Median	19650.20	27712.80	3153.400	65347.80	1829.640
Maximum	203673.4	174901.6	26713.91	382835.7	4756.160
Minimum	132.3500	452.2100	115.3000	872.4000	-1092.690
Std. Dev.	72997.84	59678.47	8915.458	139640.0	1468.951
Skewness	1.090240	0.673684	0.910260	0.812657	0.028387
Kurtosis	2.669545	1.944178	2.433061	2.147975	2.035307
Jarque-Bera	6.079614	3.662700	4.544638	4.209493	1.167319
Probability	0.047844	0.160197	0.103073	0.121877	0.557853
Sum	1722077.	1672587.	231912.6	3729344.	54828.89
Sum Sq. Dev	1.55E+11	1.03E+11	2.31E+09	5.65E+11	62576684
Observations	30	30	30	30	30

Source: E-view 10

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures they form the basis of virtually every quantitative analysis of data. Hence, the descriptive statistics of the data are as presented in the table above. As may be observed from the table, the mean, median, standard deviation as well as the skewness and kurtosis measures of the variables of interest are given. The mean values indicate that on the average Microfinance bank credit growth, Microfinance bank deposit growth, Microfinance bank investment growth, Microfinance bank assets growth and Gross Domestic Product (GDP) in Nigeria are 57402.58, 55752.89, 7730.421, 124311.5 and 1827.630 billion naira respectively. A distribution is positively skewed if the right tail is longer. Then, mean > median > mode. A distribution is negatively skewed if the left tail is longer. Then, mode > median > mean. Hence, the distributions of all the variables are positively skewed since their mean are greater than their median. Variables with value of kurtosis less than three are called platykurtic (fat or short-tailed) and all the variables qualified for this during the study period.

Table 2: Summary of Augmented Dickey-Fuller Unit Root test for stationarity

Variable	State	ADF-Test	P-value	Max Lag	AIC	D.W	Remark
Log(RGDP)	Level	-0.2576	0.8427	1	-0.3111	1.98	Non-Stationary
	First Difference	-5.8718	0.0021	1	-0.356	2.36	Stationary
Log(MFBCG)	Level	-4.7423	0.005	0	1.0102	1.79	Stationary
Log(MFBDG)	Level	-5.1841	0.002	1	1.8696	2.31	Stationary
Log(MFBIG)	Level	-3.8896	0.388	6	0.6648	1.66	Non-Stationary
	First Difference	-6.2312	0.014	2	1.2874	2.13	Stationary
Log(MFBAG)	Level	-3.6140	0.075	1	1.010	1.72	Non-Stationary
	First Difference	-7.4867	0.001	2	1.2689	2.33	Stationary

The Unit root test on the transformed log data of the variables under study found that real gross domestic product, showed a unit root without significant deterministic trend coefficient at level. However, stationarity was achieved after first difference. The test was conducted at different lag while the choice of appropriate model was made using the lag with minimum Akaike Information Criteria (AIC) and Durbin-Watson (D.W) that is approximately.

Table 3: Regression Analysis Result

Dependent Variable: LOGRGDP				
Method: Least Squares				
Date: 04/09/21 Time: 09:27				
Sample: 1991 2020				
Included observations: 30				
Variable	Coefficient	Std. Error	t-Statistic	Prob.

C	1041.852	287.9490	3.618181	0.0013
LOGMFBCG	0.071132	0.014364	-4.952084	0.0000
LOGMFBDG	0.044870	0.016800	2.670923	0.0131
LOGMFBIG	0.095919	0.143566	0.668123	0.5102
LOGMFBAG	0.013079	0.008675	1.507677	0.1442
R-squared	0.543559	Mean dependent var		1827.630
Adjusted R-squared	0.470528	S.D. dependent var		1468.951
S.E. of regression	1068.879	Akaike info criterion		16.93762
Sum squared resid	28562584	Schwarz criterion		17.17115
Log likelihood	-249.0643	Hannan-Quinn criter.		17.01233
F-statistic	7.442888	Durbin-Watson stat		1.984441
Prob(F-statistic)	0.000431			

Source: E-view 10

Discussion pf Findings

Result obtained from regression analysis: Regressing Real Gross Domestic Product (RGDP) on microfinance bank credit growth (MFBCG), microfinance bank deposit growth, (MFBDG), microfinance bank investment growth (MFBIG) and microfinance bank asset growth (MFBAG) produced the estimate of the model displayed on Table 3. A critical look at the individual coefficients of the explanatory variables shows that, apart from the investment growth and assets growth coefficient, all the other coefficients have the expected signs in line with apriori determination. With particularly focus on the significance of the coefficients. The results show that the microfinance bank investment growth and assets growth variable fail the significance test at the 5 percent level while those of microfinance bank credit and deposit growth pass the test.

Consequently, at the level of significance of 0.05, the F-statistic is 7.442888 while the p-value of the F-Statistic is 0.000431 which is less than 0.05 adopted. Therefore, the study rejects the null hypothesis and accepts the alternate which suggests that Microfinance bank indicators have a positive and significant effect on the Nigerian Economic Growth. Also looking at the Durbin-Watson stat of 1.98 > 1.7 shows absence of positive serial correlation among the variables in the model. While the coefficient of determination (R2) is 54% indicating that microfinance bank credit growth (MFBCG), microfinance bank deposit growth, (MFBDG), microfinance bank investment growth (MFBIG) and microfinance bank asset growth (MFBAG) is responsible for about 54% of Real Gross Domestic Product (RGDP). The study is in tandem with the study of Okongwu and saleh (2004) and Uwaezuoke, Nweke and Ogar (2018) who found out that microfinance bank credit and deposit growth have a positive and insignificant impact on the growth of Nigerian economic but contradict the study of Aero and Nwachukwu (2012) who opined that microfinance bank loan has negative significant impact on Nigeria economic growth.

CONCLUSION AND RECOMMENDATIONS

From the findings of this study above, the researcher therefore concludes that there exists a positive significant relationship between microfinance bank credit growth and microfinance bank deposit growth on economic Nigeria growth while microfinance bank investment growth, microfinance bank assets growth does not have significant impact on real gross domestic product as reported by the result from the multiple regression analysis. Since the research show a positive relationship between real gross domestic product and microfinance activities, except with microfinance investment and assets the researcher therefore, and make the following recommendations:

i. Microfinance banks should improve investment and other capital accumulation. It is these channels of participation in the economy that will ensure optimal use of the microfinance resources in the country with the target of achieving sustainable growth.

ii. Microfinance banks should be encouraged to continue to give credit to sectors of the economy that will enhance productivity, which will in turn lead to increased income.

iii. Credit approved must be monitored to ensure that they are used for the purpose for which they are given.

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Impact of International Financial Reporting Standards Adoption on Reporting Quality of Deposit Money Banks in Nigeria

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Abstract

At the centre of the plethora of corporate scandals that have plagued corporate entities are fraudulent financial reporting system. Against this backdrop, proponents of the International Financial Reporting Standards (IFRS) have more strongly argued for the internationalization of the adoption of the standards, as a panacea for curbing or mitigating these financial reporting infractions. Ranging from increased comparability to better decision making, the importance of IFRS cannot be over emphasized. It is to this end that this study evaluates the impact of IFRS on Reporting Quality with focus on Money Deposit Banks in Nigerian. The specific objective of this paper is to determine whether the quantitative differences in the financial reports prepared by Nigerian listed banks under NGAAP and IAS/IFRS are statistically significant or not. Secondary data were employed in this study. These data were gleaned from the annual reports of fourteen Nigerian listed banks. One hypothesis was developed and tested at five (5) per cent level of significance. Findings revealed that the quantitative differences in the financial reports prepared under NGAAP and IAS/IFRS are statistically significant. The study therefore concludes that IFRS have impacted on financial reporting in the Nigerian Deposit Money Banks.

Keywords: IFRS, Financial Reporting, Comparability, Accounting Quality

INTRODUCTION

The IAS/IFRS (International Accounting Standards/International Financial Reporting Standards) consists of a set of international accounting principles, the adoption of which aims at establishing clear rules originally within the European Union to draw up comparable and transparent annual reports and financial statements (Cardozza, 2008). Their adoption represents an essential element to obtain an integrated, competitive and attractive beyond the European capital markets. With the increasing internationalisation of trading activities amongst countries of the world, necessitated by globalisation, the Nigerian Government was persuaded to approve a roadmap to introduce this set of uniform accounting standards initially for public interest entities (PIEs)**.** Historically, the introduction of an acceptable global high quality financial reporting standards was initiated in 1973 when the International Accounting Standard Committee (IASC) was formed by sixteen (16) professional bodies from different countries such as United States of America, United Kingdom, France, Canada, Germany, Australia, Japan, Netherlands and Mexico (Garuba and Donwa, 2011). According to Ezeani and Oladele (2012), this body was properly recognized in 2001and later transformed into the International Accounting Standards Board (IASB) which developed accounting standards and related interpretations jointly referred to as the International Financial Reporting Standards (IFRS).

The quality of financial reporting is indispensable to the need of users who require them for investment and other decision making purposes (Fashina and Adegbite, 2014). Financial reports can only be regarded as useful if it represents the "economic substance" of an organization in terms of relevance, reliability, comparability, understandability, timeliness and simplifies interpretation of accounting numbers (Kenneth, 2012). Before the IFRS adoption era, most countries had their own standards with local bodies responsible for developing and issuance of the local standards even if some of them align largely with the IAS. In this vein and in the Nigerian context, the Nigerian Accounting Standards Board (NASB) was responsible for developing and issuing standards known as Statements of Accounting Standards (SAS) and in the new dispensation, the body was renamed

Financial Reporting Council (FRC) of Nigeria as the regulatory body overseeing the adoption and implementation IFRS (Kenneth 2012). As a result of increasing globalization resulting in more competition, it becomes imperative that countries and companies alike address issues that will make them become more attractive of investors' capital which is like the proverbial beautiful bride (Essien-Akpan, 2011). Accessibility to capital, both from local and foreign investors, amongst other benefits, is one of the incontrovertible gains derivable from adopting the global accounting standards. And for companies to avail themselves of this gain, as contended by proponents of IFRS, they have to adopt this set of accounting standards which will arguably help entrench best practices in financial reporting.

Apparently in a bid to take her own share of the benefits of using a set of accounting standards that not only allows for, but also enhance the comparability of financial reports across many geographical frontiers, on Wednesday, 28 July 2010, the Nigerian Federal Executive Council accepted the recommendation of the Committee on the Roadmap to the Adoption of IFRS in Nigeria, that it would be in the interest of the Nigerian economy for reporting entities in Nigeria to adopt globally accepted, high-quality accounting standards by fully adopting the International Financial Reporting Standards (IFRS) in a Phased Transition (FIRS, 2013; Fashina and Adegbite, 2014). In December 2010, following the approval of the Federal Executive Council, the Nigerian Accounting Standards Board (NASB), (now designated as Financial Reporting Council of Nigeria (FRCN)) issued an implementation roadmap for Nigerian's adoption of IFRS which set a January 2012 date for compliance for publicly quoted companies and banks in Nigeria. Relatedly, according to Fashina and Adegbite (2014), the Central Bank of Nigeria (CBN) and the Securities and Exchange Commission also adopted this date for compliance and has issued guidance compliance circulars to ensure full implementation of IFRS in Nigeria. The Council further directed the Nigerian Accounting Standards Board (NASB), under the supervision of the Nigerian Federal Ministry of Commerce and Industry, to take necessary actions to give effect to the Council's approval. As part of plans to meet international standards, the Federal Government has disclosed that new accounting system, the international financial reporting standard (IFRS) should take off in Nigeria on 1st January, 2012, especially with Public Interest Entities. In Nigeria, the government has taken its stand to involve all stake holders including institutions before it finally decided to adopt the IFRS on a gradual basis. IFRS for SMEs is to be mandatorily adopted as at January 1, 2014. This means that all Small and Medium-sized Entities in Nigeria have been statutorily required to issue IFRS based financial statements for the year ended December 31, 2014.

The adoption of IFRS has been argued in contemporary literature to offer numerous financial and non-financial benefits. It is therefore in this connection that Barth et al. (2008) argued that IFRS (and their predecessor IAS) constrain managerial discretion while Daske et al., (2008) submitted that IFRS impose a more comprehensive and highly detailed set of disclosure requirements than domestic accounting standards. When disclosure is improved upon and managerial discretions, with respect to treatment of accounting transactions, are constrained, this arguably suggests that IFRS will improve accounting quality and engender better financial reporting practices. Importantly, improved comparability is also one of the value-adding characteristics of IFRS as contended by its advocates. Many countries all over the world, including Nigeria, are now IFRS-compliant. As a corollary, it is now less costly for investors to compare and evaluate firms inside and outside industries and countries (Covrig, DeFond, and Hung, 2007). As Nigeria now belongs to the League of IFRS-adopting countries with effect from 2012, perhaps persuaded by the gains it promises, it however remains to be convincingly empirically established the extent to which this set of accounting standards has impacted on financial reporting practices in Nigeria. This study therefore is an attempt to provide evidence on the impact of IFRS on Reporting Quality Of Deposit Money Banks in the Nigerian. The paper is structured as follows: section two focuses on the review of relevant literature, while section three and four focuses on research design and data analysis and results respectively.

While section five discusses key findings from the results of the analyses, the final section concludes the paper and offer recommendations.

LITERATURE REVIEW

Conceptual framework

International Financial Reporting Standard (IFRS) in Nigeria

The Federal Government of Nigeria on 2nd September 2010 officially declares IFRS adoption in Nigeria and initiated the guidelines to be followed for its accomplishment. The consent to IFRS adoption by the Federal Government of Nigeria made the country becomes enlisted member of those countries that have adopted IFRS across the globe. The guiding principles to be followed for implementing IFRS are in three consecutive phases. The first phase comprises of Listed and Significant Public Interest Entities that are mandate to prepare and present their audited financial statements in compliance to relevant IFRS by 31st December, 2012. The second phase of IFRS implementation focuses on Public Interest Entities that are authorized to comply with IFRS format for statutory rationale by 31st December, 2013. The third phase on the other hand, expects all Small and Medium sized Enterprises (SMEs) to mandatorily comply with the adoption of IFRS as statutory reporting by 31st December 2014 (Uwadiae, 2012). As a universally accepted fact, Accounting is seen as the language of business through which performance and position of an entity is being communicated to outsiders (stakeholders) need to be spoken in a common language. IFRS has made this statement a reality because through the acceptance of IFRS, business language can be spoken in a language which is universally known, accepted, and understood by almost all worldwide investors.

Adejor and Hasnah (2014) noted that the need for a high quality and a uniform manner for which financial statements is being prepared and presented gave rise to IFRS. IFRS as a principle based format is seen as a set of published financial accounting pronouncements given by the IASB to assist Accountants and Auditors across the world in the preparation, presentation and reporting of transparent, high quality and comparable financial information to aid informed decision making. IFRS is a common global language designed to be followed by companies across international boundaries to reflect its financial activities and to improve the understanding, comparability and quality of financial reporting

Benefits of Adopting IFRS

The adoption of IFRS has several benefits. Madawaki (2012) outlined some of these benefits as follows;

i. Promotion of the compilation of meaningful data on the performance of various reporting entities at both public and private levels in Nigeria thereby encouraging comparability, transparency, efficiency and reliability of financial reporting in Nigeria.
ii. Assurance of useful and meaningful decisions on investment portfolio in Nigeria. Investors can easily compare financial results of corporation and make investment decision.
iii. Attraction of Foreign Direct Investment – countries attract investment through greater transparency and a lower cost of capital for potential investors.
iv. Assurance of easier access to external capital for local companies.
v. Reduction of the cost of doing business across borders by eliminating the need for supplementary information from Nigeria companies.
vi. Facilitation or easy consolidation of financial information of the same company with offices in different countries.
vii. Easier regulation of financial information of entities in Nigeria.
viii. Enhanced knowledge of global financial reporting standards by tertiary institutions in Nigeria.
ix. Better quality financial information for shareholders and supervisory authorities.

x. Government to be able to better access the tax liability of multinational companies.

In addition, Ahmed (2010) stated that, adopting IFRS reduces information asymmetry which would lower costs of equity and debt financing, it smoothens the communications between operators, shareholders, lenders and other interested parties resulting in lower costs. IFRS adoption, would offers comparability, lower transaction costs and greater international investment and reduces accounting manipulations and positively impacts firms‟ stock return and stock related financial performance measures (Epstein, 2009).

Pre and Post IFRS Adoption in Nigeria

Prior to the implementation of IFRS in 2012, Nigeria makes use of the Nigerian Generally Accepted Accounting Practice (NG-GAAP) in the preparation of their Financial Statement. The Nigerian Accounting Standard Board (NASB) is seen as a body sovereign charged with the duty to develop and issue Statement of Accounting Standards (SAS) for financial statements preparers and users. The Federal Government of Nigeria in 2010 designed the roadmap to be followed for a successful IFRS adoption in the country, which consist of three phases. Financial Statement prepared in compliance to IFRS comprises the followings: Statement of Financial Position, Statement of Comprehensive Income, Statement of Changes in Equity, Statement of Cash Flows and Accounting Policies.

The fundamental theories supporting NG-GAAP and IFRS are not on the whole parallel. The inception of IFRS has brought about a great deal of responsibility on the part of IASB in setting. International Accounting Standards (IAS) that will fit different business entities across the globe. Indigenous professional accountants and auditors need to keep abreast with the content of the frameworks that make up the financial statement to enable them give clarification to various stakeholders when the need arises (Adejor and Hasnah, 2014).

Empirical Literature

Ibanichuka (2018), investigated on international financial reporting standards adoption and financial performance of petroleum marketing entities in Nigeria. The study was carried out using secondary data and was analyzed using regression analysis. The result shows that there is a relationship between international financial reporting standards adoption and financial performance of petroleum marketing entities in Nigeria. The study recommends that firms should adopt and implement IFRS in order to enhance performance. Yahama (2018), carried out a study on International financial reporting standards' adoption and value relevance of accounting information of listed deposit money banks in Nigeria. The study was carried out using secondary data and the data were analyzed using simple regression analysis. The result shows that there is a relationship between International financial reporting standards' adoption and value relevance of accounting information of listed deposit money banks in Nigeria. Olayinka (2017) carried out a research on does International Financial Reporting Standards (IFRS) Impact Profitability Ratios of Listed Banks in Nigeria. The study was carried out using secondary data and was analyzed using regression analysis. The result shows that International Financial Reporting Standards (IFRS) has an Impact on the Profitability Ratios of Listed Banks in Nigeria. The study recommends that banks should adopt and implement IFRS in order to enhance performance.

Ironkwe (2016), carried out a study on International Financial Reporting Standards (IFRSs) and Corporate Performance of Listed Companies in Nigeria. The study was carried out using secondary data and data was analyzed using t-statistics. The result revealed that there is a relationship between International Financial Reporting Standards (IFRSs) and Corporate Performance of Listed Companies in Nigeria. Yahaya et al. 2015 investigated the post adoption off IFRS and value relevance of accounting information of quoted banks in Nigeria. Using the price model and the return model, the study found that the EPS increased in the post adoption than in the pre adoption periods. The study recommended that investors should understand the IFRS adoption process so as to avoid overvaluation of the economy when the financial markets are doing well. Umoren and Enang (2015) investigated how the mandatory adoption of IFRS has enhanced the value relevance as measured by earning of financial information of banks in Nigeria. Using a sample of 12 quoted banks from 2010 to 2013, the study found that the earnings of listed banks in Nigeria were more value relevant in the post IFRS periods than under the Nigeria SAS. The study suggested that the accounting standard setters should include more measures to enhance the qualities of accounting information so as to improve its value relevance. Umobong and Akani (2015) investigated the differences in the quality of accounting information Pre and post IFRS adoption by manufacturing firms in Nigeria over a five year period. Multiple regression analysis was performed on accounting quality variables and t-test was carried out for equality of mean to compare pre and post IFRS. Results indicate a decline in accounting quality using earnings management, value relevance, and timely loss recognition as independent variables. Earnings and book value of equity are less value relevant and timely loss recognition is less in post-IFRS compared to pre-IFRS period. Umobong (2015) studied on IFRS adoption and firm's performance: a comparative analysis of quoted food and beverage manufacturing firms in Nigeria. Earnings per share, price earnings ratio and dividend yield were selected as performance criterion. Data were collected and divided into pre and post IFRS- comparative analysis and t test was done to ascertain influence of pre and post IFRS adoption on market performance of the firms. Findings indicate that differences on market performance between pre and post IFRS periods are not significant suggesting a weak correlation between adoption of IFRS and market performance of quoted food and beverage manufacturing firms in Nigeria stock exchange.

Yahaya, Joseph and Safiya, (2015) examined international financial reporting standards‟ adoption and value relevance of accounting information of listed deposit money banks in Nigeria. The paper examines post-IFRS adoption value relevance of accounting information using two models. First, a price model which used proxies such as market price per share, book value of equity per share, earnings per share and cash flow per share. Second, a return-model which used proxies such as annual return, earning per share, change in earning per share, were used. The results show that the explanatory power r^2 for the price model specification is 84% for the total sample and that all coefficients are statistically significant. A comparison of coefficients indicates that the EPS of 3.47 has a higher explanatory power than any other variables. the results also demonstrate that explanatory power of accounting numbers increased from pre-adoption (60%) to post-adoption (78%). similarly, explanatory power (r2) for the return model specification is 13.4% for the total sample and just coefficient of EPS level is statistically significant. the explanatory power for the return model increased from pre-adoption (15.6%) to post-adoption (16.4%). according to both sub-samples just a coefficient of EPS level is statistically significant. so, the result of the return model also indicates adoption of IFRS improved relevance of accounting numbers in the deposit money banking sector.

METHODOLOGY

The purpose of this study is to evaluate the impact of IFRS on financial reporting practices in the Nigerian Banking sector. To users of financial statements, one of the ways by which IFRS impacts financial reporting is by ensuring comparability of financial reports amongst companies either within the same industry, countries or countries. The Nigerian Banking sector was selected as the focus of this paper in view of the criticality of its roles in the Nigerian economy. Currently, there are twenty two (22) banks operating in Nigeria, of which fourteen (14) of them are listed. These listed banks were the focus of this study due to data availability. As noted earlier, comparability of financial reports is one of the ways by which IFRS positively impact on financial reports. This study attempts to quantitatively measures the extent to which financial reports prepared under different accounting standards (NGAAP and IFRS) can be compared. To this end, a modified version of the Gray's Conservatism Index was used. Gray (1980, as cited in Cardozzo, 2008) first introduced the Index of Conservatism in comparing profits of several countries as a quantitative measure of differences between accounting practices. This Conservatism Index could otherwise be called 'Comparability Index'. This paper modified this Comparability Index by applying it to other key elements of financial statements such as assets, liabilities and equities prepared under NGAAP and IFRS. This Index is calculated below:

$$\text{Total Comparability Index} = 1 - \frac{\text{Total Assets}_{IAS/IFRS} - \text{Total Assets}_{NGAAP}}{\text{Total Assets}_{IAS/IFRS}}$$

$$\text{Total Comparability Index} = 1 - \frac{\text{Total Liabilities}_{IAS/IFRS} - \text{Total Liabities}_{NGAAP}}{\text{Total Liabilities}_{IAS/IFRS}}$$

$$\text{Total Comparability Index} = 1 - \frac{\text{Total Equity}_{IAS/IFRS} - \text{Total Equity}_{NGAAP}}{\text{Total Equity}_{IAS/IFRS}}$$

Furthermore, the benchmark used in this study is IAS/IFRS for evaluating the accounting impacts on the elements of the statements of financial positions of the transition from the Nigerian GAAP to IAS/IFRS. The total assets, total liabilities and total equities reported under IAS/IFRS are chosen as the denominators in order to assess the impact of IAS/IFRS on Nigerian financial statements. The neutral value of the index is one. This implies a no impact situation on the NGAAP by IFRS. An index that is greater than one implies that the Nigerian Banks' total assets, total liabilities and total equities are higher than what were reported under IAS/IFRS. Conversely, an index that is lower than one suggests that the Nigerian Banks' total assets, total liabilities and total equities are lower than that what were reported under IAS/IFRS.

It is essential to note that these data were gleaned from the annual reports of these banks for the years 2010 and 2020. The annual reports for year 2010 were prepared by these banks in compliance with the Nigerian Generally Accepted Accounting Principles. And therefore, the NGAAP total assets, total liabilities and total equities as at 31 December, 2010 were obtained from here. As most of these banks transited to International Financial Reporting Standards in 2020, with exception to few of them that converted their accounting books earlier, the total assets, total liabilities and total equities were obtained from this year's financial statements for these Banks using the data on the transition date of 1 January, 2011, a date which is the same as 31 December, 2010. Choosing this date for these data makes comparison with the NGAAP figures easy. The mean differences of the computed Comparability Indexes were tested using the t-test, a parametric test, at 5 per cent level of significance. The rationale for the use of this statistical technique lies in the fact that the samples size is lower than thirty, which would have allowed the use of the Z-test and make assumption about the normality of the distribution of the data.

RESULTS AND DISCUSSION

Descriptive and inferential statistical techniques were employed to carry out the analyses. The descriptive statistics, particularly the mean, were used to gain an insight into the nature of distribution of the data. The inferential statistics of one sample t-test, on the other hand, is employed to test the formulated hypothesis.

Table 4 **One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
Comparability Index of Assets	14	.9854	.03471	.00928

(Source: SPSS Output, 2014)

The mean comparability index of 0.9854 in table 4 above suggests that total assets under IAS/IFRS are greater than that of Nigerian GAAP for all the sampled fourteen banks, with the level of clustering of individual bank's assets closer to the mean of all the fourteen sampled banks' assets. This contrasts to that of total liabilities and total equities. This picture is as depicted by the standard deviation and standard error of mean of 0.03471 and 0.00928 respectively.

Table 5 **One-Sample Test**

	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Comparability Index of Assets	106.215	13	.000	.98538	.9653	1.0054

(Source: SPSS Output, 2014)

From table 5 above, it could be inferred that the asymptotic significance of 0.000 is less than the level of significance employed in this study. Consequently, the null hypothesis that the quantitative differences in the financial reports (total assets) prepared under NGAAP and IAS/IFRS are not statistically significant stands rejected while the alternative hypothesis that the quantitative differences in the financial reports prepared under NGAAP and IAS/IFRS are statistically significant stands accepted.

Table 6 **One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
Comparability Index of Liabilities	14	.9831	.04307	.01151

(Source: SPSS Output, 2014)

The mean comparability index of 0.9831 in table 6 above suggests that total assets under IAS/IFRS are greater than that of Nigerian GAAP for all the sampled fourteen banks. The comparability indices of individual bank's liabilities disperse more around the total mean liabilities, compared to that of assets. This picture is as depicted by the standard deviation and standard error of mean of 0.04307 and 0.01151 respectively.

Table 7 **One-Sample Test**

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Comparability Index of Liabilities	85.396	13	.000	.98309	.9582	1.0080

(Source: SPSS Output, 2014)

From table 7 above, it could be inferred that the asymptotic significance of 0.000 is less than the level of significance employed in this study. The effect is that the null hypothesis that the quantitative differences in the financial reports (total liabilities) prepared under NGAAP and IAS/IFRS are not statistically significant stands rejected, while the alternative hypothesis is accepted.

Table 8 **One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
Comparability Index of Equity	14	1.0252	.13347	.03567

(Source: SPSS Output, 2014)

The mean comparability index of 1.0252 suggests that total assets under IAS/IFRS are less than that of Nigerian GAAP for all the sampled fourteen banks. This means that the total equity for all the banks under NGAAP is greater than that of IAS/IFRS. This position contrasts to that of total assets and total liabilities. The level of dispersion of the comparability index greatly is more amongst the sampled banks.

Table 9 **One-Sample Test**

	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Comparability Index of Equity	28.740	13	.000	1.02523	.9482	1.1023

(Source: SPSS Output, 2014)

From table 9 above, it could be inferred that the asymptotic significance of 0.000 is less than the level of significance employed in this study. This implies that the null hypothesis that the quantitative differences in the financial reports (total equities) prepared under NGAAP and IAS/IFRS are not statistically significant stands rejected, while the alternative hypothesis that the quantitative differences in the financial reports prepared under NGAAP and IAS/IFRS are statistically significant stands accepted.

Discussion of Findings

The results from the above analyses revealed clearly that International Financial Reporting Standards (IFRS) have an impact on financial reporting practices of Nigerian banks. Literature is replete with wide-ranging benefits IFRS offers its adopters. From increased comparability to better decision making, the importance of IFRS adoption cannot over-emphasised. Other benefits of IFRS adoption as evidenced by previous studies include the following: (Leuz and Verrecchiia, 2000): decreased cost of capital, (Bushman and Piotroski, 2006): efficiency of capital allocation (Young and Guenther, 2008): international capital mobility, (Ahmed, 2011): capital market development (Adekoya,2011): increased market liquidity and value (Okere,2009): enhanced comparability (Bhattacharjee and Hossain 2010): cross border movement of capital (Mike,2009): improved transparency of results. Comparability stands out as one of the values of IFRS. This study has therefore strengthened this position by empirically establishing that financial reports prepared under NGAAP differ from that prepared under IFRS, a finding that aligns well with that of (Bhattacharjee and Hossain 2010).

CONCLUSION AND RECOMMENDATIONS

The importance of international financial reporting standards to financial reporting practice cannot be over emphasized. Members of the international community are interested in financial reports that have been prepared on the basis of IAS/IFRS, thereby help in attracting foreign direct investments. Other benefits derivable from the adoption of IFRS include: imposition of a more comprehensive and highly detailed set of disclosure requirements than domestic accounting standards; constrain managerial discretion, improvement in accounting quality, which in turn contributes to a generally transparent firm information environment and better accounting practice. Improved comparability is also one of the value-adding characteristics of IFRS as contended by most financial reporting pundits, as it will make it less costly for investors to compare and evaluate firms inside and outside industries and countries. There are however some arguments against why IFRS adoption may not have a beneficially meaningful impact on financial markets, financial institutions, investors and other users of accounting information. First, financial reporting is shaped by incentives. Incentives, in turn, are influenced by the institutional structures in place. For instance, a strong investor protection regime supports a higher level of financial development with deep and liquid equity and debt markets. In such an environment, firms are not unwilling to provide greater information since it allows them to access lower cost external financing. Based on the above findings, this study concludes that IFRS has impacted on the financial reporting practices in the Nigeria Banking sector.

In order to deepen transparent financial reporting practices in the Nigerian Banking sector, sequel to the adoption of IFRS, this study offers the following recommendations:

i. Strengthen the financial reporting institutional framework by further empowering the Financial Reporting Council of Nigeria. In this regard, the paper argues that one way of invigorating and empowering the Council is by making it self-sufficient in terms of funding. This will surely engender financial autonomy on the part of this regulator and avoid a situation where the regulator gets its finances from the entities it is suppose to regulate, as it was the case during the era of the defunct Nigerian Accounting Standard Board (NASB);
ii. Membership of the Financial Reporting Council should be widened in order to increase its influence beyond the financial sector of the Nigerian economy; and
iii. The Financial Reporting Council in conjunction with various professional bodies should place more premium on continuing professional education and training. As much as possible, the professional accountancy bodies should align their continuing professional education requirements with IFAC guidelines.

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Impact of Working Capital Management on Financial Performance of Quoted Health Sector Firms in Nigeria

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Abstract

The performance of any company is critical to its survival. Management of working capital involves the management of current assets and current liabilities of a firm. At every given time both the current assets and current liabilities exist in the business. "The working capital plays the same role in the business as the role of heart in human body. Working capital funds are generated and these funds are circulated in the business. As and when this circulation stops, the business becomes lifeless.This study examined the impact of working capital management on firms' performance by using audited financial statements of a sample of 7 listed companies in the health sector of the Nigerian Stock Exchange for the period of 2015 to 2017. The performance was measured in terms of profitability using return on capital employed and return on equity as dependent variables. The working capital was determined by the Cash conversion cycle, Accounts receivable collection period, inventory turnover period and accounts payables payment period are used as independent working capital variables. More so, control variables like current ratio are used as liquidity indicators, firm size as measured by logarithm of sales, and debt to asset ratio as leverage.The data was analyzed statistical tool, correlation analysis and regression models of cross-sectional and time series data were used for analysis. The study showed that the return on capital on capital employed (ROCE) is negatively related to receivable collection period (ACP), payables payment period (APP), inventory turnover period (ITP), cash conversion cycle (CCC) and debt to asset ratio (DR), which however was insignificant at 5% significance level. However, capital on capital employed (ROCE) was positively related to Current ratio (CR) and firm size (Size), with firm size having significant effect on profits.

Keywords: Working Capital, Financial Performance, Return on Capital Employed, Health Sector Firms

INTRODUCTION

The world economy was hit by an unprecedented financial and economic crisis in 2007-2009 that resulted in a global recession. In Nigeria, the economy faltered and was hit by the second-round effect of the crisis as the stock market collapsed by 70 per cent in 2008-2009 and many Nigerian banks sustained huge losses. However, the Nigerian economy has huge potentials for growth. To realize this, it is imperative that we learn lessons from the global financial crisis and take steps to not only fix the problems but evolve a healthy financial sector and ensure the banking sector contributes to the development of the real economy (Sanusi, 2012). The Nigerian economy under the regime of president Buhari slipped into recession in 2016, a development triggered by dwindling government revenue occasioned by the fall in oil prices in the international market and unrest in the oil-rich Niger Delta region. The National Bureau of Statistics (NBS) confirmed that the 2016 economic recession was a full year recession, and the worst in the country's history since 1987.(Mayowa, 2017). This study examines the impact of working capital management on financial performance of quoted health sector firms in Nigeria around the economic recession era: (2015-2017). The performance of any company is critical to its survival. This performance usually looks at the business and financial situation which are two distinct but extremely interdependent indicators of success or otherwise.

Working capital management will consider the currents assets and current liabilities. It is necessary to understand the meaning of current assets and current liabilities for learning the meaning of working capital.It is rightly observed that "Current assets have a short life span. These types of assets are engaged in current operation of a business and normally used for short– term operations of the firm during an accounting period. Cash balance may be held idle for a week or two, account receivable may have a life span of an average 30days period, and inventories may be held for above 30days. (Parasanna, 1984). At every given time both the current assets and current liabilities exist in the business. "The working capital plays the same role in the business as the role of heart in human body. A popular measure of working capital management is the cash conversion cycle.Deloof (2003) indicated that the longer the time lags, the larger the investment in working capital, and a long cash conversion cycle might increase profitability because it leads to higher sales. However, corporate profitability might decrease with the cash conversion cycle if the costs of higher investment in working capital rise faster than the benefits of holding more inventories or granting more trade credit to customers. Therefore, it is a significant issue to know and understand the effects of working capital management and its influence on firms' performance. Also, several research works have identified the impact of working capital management on the performance of organizations, it is imperative for a significant work to be done on the effective of working capital management on the performance of Health sector companies in emerging stock markets like the Nigerian Stock Exchange (NSE).

When a business does not manage its liquidity well, it will have cash shortages and as a result experience problem paying its obligations when they fall due. Indeed, working capital starvation has generally been credited as a major cause, if not the main cause of small business failure in many developed and developing countries (Rafuse, 1996). The fact that an organisation makes profit is not necessarily an indication of the efficient management of its working capital because a company can be endowed with asset and profitability but short of liquidity, this means that its assets cannot readily be converted into cash (Oyewale, 2004). Business success depends heavily on the ability of financial managers to effectively manage the components ofworking capital (Filbeck and Krueger, 2005). This paper will go or examine the usefulness of financial ratios, particularly working capital ratios in evaluation of company's performance for funding decisions and running of day-to day operations of the business. To aid the achievement of the desired objective of this study, the researcher will attempt to test the following hypotheses:

H0: Working capital management does not have significant impact on firm's financial performance.

LITERATURE REVIEW

Conceptual Clarifications

Working capital management involves managing the firm's inventory, receivables, and payables to achieve a balance between risk and returns and thereby contribute positively to the creation of a firm value. Thus, the importance of maintaining an appropriate level of working capital and its contribution to business survival is a concept that should be understood by every company (Harris, 2005). Working capital is considered as the lifeblood of any business and its performance has significant impact on the overall performance of the concerned firms. Hampton (1989) stated that working capital policy is a function of two decisions: the appropriate level of investment in currents assets and the chosen methods of financing the investment. WCM is a therefore a fundamental part of any firm's overall corporate strategy to create value, to ensure financial health and provide competitive advantage (Deloof, 2003). WCM is also vital for the success and survival of businesses and for enhanced performance and contribution to economic growth (Padachi, 2006). The goal of WCM therefore, is to ensure that the firm can continue in its operations and that it has sufficient cash flow to satisfy both maturing short-term debt and upcoming operational expenses (Brigham and Houston, 2007).

Financial performance refers to a measure of the results of a firm's policies and operations in monetary terms. These results are reflected in the firm's return on capital employed (ROCE), return on assets (ROA), shareholder value, accounting profitability and its components. Ratios are simply relationships between two financial balances or financial calculations which establish our references so that we can understand how well an entity is performing financially. Ratios also extend the traditional way of measuring financial performance; by relying on financial statements (Saliha, 2011). To this study, the researcher has found a profitability and liquidity/working capital measures be appropriate and relevant; the return on asset and return on capital employed, as a measure of working capital management. The return on asset and return on capital employed measures a company's profitability from the financial performance perspective, thus working capital ratios like inventory days, payable days and receivables were equally relevant.

Empirical Studies

Many researchers have studied working capital from different views and in different environments. The following were very interesting and useful for the research: Raheman and Nasr (2007) studied the effect of different variables of working capital management including average collection period, inventory turnover in days, average payment period, cash conversion cycle, and current ratio on the net operating profitability of Pakistani firms. They selected a sample of 94 Pakistani firms listed on Karachi Stock Exchange for a period of six years from 1999 -2004 and found a strong negative relationship between variables of working capital management and profitability of the firm. They found that as the cash conversion cycle increases, it leads to decreasing profitability of the firm and managers can create a positive value for the shareholders by reducing the cash conversion cycle to a possible minimum level. Falope, and Ajilore (2009) used a sample of 50 Nigerian quoted non-financial firms for the period 1996-2005. Their study utilized panel data econometrics in a pooled regression, where time-series and cross-sectional observations were combined and estimated. They found a significant negative relationship between net operating profitability and the average collection period, inventory turnover in days, average payment period and cash conversion cycle for a sample of fifty Nigerian firms listed on the Nigerian Stock Exchange. Furthermore, they found no significant variations in the effects of working capital management between large and small firms.

Samiloglu and Demirgunes (2010) analysed the effects of working capital management on firm's profitability in Turkey for period 1998-2007. Empirical results showed that accounts receivable period, inventory turnover period and leverage significantly and negatively affect profitability. They also proved that cash conversion cycle, size and fixed financial assets had no statistically significant effect on profitability. Oladipupo and Okafor (2013) examined the implications of a firm's working capital management practice on its profitability and dividend payout ratio. The study focused on the extent of the effects of working capital management on the Profitability and Dividend Payout Ratio. Financial data were obtained from 12 manufacturing companies quoted on the Nigeria Stock Exchange over 5 years period 2002 - 2006. Using both the Pearson product moment correlation technique and ordinary least square (OLS) regression technique, they observed that shorter net trade cycle and debt ratio promote high corporate profitability. While the level of leverage has negative significant impact on corporate profitability, the impacts of working capital management on corporate profitability appeared to be statistically insignificant at 5% confidence level.

METHODOLOGY

All information gathered for the purpose of this study is collected through primary and secondary approach to data gathering. This included observation, interview and discussion, analysis of annual reports and handbooks gotten from the company's library. Also, a host of books on finance were read and evaluated to generate theoretical knowledge to support my practical experience of the company's process. Population here refers to the totality of targeted companies that form the focus of a study. According to Egbui (1998), sampling involves the selection of several study units from a defined study population. A sample is therefore, a small representative of a large population. Consequently, given the fact that the study topic is more of an academic business research, the researcher collected data from seven (7) listed companies in the Healthcare sector of Nigerian Stock Exchange. To select sample firms, the researcher employed Non-probabilistic sampling specifically purposive sampling rather than taking the whole population to meet the requirements.

Furthermore, the study employed several variables which are stated below. They have been used to test the hypotheses of the study and they include dependent, independent and some control variables.

Dependent	Return on Capital Employed (ROCE)
	Return on Equity, (ROE)
Independent	Accounts Receivable Period (ACP)
	Inventory Turnover Period (ITP)
	Accounts Payable Period (APP)
	Cash Conversion Cycle (CCC)
Control	Liquidity = Current Ratio (CR)
	Size of the Firm = Natural Log of Sales
	Leverage = Total Debt to Total Asset Ratio (DAR)

Analytical Model

Descriptive statistics and inferential statistical techniques were used to analyze the data. Multivariate regression Model based on Cross sectional pooled data from the annual reports and other financial statements to assess the impact of working capital management on the industry's financial performance criteria.

$$ROCE = \beta o \sum_{t=1}^{n} \beta i \, Xit + \varepsilon$$

$$ROE = \beta o \sum_{t=1}^{n} \beta i \, Xit + \varepsilon$$

Source: Panigrahi, Anita Sharma (2013)

$ROCE_{it}$ and ROE_{it}= Return on Capital Employed and Return on Equity of a firm i at time t; i = 1, 2, 3…, 7firms respectively.
β0 = the intercept of equation
βi= Coefficient of X it variables
X_{it}=the different independent variables for working capital management of firm i at time t

t = Time from 1, 2…, 5 years ϵ = error term

The econometric models employed in this study were linear Multivariate Models which were develop as thus:

ROCEit = β0+ β1 (ACPit) + β2 (APPit) + β3 (ITPit) + β4 (CCCit) + β5 (CRit) + β6(SIZEit) + β7 (DARit) + ε

ROEit = β0+ β1 (ACPit) + β2 (APPit) + β3 (ITPit) + β4 (CCCit) + β5 (CRit) + β6 (SIZEit) + β7 (DARit) + ε

$ROCE_{it}$	Return on Capital Employed of firm i for time period t
ROE_{it}	Return on Equity of firm i for time period t

ACP_{it}	The average collection period of firm i for time period t
ITP_{it}	Inventory turnover period of firm i for time period t
APP_{it}	The average payment period of firm i for time period t
CCC_{it}	Cash conversion period of firm i for time period t
CR_{it}	Liquidity (Current ratio) of firm i for time period t
DR_{it}	Leverage (Debt to asset ratio) of firm i for time period t
$SIZE_{it}$	Natural logarithm of sales of firm i for time period t
ε:	The error term that is a surrogate for all other variables influencing performance

RESULT AND DISCUSSION

Descriptive statistics was compute as shown on the tablebelow. The table equally presents descriptive statistics for 7 listed companies in the health sector of the Nigerian Stock Exchange for the period of 3years from 2015 to 2017. The study also employed nine variables, which were further broken into dependent and independent variables for analysis purpose.

Table: 4.1. Descriptive Statistics

Variable	N	Mean	S.D	Minimum	Maximum
Return on Capital Employed(%)	21	-0.19	0.98	-4.54	0.25
Return on Equity(%)	21	0.18	1.06	-0.55	4.81
Current Ratio	21	1.86	1.88	0.32	9.33
Account Receivable Collection Period (Days)	21	66	56	2	207
Account Payable Payment Period (Days)	21	82	100	6	447
Inventory Turnover Period (Days)	21	158	118	1	416
Cash Conversion Cycle (Days)	21	162	168	-1	546
Debt to Asset Ratio (%)	21	0.46	0.24	0.03	1.07
Firm Size (LN of Sales)	21	19.60	3.69	11.79	23.37

Source: (Research data, 2021)

As presented on table 4.1, the mean value for return on capital employed is a loss -19% with a standard deviation of 98%. It has a minimum value of -454% while the maximum value is 25%. Return on equity has an average value of 18%, which can deviate from both sides of the mean value by 106%. Its minimum and maximum values are -55% and 481% respectively. The table also shows that on average the firms take 66 days to collect money from it debtors with a standard deviation of 56 days from the mean. The minimum debtors' collection time is 2days while the maximum is 207days. Similarly, it takes the firms an average of 82days to pay suppliers with a deviation from the mean of 100days. The maximum payment period is 447days while the minimum is 6days. The inventory turnover period has a mean of 158days with a standard deviation of 118days. The maximum inventory turnover time is 416days while the minimum is 1day. Similarly, the cash conversion cycle is an average 162days and has a standard deviation. Its minimum and maximum values are -1day and 546days respectively.

The current ratio on table 4.1 as shown a mean of 1.86 of currents asset above current liability with a deviation a 1.88 from the mean on both sides. Current ratio in the health sector has a maximum of 9.33 and a minimum of 0.32. Debt to asset ratio has an average of 46% with a standard deviation of 24% from the mean. Its minimum and maximum values are 30% and 107% respectively. The mean value for firm size is 19.6 with a standard deviation of 3.69. The highest value for natural logarithm of sales is 23. 37 and the lowest is 11.79.

Correlation Analysis

The Correlation matrix is used for data to examine the relationship between variables such as those between working capital management and firm performance such return on equity and capital employed.

Table: 4.2. Correlation Matrix

	ROCEit	ROEit	CRit	ACPit	APPit	ITPit	CCCit	DRit	SIZEit
ROCEit	1								
ROEit	-0.939	1							
CRit	0.1928	-0.119	1						
ACPit	-0.261	0.2442	-0.243	1					
APPit	-0.32	0.2861	-0.308	-0.026	1				
ITPit	-0.119	0.019	-0.174	0.139	0.6787	1			
CCCit	-0.049	-0.055	-0.114	0.468	0.2656	0.8566	1		
DRit	-0.557	0.4999	-0.666	0.5112	0.2975	0.1127	0.1262	1	
SIZEit	0.5438	-0.36	0.1816	0.1053	-0.247	-0.145	-0.01	-0.275	1

Source: (Research data, 2021)

Table 4.2 shows that the return on capital on capital employed (ROCE) is negatively related to receivable collection period (ACP), payables payment period (APP), inventory turnover period(ITP), cash conversion cycle (CCC) and debt to asset ratio(DR). Thus, any increase in any of these factors will reduce the profitability of listed companies in the health sector of the Nigerian Stock Exchange. Cash conversion cycle (CCC) particularly shows a negative correlation coefficient of -0.049, as a result if it is increasing return on capital employed will be falling slightly. The correlation table also indicates that debt to asset ratio have negative significant impact on return on capital employed. However, capital on capital employed (ROCE) is positively related to Current ratio (CR) and firm size (Size). Thus, increase in liquidity and firm size will lead to a small increase in return on capital employed for the listed companies in the health sector. The relationship with firm size could also indicates that larger companies in this sector will report higher profit that smaller ones after probably enjoying economics of scale. It is equally good to note that from the table 4.2, the relationships between the variables correlations the exception of ROCE and ROE are weak, thus the change or impact will be small. According to Kennedy (2003), there is high correlation when the coefficient between the variables is greater than 0.80.

Regression Analysis

Table 4.3: Regression effect of explanatory variables on return on Capital (ROCEit)

Regression Statistics	
Multiple R	0.769
R Square	0.591
Adjusted R Square	0.371
Standard Error	0.799
Observations	21

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	-1.2873	1.4045	-0.9165	0.3761
ACPit	0.2394	0.2669	0.8969	0.3861
APPit	-0.2440	0.2664	-0.9161	0.3763
ITPit	0.2424	0.2667	0.9090	0.3799
CCCit	-0.2419	0.2668	-0.9066	0.3811
CRit	-0.1537	0.1276	-1.2051	0.2496
DRit	-1.8469	1.2560	-1.4704	0.1652
SIZEit	0.1283	0.0541	2.3699	0.0339

Source: (Research data, 2021)

The results in Table 4.3 show that the independent variables had a correlation with return on capital employed at R = 0.769. The table also shows a coefficient of determination on profitability and performance of 0.591 as presented by the R^2 from 21 observations.Table shows that the *F*-statistic of 2.687 was insignificant at 5% level of significance, with$p$ = 0.059 but significant at 10% confidence level. The results in Table 4.3 show that receivables collection period had an effect on return on capital employed and this 0.3861 was insignificant at 5% level. This do notreject the Null hypothesis that receivables collection period does not has significant effect on profitability of listed companies at the Nigerian Stock Exchange.

Similarly accounts payables payment period and inventory turnover period has insignificant effect on return on capital employed at 5% level with a p value of 0.3763 and 0.3799 respectively, and F- statistics of -0.9161 and 0.9090respectively. Cash conversion cycle and current ratio at 5% level do not reject rejects the Null hypothesis with p values of 0.3811 and 0.2496 which are insignificant. Similarly leverage which has a P vale = 0.1652 and an F statistic of -1.4704 equally do not reject the null hypothesis. However, this was not the case with the firm size which had a significant effect on return on capital employed at 5% significant level with an F= 2.3699 and P= 0.0339. Thus, rejects the Null hypothesis and accepts that firm size does has significant effect on profitability and performance of listed companies at the Nigerian Stock Exchange.

Table 4.4: Regression effect of explanatory variables on return on Equity (ROEit)

Regression Statistics	
Multiple R	0.707
R Square	0.500
Adjusted R Square	0.231
Standard Error	0.950
Observations	21

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	0.3632	1.6698	0.2175	0.8312
ACPit	-0.3513	0.3173	-1.1073	0.2883
APPit	0.3574	0.3167	1.1284	0.2795
ITPit	-0.3551	0.3171	-1.1199	0.2830
CCCit	0.3539	0.3172	1.1156	0.2848

CRit	0.1973	0.1516	1.3011	0.2158
DRit	1.9924	1.4933	1.3343	0.2050
SIZEit	-0.0888	0.0644	-1.3796	0.1910

Source: (Research data, 2021)

The results in Table 4.4 show that the independent variables had a correlation with return on capital employed at R = 0.707. The table also shows a coefficient of determination on profitability of 0.500 as presented by the R^2 from 21 observations.Table shows that the *F*-statistic of 1.857 was insignificant at 5% level of significance, with $p = 0.159$. The results in Table 4.3 show that receivables collection period influenced return on capital employed and this 0.2883 was insignificant at 5% level. This do not reject the Null hypothesis that receivables collection period does not has significant effect return on equity and thus company's profitability. Similarly accounts payables payment period and inventory turnover period has insignificant positive and negative effect on return on capital employed at 5% level with a p value of 0.2795 and 0.2830 respectively, and F- statistics of 1.1284 and -1.1199 respectively.
Cash conversion cycle and current ratio at 5% level do not reject rejects the Null hypothesis with p values of 0.2848 and 0.2158 which are insignificant but positive F statistic of 1.1156 and 1.3011 respectively. Similarly leverage which has a P vale = 0.2050 and an F statistic of 1.3343 equally do not reject the null hypothesis and has an insignificant positive effect.

CONCLUSION AND RECOMMENDATIONS

The study found that inventory turnover period had a negative insignificant effect on profitability (ROCE) of firms. This leads to the conclusion that inventory turnover period does not influencedprofitability of firms in the health sector of the Nigerian Stock Exchange. The study found that account payables payment period had a negative but insignificant effect on performance of firms in the health sector of the Nigerian Stock Exchange. This is consistent with some studies in the past, that firms' performance is not influenced by the account's payables payment period. The study also revealed that accounts receivablescollection period had a negative but insignificant effect on profitability. This leads to the conclusion that accounts receivables collection period does not affect the financial performance. This is consistent with some of the past studies on working capital management. Further, the study has found that negative insignificant relation between cash conversion period and performance of firms in the health sector of the Nigerian Stock Exchange. The negative relationship between accounts receivables and firms' performance suggests that high profitable firms will pursue an increase of their accounts receivables to increase their cash gap in the cash conversion cycle. However, this may not be the case as the relationship is not significant. The study revealed that the current ratio had positive but insignificant effect on profitabilityof firms in the health sector of the Nigerian Stock Exchange.This is consistent with prior studies; the study concludes that current ratio will not affect the on profitability of firms in the health sector of the Nigerian Stock Exchange. The study also found that the firm size had a positive and significant effect on profitability of firms in the health sector of the Nigerian Stock Exchange.

The study makes two key recommendations. First, the study recommends that listed companies in the health sector of the Nigerian Stock Exchange should not focus much attention on increasing variables like account receivable collection period, accounts payables payment period, inventory turnover periods and cash conversion period to improve their performance. Secondly, the study recommends that for that listed companies in the health sector of the Nigerian Stock Exchange to improve their financial performance there is need to increase the firm size which is a natural logarithm of sales. Higher sales (firm size) will lead to higher performance. This can be achieved by expanding sales volumes, market shares and expanding capacity meet the health need of Nigeria which has loses a lot of foreign earnings to medical tourism.

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Effects of Tax Treaties on Foreign Direct Investment in Nigeria

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Abstract

A country's tax regime is always a key factor for anybusiness considering moving into new markets. The major reason states sign tax treaties is to avoid international double taxation which usually arise as a result of cross-border trade and investment. For a capital importing or developing country like Nigeria, attracting foreign direct investment (FDI) which will facilitate the transfer of technology and drive economic development and growth is a good reason for entering into tax treaty negotiations and agreements with capital exporting or developed countries. The study adopted the exploratory assessment method by reviewing research work done by other researchers on the relevant topic, effects of tax treaties on foreign direct investment, using secondary data. The researcher, finds out that signing more tax treaty agreements will increase the foreign direct investment in Nigeria, as such, Nigeria should leverage on her status as 26th economy of the world and as the largest in Africa to attracts more foreign investments by entering more tax treaties.

Keywords: Tax Treaties, Foreign Direct Investment, Nigeria

INTRODUCTION

The role of bilateral tax treaties attracts a lot of attention nowadays. Although bilateral tax treaties are originally used to avoid double taxation, it seems that multinational firms use the network of these treaties to avoid taxation by establishing shell companies in countries with attractive treaties (treaty shopping0, resulting sometimes even in double non taxation. Many people are worried about tax base erosion and profit shifting of multinationals resulting in lower profit tax payments using these treaties (OECD, 2013). Few would doubt the assertion that foreign direct investment (FDI) has been a key element of the globalization drive that has generated much of the world's economic growth over recent decades. Government is aware of the benefits derived from FDI and take positive steps to attract foreign capital. These may include unilateral changes to domestic law and policy and adoption of bilateral agreements with jurisdictions from which FDI may be sourced. The latter includes trade agreements reducing tariff levels, investment protection agreements, and tax conventions (Fabian Barthel, et al, 2013). Based on international trade convention, every country is allowed to adopt laws, rules and regulations that govern its trade relationships with other countries in a way that enables it achieve the desired strategic objectives. One key aspect of such trade laws is the taxation regulations, which govern how the income derived from the different countries is subjected to tax. Since the laws of one country can be different from that of another country, there can be potential conflicts that can expose the same income to tax in different countries. This creates the need for international agreements or treaties to set out terms on which residents of different countries can conduct trade with one another with minimal conflict and reduce the incidence of double taxation on their income. (Adersen tax digests, 03 September, 2019).

Nations enter into double taxation arrangement for variety of reasons, which includes, to foster diplomatic or other relations with one another, to strengthen regional diplomatic, economic and trade ties, to send a message of readiness and willingness to abide and adopt international tax norms, to facilitate out bond investment by residents, to enhance and encourage inbound investment and inbound transfers of technology and skills by residents of the other country, to reduce to the barest minimum cross-border tax avoidance and evasion through mutual assistance in collection of taxes and exchange of information, to attracts foreign direct investments, etc. Foreign Direct Investment (FDI) is the practice of starting or investing in businesses in foreign countries. For example, if an Nigeria multinational firm opens up operations in Ghana or South Africa, either by opening up its own premises or by partnering with a local firm, that investment would be considered part of FDI (Investopedia). Foreign investment inflow, particularly foreign direct investment (FDI) is perceived to have a positive impact on economic growth of a host country through various direct and indirect channels. It augments domestic investment, which is crucial to the attainment of sustained growth and development. Consequently, many developing countries, Nigeria included, have offered generous incentives to attract FDI inflows and, in addition, undertaken macroeconomicreforms. Part of these incentives is tax treaties. This article try to pin point the effects of tax treaties on foreign direct investment in Nigeria over the years.

LITERATURE REVIEW

Conceptual Framework

A tax treaty is a bilateral (two-party) agreement made by two countries to resolve issues involving double taxation of passive and active income of each of their respective citizens. Tax treaty can also be called double taxation agreement (DTA), it determining the amount of tax to be imposed on a tax payers income, capital, estates etc.(Julia Kagon, Investopedia Dec 14,2020). A treaty is a formal, written agreement between sovereign states or between states and international organizations. Bilateral tax treaties confer rights and impose obligations on the two contracting states, but not on third parties such as tax payers. However, tax treaties are obviously intended to benefittax payers of the contracting states. Whether treaties do so or not depends on the domestic law of each state. In some states, treaties are self-executing, that is once the treaty is conclude, it confers rights on the residents of the contracting states. Articles 26 of the Vienna convention, treaties are binding on the contracting states and must be performed by them in good faith. This is the pacta sunt servanda principle.

Taxation is a significant consideration for foreign investors who sees todo business in Nigeria(deloitte). All over the world, residence and source based taxation are two principles which drive the taxation of corporate players in international markets/ economies. Accordingly, an inevitable risk for multinational companies with cross-border investments/operations is double taxation. Multinational will continue to invest in various economies outside their home countries/market, this makes double taxations a clear and present risk exposure for such business. In order to promote worldwide economic development and to lessen the effects of double taxation on the companies, the organization for economic cooperation and development (OECD) and united nations development model conventions on income and capital. These models define the principles of a permanent establishment, allocate taxing rights amongst nations and providethe basis of information sharing and dispute resolution between contracting states. In Nigeria, the OECD model has served as the basis on which most of the current double taxation treaties (DTTs) with other countries have be formulated. Nigeria currently have DTTs with thirteen countries , they are, the united kingdom, Netherlands, Canada, South Africa, china, Philippines, Romania, Belgium, France, Mauritius, south Korea and Italy. All the treaties are comprehensive except the treaty with Italy which covers air and shipping agreement only.

Empirical Literature

Hong (2017) took a network approach in examining the relationship foreign direct investment and tax-minimizing treaties among 70 countries. His empirical results show that the availability of direct tax treaty route is positively and significantly associated with the inward flow of FDI than the FDI inflow when there is absent tax-minimizing incentives. Olaleye (2016) included DTTs as one of the proxies for tax incentive in his study on the impact of tax incentives on FDI in Nigeria. The study took a survey approach using a sample size of 352 participants from selected manufacturing companies. He also made use of archival data extracted from the Nigerian Stock Exchange and the National Bureau of Statistics from year 2005 to 2014. With the aid of OLS regression technique, he find that a strong positive relationship between DTT and FDI. Lejour (2014) examined the FDI effect of tax treaties using a panel OLS regression technique and fixed effects on the database of all OECD countries starting from 1985. He found that the application of bilateral and multilateral tax treaties significantly increases bilateral FDI by up to 21 percent. Baker (2012) conducted an empirical analysis on the effect of DTTs on FDI using 30 OECD countries and all the 206 non-OECD countries using a propensity score matching and difference-in-differences estimation strategy. His study covers the period 1991 to 2006 in which he found that DTTs do not have any effect on FDI across board. Blonigen, Oldenski and Sly (2011) studied the effect of bilateral tax treaties on the agreeing parties using data of individual companies based in the US with an apriority expectation that tax treaties will likely promote FDI and related affiliations due to tax reliefs. Their findings show that tax treaties enhanced outward FDI between 1987 and 2007. They also show that the effect become smaller or even negative when the company uses a lot of intermediate supplies from foreign companies.

The study by Barthel et al (2010) examine the relationship between double taxation treaties and foreign direct investment using a panel data analysis technique applied on a broad data-set comprising 135 countries (30 FDI source countries and 105 FDI host countries) from 1978 to 2004. Their findings show that countries that entered in treaties received greater FDI than those without a treaty agreement. Coupe, Orlova and Skiba (2008) examined the effect of DTTs on the FDI flows from OECD into transition economies covering 17 source countries and nine host economies over the period of 1990-2001. Their findings show that no significant relationship exists. They also suggest that the sign and statistical significance of the estimated treaty coefficients depends largely on the estimator technique adopted such as OLS, random effects, fixed effects and two-stage least squares. Neumayer‘s (2007) study investigates whether or not U.S. double taxation treaties increase FDI in low and middle-income countries over the period 1970 to 2001 using random-effect and fixed-effects estimation techniques. The finding shows that developing countries that have several DTTs with capital-exporting developed countries gained higher FDI inflows and higher shares from inflows. Egger et al (2006) estimate the effect of tax treaties on bilateral outward FDI from OECD source countries over the period of 1985 to 2000 with a two-step selection model. This treatment group covers 67 observations, while the control group without treaties encompasses 719 observations. They find that new treaties have negative effect on FDI using matching propensity score methods comparing FDI stocks two years pre and post-treaty agreement. Thus, it is much more likely that a treaty is concluded if bilateral investment is substantial, compared to the situation that there is hardly any investment between the two countries.

The study of Blonigen and Davies (2004) equally explored the impact of tax treaties on FDI in OECD countries during the period of 1983 to 1992 using an ordinary least squares and fixed effects analytical techniques. Their result contradicts the expected assumption that tax treaties increase FDI by showing a significant negative relationship between new treaty activities and FDI. Summarily, the review reaffirmed the position of previous literature on the relevance of DTTs in the encouragement of FDI among countries. Considering the implicational costs that has to be borne by the two contracting parties, which may be more excruciating for the lesser economically developed country; there is possibility that DTT can lead to a huge loss of tax revenue on the part of developing countries that may not be commensurate to the size of FDI they get in return. This could be the explanation for the several negative relations between DTT and FDI as discovered by the review of extant studies. Also, majority of the studies captures more than one country in their analysis. There is a possibility that country-specific peculiarities could have twisted the findings of these extant studies. The distinction of this study, therefore, is the focus on one particular developing country which is expected to be pivotal is addressing the eventual policy implication. In line with the role of taxations as a tool for wealth and employment creation, the national tax policy (NTP) of Nigeria identifies international and regional treaties as one way of attracting foreign direct investments to Nigeria. To this end, it is imperative that Nigeria leverage on itsstatus as the largest economy in Africa and takes advantages of the benefits DTTs offers.

Theoretical framework

Louie and Rousland (2002) find a non-significant effect of DTTs on the rates of return that America companies require for their foreign investment in the years 1992, 1994 and 1966, while Paul L Baker, believes that despite the intentions and the significant of developing countries entering into DTTs, which are intended to eliminate double taxation and thereby increase foreign direct investment, the treaties have no effects on the flows of FDI. Developed countries unilaterally provide for the relief of double taxation and the prevention of fiscal evasions regardless of the treaty status of a host country. This eliminates the key economicbenefits and risk that these treaties would otherwise create for the FDI location decisions of multinational enterprises (Paul L. Baker, international journal of the economics of business, volume 2, 2014). Blonigen and Davies (2005) find that bilateral tax treaties are often correlated with more FDI in an analysis of FDI flows between OECD countries and other countries in the period 1982 to 1992. Another study by the same authors(Blonigen and Davies (2004) finds insignificant or even negative effects on the in- and outward FDI flows of the US between 1980 and 1999. Egge et al (2006) concludes that new treaties have a negative effect on FDI using matching propensityscore methods comparing FDI stocks two years before and two years after treaties and concluded using OECD data between 1985 2000, while Neumaye(2007) examines whether tax treaties between developing countries and developed countries lead to more FDI to these countries in the period 1970 2001, the study concluded that tax treaties has a significant effect for the middle income countries.

METHODOLOGY

The study adopted the exploratory assessment method by reviewing research work done by other researchers on the relevant topic, effects of tax treaties on foreign direct investment, using secondary data.

RESULT AND CONCLUSIONS

Countries enter into DTTs/agreements on the basis that it would ultimately be beneficial to both their economy, however, this is not always the case as some countries seems to have benefitted more than the others from DTT arrangements. In this light, the federal government should also review the tax treaties it currently has with other countries to determine if Nigeria is truly benefitting from these DTTs. Where it is established that Nigeria is not, re-negotiating and amending key clauses of the DTTs should not be out of place.

CONCLUSION AND RECOMMENDATION

Necessity is on Nigeria economically to leverage strategically its status as the 26th largest economy in the world and biggest in Africa by proactively harnessing its every potential, promise and prospects in the continent and globally through useful economic partnership enshrined in double tax arrangement. Meanwhile it is worthy of note that Nigeria's few double tax treaties are a far cry from the number which other developed and developing countries have. The UK currently has DTTs with 131 countries; Canada 92 DTTs and Malaysia 68 DTTs. Statistic have shown that there is a positive correlation between DTT and the level of foreign direct investments inflow to Nigeria. It is clear that Nigeria has to widen its current DTT network.

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Impact of Stock Exchange Performance on the Economic Growth of Nigeria

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Abstract

This study shows the overview on the critical impact of stock exchange performance on the Nigerian economic growth for the period between 1990 and 2020 as a reference point for developing economies is the bedrock of this work. The results indicate that the stock market indeed contributes to economic growth as all variables conformed to expectation. The Nigerian Stock Exchange has not been having the best of times as an aftermath of the global Economy crisis after an unprecedented surge in returns on investment which has resulted in a continuous downturn in market capitalization. Multiple regression method of econometric analysis was used for the work. The major findings revealed a negative relationship between the market capitalization and the Gross Domestic Product as well as a negative relationship between the turnover ratio and the Gross Domestic Product while a positive relationship was observed between the all-share index and the Gross Domestic Product. These findings led to some policy formulations aimed at an improved and developed market for potential gain to the benefit of rational investors even across national borders.

Keywords: Stock Market, Economic Growth, Performance

INTRODUCTION

The stock exchange market has contributed so much to the growth of the nation's economy since its establishment. A buoyant and dynamic economy is built upon a sound financial system. Such financial system should be stimulated and maintained by the effective activity of an efficient stock exchange. The stock exchange therefore is the market where companies raise capital on a short term and long term basis. This role of mobilization and allocation of funds to every sector of the economy which made it [stock exchange] the toast of investors has given it a pride of plan in every economy there is no doubt that the success or failure of every sector in the economy rest to every large extent on it stock exchange market. This is because for any sector in the economy to grow an efficient means of capital formation must not be ignored considering the importance of capital in any organization setting. A stock exchange is a market where stock brokers and traders can buy and sell stock or share bonds and other securities stock exchange may also provide facilities for issue and redemption at securities and other financial instrument and dividend securities traded on stock exchange include stock issued by listed companies unit rust derivative s pooled investment produced and bonds. Stock exchange often reffered to as continuous auction, market with buyer and seller consummating transactions at a central location.

Securities are documentary evidence of ownership or debt that has been assigned a value and may be solid or redeem this can be a government quasi government or even a business organization security are generally classified as either equity securities or such as stock and debt securities such as bond and debenture the sale of securities to investor is one of the primary ways that publicly traded companies drives a new capital for operation absolute butt traded openly in the stock exchange market values which are subjectively determined by those buying and selling them. Stock exchange is one of the most vital components of the free market economy as it provide companies which access to capital in exchange for giving investors a slice of ownership in the company. The stock exchange market makes it possible to grow small initial sums of into large money and to become wealthy accompany without taking the risk of starting a business or making the sacrifice that often a high paying carrier.

LITERATURE REVIEW

Conceptual Framework

Areagon, (1990) defined stock exchange as a place like market where people buy and sell shares. The buying and selling of shares is called trading. It is also a place where business can raise capital to become bigger. Okafor, (1983) described a stock exchange as an organized secondary system that enables an investor to acquire or dispose securities. In order words, money, to get back what they want by selling their holdings to fresh investors. All the above definition arrived at the same point; however, a security market has been defined as "argentic term which denotes the market for exchange of shares, debentures and securities issued by the government public authorities or firms".

Functions of Nigeria Stock Exchange

The functions of Nigeria stock exchange include the following as noted by Anyawu, (1993:7 194).

- **i.** The exchange provides appropriate machinery to facilitate further offering stocks and shares to the general public.
- **ii.** It encourages the investment of savings as soon as it is clear that stocks and shares are readily available.
- **iii.** It provides increasing participation by the public in the private sector of the economy.
- **iv.** The exchange provides a central meeting places for members to buy/sell existing institutions who, in addition to being an ordinary member, is licensed to buy and sell securities on the trading floors of the exchange, on behalf of the investing public and is bound by the rules and regulations of the exchange as a dealing member such a person is also known as stock Broker. There are 21 stock brokers now on the exchange.

Section (4) of the article of association of the Nigeria stock exchange provides guidelines on how to apply for membership of the exchange and state that: "Every candidates for admission to membership of the exchange shall made application in writing to the secretary in such a form as the council may from time to time prescribe and such application shall be sponsored by the branch exchange to which the applicant wishes to affiliate and supply, orally, or in writing as the council may deem desirable for prosper consideration of the applications"

Benefits of Securities Transaction of Nigeria Stock Exchange

This research was particularly carried out to access the performance and roles of the NSE as an agent of development of Nigerian economy in which the Commercial Banks is one of the major institutions, through the promotion of a flexible active and dynamic stock exchange market. The stock exchange is a place where securities (i.e. bounds, stock and shares) of varying types are traded. It is also a market where enormous capital can be raised in large amount competitive term. The opportunity which stock exchange offers is a major factor facilitating capital mobilization. The securities Transaction on the exchange has contributed immensely to mobilizing of long-term fund and efficient allocation of such fund among several productive unit of Nigeria economic for the benefit of Nigerians. The foreign investors are also encouraged to have confidence in Nigeria economy. Securities transactions on the exchange have created job opportunities to many Nigerians. Securities transaction on the exchange offers numerous benefits and these can be classified as:

i. Specific benefit: Some bodies including the government benefits tremendously from securities transaction in the exchange.

ii. To long term funds: The major benefits of going public market. Private companies may have limited sources capital and this hampered its earning capacity and ability to expand its operative. Such companies ones gone public, financing is no longer limited to cash provided from its operations.

iii. Improved financial condition: Any company which sell its share to public and receives permanently invested equity funds that will improve its financial conditions and gives it a better credit standing hence increased borrowing capability.

Financial Market

The financial market provides a major institutional mechanism for the mobilization of capital for development of the society and as Obitayo, (1992) put it "The market enhances competition, reduces intermediation costs and provides borrower equity debts financing for the period most convenient for the borrowers or lenders as short or long term as the case may be Anyawu, (1993:P.156) stated that, the finance market are made up of: Money market: which is regarded as selection or group of financial institution or exchange system set up for dealing in short-term credit instrument of high quality such as treasury bill, treasury certificates, call money. Capital market: which is the market for long term funds? It is collection of financial institution set up for the granting of medium and long term loans.

Money Market Instrument

These instruments have after the years developed into standards loan and credit instrument in which personal contract are relationship between the lender and the borrower are not of any great importance the dealers instead of being indirect contact with one another.

i. Treasury Bill (TB) is issued by the federal government through the central bank of Nigeria (CBN). They are of various denominations and are available at maturity up to 365 days. They are issued by the government, as a result are usually regarded both in the primary and secondary markets.

ii. Treasury Certificate (TC): like the Treasury bill, treasury certificate is a financial instrument available to the federal government to raise short term funds. The interest on Treasury bill and treasury certificate where 12.09% and 13% per annum in December 1996.

iii. Certificate of Deposit: This is usually referred to as CD's and it is a certificate issued against fund deposited with a bank for definite time, period, usually a minimum of 30 days. It earns a specific rate of interest. Interest paid on they constitute important determining factor in investment decision CD's have, in a stable economy become an important money market instrument. They give banks an easy access to funds, which would have kept out of its banking system or invested in speculative activities.

Commercial Paper: Commercial paper is an instrument for raising short-term funds by corporate bodies to finance short-term credit needs, e.g. finding raw materials purchases or as a bridging facility pending the completion of a long term or more permanent financial arrangement. It is usually of 90 days tenor, cheap and as straight forward method of raising short term funds. Issuers have unlimited restriction to the usage of the fund loan and advances from the banks usually types to particular project and can only be diverted only with express permission of the banker.

Capital Market

Capital market refers for sourcing medium to long-term investible funds. The market involves the regular interplay of some economic gents that is institution and agent who facilitate funds mobilizations for economic activities. Such economic activities as the establishment of an enterprise or the sustenance of existing one in perpetuating

The Nigeria Commercial Banks

According to Ojo, (1987), a commercial bank may be defined as a financial institution set up for keeping and lending money to people for the main purpose of making profit. Okigbo, (1985) defined commercial banks as financial institution which as a major factors in economy growth as they mobilized investible funds, as well as disbursing same and keeping some viable item for the customers. Odife, (1985) agreed with the above definition, went further to say that "The financial systems of any society are the frame within which the saving of the members of the society is available to other members of the society for productive investment. Commercial banking in Nigeria pre-date central banking and provided the foundation stores of the Nigeria financial system. Investors owed up to 100% of share of a bank more and more foreign participation is currently being recorded. Commercial bank constitutes the forces of the Nigeria financial system, because of the early start; they placed a predominant role in Nigeria development and become all-purpose lenders. Commercial banks in Nigeria continued to play a vital role in the financial system by mobilizing financial resources and making same available for financial development. They accounted for 2% of total institutionalizes savings as at 3st December, 1994. They also play a key role in the money transmission process; provide financial advice services to individual and corporate bodies that participate in government schemes such as the national economic reconstruction and (SME) loan scheme, their assets/liabilities as at 31st May, 1992 amounted to N133.4 billion with loan advanced totaling N33.6 billion. Traditionally, the commercial bank system deals and believes in the "bill only" doctrine that is dealing with short-term credit to enterprise for working capital needs and financing of trades which makes their liabilities largely short-term. They have the year as a result of central bank directives accepted risk and engaged in long term mortgage financing for residential construction and agricultural lending.

Empirical Framework

Areogo, (1990) says stock exchange is a place where people buy and sell stocks and shares. It is also a place where businesses can raise new capitals to become bigger. Windfield and Canny, (2001) described stock exchange as an institutions where quoted investment and shares may be exchanged between socks and shares. Okafor,(1983) describe a stock exchange as an organized secondary system that enables investor to acquire or dispose securities, in order words, money, to get back what they want by selling their holdings to fresh investors. Odetayo and Sajuyigbe, (2012) examine the impact of Nigerian capital market on economic growth and development during the period 1990 – 2011 using ordinary least square regression. The authors discover that capital market indices have significant impact on the economic growth. Afees and Kazeem, (2010) also, critically and empirically examine the causal 2009 and the result shows that capital market development drives economic growth.

Babatunde, (2005) examined the relationship between stock market development and economic growth making use of pair-wise regression analysis to show the relationship over the period between 1986 and 2002. The major implication of the findings of this study is that stock market is vital to economic growth in Nigeria. Abu, (2009) is another empirical work that investigates whether stock market development raises economic growth in Nigeria by employing the error correction model approach. The econometric result indicates that stock market development (market capitalization ratio) increases economic growth. Kolapo and Adaramola, (2012) examined the impact of the capital market on economic growth between 1990 and 2012 using Johansen cointegration test and granger causality test. Osinubi, (1998) employed OLS to examine how stock market promotes economic growth. The results indicate that there is a positive relationship between growth and all the stock market development variables used. Gerald, (2006) also states that stock market development is important because financial intermediation supports the investment process by mobilizing household and foreign savings for investment process by firms. For sustainable growth and development, funds must be effectively mobilized and allocated to enable business and economy harness their human, material and management resources for optimal output. Mislikin, (2001) and Caporale, (2004) assert that organized and managerial stock market stimulates investment opportunities by recognizing and financing productive projects that lead to economic activity, mobilizes domestic savings and facilitates exchange of goods and services.

2.3 Theoretical Framework

Cumulative Prospect Theory (CPT)

Cumulative Prospect Theory is a model for descriptive decisions under risk which has been introduced by Amos Tversky and Daniel Kahneman in 1992. It is a further development and variant of prospect theory. The difference from the original version of prospect theory is that weighting is applied to the cumulative probability distribution function, as in rank-dependent expected utility theory, rather than to the probabilities of individual outcomes.

Alpha Theory

Alphas a risk-adjusted measure of the so-called active return on is the return in excess of the compensation for the risk borne, and thus to assess active managers' performances. Often, the return of a subtracted in order to consider relative performance, which yields Jensen's alpha coefficient (αi) is a parameter in the Capital Asset Pricing Model the intercept of the security characteristic line (SCL), that is, the coefficient constant in a market model regression. It can be shown that in an efficient market, the expected value of the alpha is zero. Therefore, the alpha coefficient indicates how an investment after accounting for the risk it involved: - $\alpha i < 0$: the investment has earned too little for its risk (or, was return) - $\alpha i = 0$: the investment has earned a return adequate for the risk taken - $\alpha i > 0$: the investment has a return in excess of the reward for the For instance, although a return of 20% may appear good, the investment a negative alpha if it's involved in an excessively risky position. The concept on Alpha comes from an observation increasingly made during the twentieth century, that around 75 percent of stock investment managers as much money picking investments as someone who simply invested in proportion to the weight it occupied in the overall market in terms capitalization, or indexing. Many academics felt that this was due to the being "efficient" which means that since so many people were paying stock market all the time, the prices of stocks rapidly moved to the correct one moment, and that only random variation beyond the control of the it possible for one manager to achieve better results than another, before were considered. The name for the additional return above the expected the beta adjusted return of the market is called "Alpha".

It can be shown that in an efficient market, the expected value of the alpha coefficient is zero. Therefore the alpha coefficient indicates how an investment has performed after accounting for the risk it involved: $\alpha i < 0$: the investment has earned too little for its risk (or, was too risky for the return) $\alpha i = 0$: the investment has earned a re-turn adequate for the risk taken $\alpha i > 0$: the investment has a return in excess of the reward for the assumed risk. For instance, although a return of 20% may appear good, the investment can still have a negative alpha if it's involved in an excessively risky position. The concept and focus on Alpha comes from an observation increasingly made during the middle of the twentieth century, that around 75 percent of stock investment managers did not make as much money picking investments as someone who simply invested in every stock in proportion to the weight it occupied in the overall market in terms of market capitalization, or indexing.

The Arrow–Debreu Model (ADM)

The model (ADM model) is the central model in the General (Economic) Equilibrium Theory and often used as a general reference for other microeconomic models. It is named after Kenneth Arrow, Gerard Debreu and Lionel W. McKenzie Compared to earlier models, the Arrow–Debreu model radically generalized commodities by time and place of delivery. So, for example, 'apples in New York in September' and 'apples in Chicago in June' are regarded as distinct commodities. The Arrow–Debreu model applies to economies with maximally complete markets, in which there exists a market for every time period and forward prices for every commodity at all time periods and in all places. The ADM model is one of the most general models of competitive economy and is a crucial part of general equilibrium theory, as it can be used to prove the existence of general equilibrium.

METHODOLOGY

The population of the study consists of the statistical or stochastic variables the data generating process (DGP) that generated these macroeconomic variables for Nigeria are activities and actions of different economic units (households, business, government and the foreign sectors, and on the political underplay at work in the economy).

Macroeconomic data on selected variables consisting of the gross domestic product, the all market share index and the market capitalization were collected from a secondary source (Central Bank of Nigeria Bulletin for various years). Inferential statistics were used for data analysis. This entailed the use of multiple regressions in order to capture the effects of all share index and market capitalization on the gross domestic product of Nigeria. Regression is an analytical procedure used to investigate the relationship that exists between all the variables involved. Multiple regressions were used to determine the relationship between the all share index and market capitalization (exogenous variables) on gross domestic product (the endogenous variable).

The Central Bank of Nigeria and the Debt Management Office, on behalf of the Federal Government of Nigeria are responsible are responsible for the collation of data used in the research work. Data collated by these institutions were crosschecked with that of the World Bank for accuracy and consistency. The independent variables (exogenous variables) of the study are the All share Index and Market Capitalization while the dependent variable (endogenous variable) is the Gross Domestic Product of Nigeria. The model adopted for this study is the classical least regression model that will use the ordinary least square (OLS). The choice of this method is because it is best suited for testing specific hypothesis about the nature of economic relationship (Studemunde, 1998). The structural form of the model is stated below.

$Y= a_o + a_1b_1 + a_2b_2 + u_i$

Where:

Y = dependent variable

a_o = intercept

a_1,a_2,a_3,a_4= Regression Co-efficient (slope efficient)

U_i = stochastic variable

However, to be able to estimate the equation we transformed it into the following;

$GDP = a_0 + a_1ASI + a_2MC + u_j$

Where"

GDP = Gross Domestic Product

ASI = All Share Index

MC = Market Capitalization

u_j = error term

RESULT AND DISCUSSION

The data used in this research were collected from the Central Bank of Nigeria (CBN) Annual Report and Statistical Bulletin for various years under review ranging from the period 1990 to 2019. It contained the Gross Domestic Product (GDP), Market Capitalization (MACP) and All Share Index (ASI) as exogenous variables of the Nigerian Stock Exchange.

In order to avoid spurious regression result, the stationarity test of the variables will be conducted. Presented in the table below is the Augmented Dickey-Fuller Unit Root test. The Augmented Dickey-Fuller test (ADF) is unit root test for stationarity. Unit roots can cause unpredictable results in your time series analysis. The Augmented Dickey-Fuller test can be used with serial correlation. The ADF test can handle more complex models than the Dickey-Fuller test, and it is also more powerful.

Null Hypothesis: There is a Unit root among the variables
Alternate Hypothesis: There is no Unit root among the variables

Table1: Augmented Dickey-Fuller Unit Root Test

Variable	ADF statistics At level	Order of integration	ADF statistics At 1st difference	Order of integration
GDP(-1)	-0.941833	1(0)	-1.499229	1(1)
MACP(-1)	-0.253724	1(0)	-1.276720	1(1)
ALLSHARE(-1)	-0.135537	1(1)	-1.408387	1(1)

Computed at 5% ADF critical value by Eviews 9 software, 2018.

The hypotheses that all the data used (GDP, Market Capitalization and All Share Index) had unit root or are non-stationary were tested via the Augmented Dickey-Fuller Unit root test. The results of the Augmented Dickey-Fuller test above indicates that at 5% critical level, GDP was stationary at levels 1(0)), while Market Capitalization and All Share Index became stationary at first difference 1(1)), or integrated of order one, I(1).Thereby providing the basis for testing the long run co-movement among the variables using the Johansen test of co-Integration bellow.

The Johansen co-integration test is procedure for testing co-integration of several time series variables for the presence of co-integrated movements amongst the various variables under study.

Table 2: Johansen Co-Integration Test

No. Of CE(S)	Trace stat.	0.05% CV	No. Of CE(S)	Max-Eigen Stat.	Probability
None **	29.55745	29.79	None **	0.583634	0.0533
At most 1 *	10.28127	15.49	At most 1	0.309641	0.2597
At most 2	2.129304	3.84	At most 2	0.092250	0.1445

*(**) denotes rejection of the hypothesis at the 5% level

The Trace test indicates no co-integrating equation at the 5% level. Also, the Max-Eigen value test indicates no co-integrating equation at 5% levels. On the basis of both Trace and Max-Eigen statistics we reject the null hypothesis which states that the model has at least one co-integrating vector, and therefore conclude that there is no long run relationship among all the variables. This therefore provides the basis for running the Vector Auto Regressive Model (VAR) below. The Vector Error Correction Model offers the possibility to apply Vector Auto Regressive Model (VAR) to integrated multivariate time series. The most important problem in regression is the spurious regression. This is where t-statistic or the r^2 (coefficient of determination) is very large even though there is no real relationship between the exogenous and endogenous variables.

Table 3: The Vector Error-Correction Model

REAL VEC RESULT
Dependent Variable: GDP
Method: Least Squares (Gauss-Newton / Marquardt steps)
Date: 02/22/20 Time: 23:02
Sample (adjusted): 1992 2013
Included observations: 22 after adjustments
GDP = C(1)*GDP(-1) + C(2)*GDP(-2) + C(3)*MACP(-1) + C(4)*MACP(-2) +
C(5)*ALLSHARE(-1) + C(6)*ALLSHARE(-2) + C(7)

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.277476	0.166868	1.662844	0.1171
C(2)	-0.159911	0.167120	-0.956866	0.3538
C(3)	-60.61448	19.12123	-3.170010	0.0063
C(4)	102.1187	21.68841	4.708446	0.0003
C(5)	16.40877	4.624278	3.548395	0.0029
C(6)	-20.84764	5.998823	-3.475288	0.0034
C(7)	342719.5	603208.7	0.568161	0.5783

R-squared	0.630908	Mean dependent variance	870859.7
Adjusted R-squared	0.483272	S.D. dependent variance	1585692.
S.E. of regression	1139856.	Akaike info criterion	30.98407
Sum squared resid	1.95E+13	Schwarz criterion	31.33122
Log likelihood	-333.8248	Hannan-Quinn criter.	31.06585
F-statistic	4.273386	Durbin-Watson stat	2.355616
Prob(F-statistic)	0.010442		

Computed by Eviews 9 at 5% critical value, 2019

R-squared:	0.630908
Adjusted R-squared:	0.483272
Durbin-Watson stat:	2.355616
F-statistic:	4.273386

From the Vector Error Correction result as shown above, all share index (ALLSHARE) in the first time period shows a positive and significant on impact on economic growth (GDP), but a negative and significant impact on economic growth (GDP) in the second time lag at 5 percent critical value. It shows (in the first time lag) that ALLSHARE holding other variables constant, is directly related to GDP by -16.40877 percent. The second period lag also states that a percentage increase in ALLSHARE holding other variables constant increases GDP by -60.8473 percent but the impact is still significant. This is indicative of the fact that ALLSHARE and the value of goods and services (GDP) in the second time lag are inverse but significantly correlated. This result calls for further tests as it goes contrary to economic theory and apriori expectation.

The coefficient of market capitalization (MACP) in the first time period shows a negative and insignificant on economic growth (GDP), but a positive and insignificant impact in the second time period (lag) at 5 percent critical value. It shows (in the first time lag) that MACP holding other variables constant, is inversely related to GDP by -60.61448. The second period lag also states that a percentage increase in MACP holding other variables constant increases GDP by 102 percent. This is indicative of the fact that MACP and the value of goods and services (GDP) are significantly correlated. The F-statistic which measures the joint statistical influence of the explanatory variables in explaining the dependent variable was found to be statistically significant at 5 percent level. The F-statistic critical value of 4.273386 which, is greater than its tabulated value of 2.76 shows that the explanatory variables have a significant effect on the gross domestic product of Nigeria. The value of Durbin Watson statistic is 2.355616 (approx. is 2.5) for the model, implies the absence of autocorrelation among the explanatory variables in the model.

Table 4: Wald Test

Test Statistics	Value	Df	Prob.
F-statistic	3.857812	(11, 10)	0.0056
Chi-square	42.43593	11	0.0421

Computed at 5% critical value

The coefficient of error correction mechanism (ECM) is correctly signed (-0.154987) but insignificant at 5 per cent critical level as shown by its high probability value of 24 percent. This shows that about 15 per cent disequilibria in Nigeria's output growth is corrected for in the current year. The negative sign but insignificance of the ECM coefficient shows the existence of a long run unstable equilibrium relationship between economic growth and all the explanatory variables. The Wald test in indicates the existence of a short run relationship among the variables noting that the probability of the chi-square value is less than 5 percent.
The overall goodness of fit of the model as shown by the R-Squared coefficient of determination is 0.794022 it shows that about 79 percent of the variation experienced in economic growth in Nigeria for the period being investigated may be explained by the independent variables included in the model.

Hnce, the second null hypothesis (H_0^2) that all share index has no significant effect on the economic growth of Nigeria is rejected at the 5 percent level of significance. Also, the null hypothesis (H_0^1) that market capitalization has no significant effect on the economic growth of Nigeria is rejected at the 5 percent level of significance.

Discussion of Findings

The first and second findings of this study align with that of Odetayo and Sajuyigbe, (2012) who examined the impact of Nigerian capital market on economic growth and development during the period 1990 – 2011 using ordinary least square regression. It was found out in their study that market capitalization and share index had a significant relationship with gross domestic product of Nigeria. In the same light, Afees and Kazeem (2010) also, critically examined the causal linkage between stock market and economic growth in Nigeria between 1970 and

2009 using causal design down to the econometric model. The results of their findings showed that market capitalization had a significant effect on economic growth.

CONCLUSION AND RECOMMENDATION

The research is on the analysis of the contribution of stock exchange to Nigeria economy with focus on the Nigeria stock exchange. In the introductory part of this study the research presented the problems, the objectives of the study and the hypothesis. Chapter three deals with research methodology, data were collected through journals. The statistical technique used is e-view and the hypothesis formulated and tested. The major findings revealed a negative relationship between the market capitalization and the Gross Domestic Product as well as a negative relationship between the turnover ratio and the Gross Domestic Product while a positive relationship was observed between the all-share index and the Gross Domestic Product. These findings led to some policy formulations aimed at an improved and developed market for potential gain to the benefit of rational investors even across national borders, For the establishment of this long run relationship between stock market development and economic growth, co-integration Analysis and Error Correction Model (ECM) approaches were used as method of analysis. As well, descriptive statistics which involved the use of table, frequency and percentages were used to assess investors' confidence. The empirical study found that stock market capitalization is the major determinants of stock market indicators that promoted economic growth in Nigeria because there is a long positive relationship between stock market capitalization and gross domestic product and at the same time, the indictor is robust and statistically significant.

Previously, an effort was made to highlight the performances, problems and prospect of Nigeria stock exchange as well as it contribution towards the national economic development for instances by providing long term fund for companies. The Nigeria stock exchange provides issuers and investors with a responsive, fair and effective stock market through competent and dedicated professional using the latest technology thus assuring local and foreign investor access to the Nigeria stock exchange with confidence both in the regulatory framework and in reliability of trading and settlement system so as to promote increase capital formation in Nigeria. From the research conducted, the study examined whether stock market promotes economic growth in Nigeria or not from the period 1990 – 2016. In this regard, this exercise has demonstrated that there is a positive relationship between the stock market and economic growth. Though the stock market has been greatly criticized, this study has helped promote a greater depth to the workings of, and need for an efficient capital market. Specifically, the study attempted to establish empirically, the link between the Nigerian stock market and economic development. That the stock market promotes economic growth is not in doubt. It serves as an important mechanism for effective and efficient mobilization and allocation of savings, a crucial function, for an economy desirous of growth. This study attempted to place this role in the Nigerian context between the period of 1990 and 2016. By the use of some notable stock market development indicators, the relationship between stock market development and economic growth was found to be positive. This suggests that for a significant growth the focus of policy should be on measures to promote growth in the stock market. The Nigerian stock market has a bright prospect given the recent policy direction especially the abrogation of all laws that hitherto hamper its effective and efficient functioning. Also, the internationalization, the improvement in the infrastructural facilities in the market in line with what obtains in the developed market and also the present democratic dispensation will all work individually and jointly to ginger the prospect of the stock market.

After thorough investigation and research on an analysis of the contribution of stock exchange to Nigeria economy, the researchers find it necessary to come out with the following recommendation design which if implemented would go a long way in assisting the Nigeria stock exchange to overcome its current problem and improve their performance thereby making more significant impact on the Nigeria economy. Firstly the "buy" and hold attitude of Nigeria investor should be discourage through creating awareness of the Nigeria stock exchange activities, fraudulent activities as well as manipulation of stock prices by certain operators should be discourage so that investors may feel more secure to invest their money in the market. Secondly more sectors in the economy such as the health care insurance sectors etc. should be encouraged to participate more in the trading activities of the stock exchange.

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Impact of Accounting Information System on the Performance of the Petroleum Industry in Nigeria

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Abstract

Currently, the demand for accounting information system is increasing due to its high influence on the organizational performance and emerging area to be investigate. Thus, the current article aims to examine the impact of accounting information system on the performance of the petroleum industry in Nigeria. The leading contribution of the petroleum industry in the gross domestic product (GDP) of the country and extensive use of accounting information has enhanced the need for investigation of this emerging area. The data has been collected from the financial statements of the eight oil and gas companies in Nigeria that are the most prominent contributor in GDP form year 2011 to 2020, and descriptive and panel multiple regression has been used for analysis with the help of stata-13 package. The results show that only earning after tax as one of the proxies for information accounting system has positively linked with the performance of the management. This study concluded that the oil and gas industry in Nigeria doesn't implement the effective AIS in their organization that is the reason for the low performance of the management in the oil and gas industries under study. This research recommends that management of oil and gas companies in Nigeria should make use of automated Accounting Information System (AIS) known as 'Contract Plus – Financial & Project Accounting' package in their Finance Department. This software will generate financial data to be analysed by the accountants and subsequently used by top level of management for strategic decision making, thus, these managers could identify future opportunities and limitations face by the company and industry.

Keywords: Accounting Information System, Gas Industry, Performance

INTRODUCTION

Technology has contributed to the advancement of various fields, accounting information has become one of an essential tool in information and technology which is not only focused on financial controls but also has established an enormous impact on the measurement of the oil sector. Today's accounting system focuses on providing relevant, reliable and timely financial information to decision makers, who use the information to make key financial decisions concerning their business entities. Those decision makers including oil and gas sector (andthose interested in their financial information) see accounting information as a veritable tool in the implementation of an entity's guidelines and policies. Accounting Information System (AIS) is focused on collecting, processing, and communicating financial oriented information to a company's external parties (such as investors, creditors and tax agencies) and internal parties (principally management). This informationis gathered from the financial statement of the company. It reveals profit or loss for a given period, and the value and nature of a firm's assets and liabilities and owner's equity.The objective of financial statements is to provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions. Information is the main source of decision-making, so this information must be characterized by a set of characteristics, in order to achieve the goals required for decisionmaker. Accounting information is one of the oldest information systems known in companies, as accounting information described with a great importance in identifying the financial and economic reality of thefirms, and how company's relationships with its environment (Kassem, 2004). In general Accounting information system plays an important role in the management of firms, and one of the most important reasons for the existence of accounting and its continuous evolution is that it provides the appropriate information for both managers' and external parties concerned with such information. The study tries to assessment the impact of accounting information systems on the petroleum industry in Nigeria through providing high quality of accounting information.

Oil and gas industry play an important role in the Nigerian economy through revenue generation to the government, employment generation and being the major contributor to the growth of the Gross Domestic Product. Oil and Gas Companies, like other entities, are required to prepare and present their financial statements in accordance with Generally Accepted Accounting Practices andInternational Accounting Standards. Such financials are expected to be relevant, reliable and faithfully representing the financial position and performance of the affairs of the reporting entity at any particular point in time. The performance of companies can be measured bythe use of accounting information or stock market values in a financial accounting practices context. When accounting information is used, accounting ratios are employed. Among the common accounting ratios used to measure profitabilityare: return on assets (ROA), return on capital employed (ROCE) and return on equity (ROE). Return on assets is an indicator of how profitable a company is relative to its total assets. It gives an idea as to how efficient management is at using its assets to generate earnings. In Nigeria, not enough researches have been carried out byscholars on the impact of Accounting Information System on the Performance of petroleum industry. Some Scholars have look at the effect of Waste Management Expenditure on the Profitability of Oil and Gas Companies in Nigeria. Others have looked at the effect of Security and Militancy Costs of the Performance of Oil and Gas Companies in Nigeria. But none have looked at the problem of how financial accounting information employed by petroleum industryimpact on their Performance, particularly their profitability. This study has an earnest desire to have a deeper and clearer understanding regarding the impact of Accounting Information System on the performance of petroleum industry in Nigeria. After a lot of research and analyses torecognize the nature of the relation between the study variables, starting from identifying a problem andtesting the data collected to reach good understood, better interpretation, until extraction valuable results, the study therefore seeks to evaluate the impact of Accounting Information System on the Performance of the Petroleum Industry in Nigeria.

LITERATURE REVIEW

Concept of Accounting Information System

Accounting Information System (AIS) has traditionally focused on collecting, processing, and communicating financial oriented information to a company's external parties (such as investors, creditors and tax agencies) and internal parties (principally management).According to Borhan and Nafees (2018) accounting information system is the process of collecting, analysing and converting data into action. This definition justifies accounting information system as a computer based system that collects data, process and analyses data and produces results or output. Accounting information system according to Manchilot (2019) may be a computer-based electronicsystem used for collecting, storing, processing and communicating financial and accountingdata through financial statements with the aim of supporting and guiding organizational decision making process. Computers are the hub of accounting information as they provide a platform for the workability of all information systems. For an accounting information system to be operational, itsappropriate software application must be on the computer system intending to be used.Kashif (2018) states that accounting information system is a combination of people, equipment, policies, and procedures that work together to collect data and transform it into useful information. Borhan and Bader (2018) defined accounting information system is a system which contains a group of harmonized business, components, and resources which processes, manage, and control the data for producing and carrying the relevant information for decision makers in the organization. Accounting information requires series of processes to carry out its function just like any other system. It is a connected and homogeneous set of the resources and different components (human, equipment, finance, etc) that interact simultaneously inside a specific framework to work towards the achievement of organizational goals. AIS is a system that provides people with either data or information relating to an organization's operation to support the activities of employees, owners, customers, and other stakeholders in the organization's environment by effectively supplying information to authorized people in a timely manner.

Relevance of Accounting Information System

The main function of AIS is to assign quantitative value of the past, present and future business events (Rehab, 2018). Accounting information, in the form of periodic reports or special analyses, is often a source of information for making decisions. These decisions may include pricing, production levels and product mix, outsourcing, inventory policy, customer servicing, labour negotiations, and capital investments (Horngren, Harrison, Bamber, Willis and Jones, 2005; Sprinkle, 2003). Accounting information systems play an important role in the implementation of the managerial functions of the organization such as planning and control (Samer, 2016). In the planning function, AIS provide data relating to study and analyze the goals set for the organization. It also provides information regarding the relationship between cost, volume and profit required to determine the amount of interdependence and interaction between them. AIS under the planning function also helps in preparing lists of future needs and financial flows and planning of budgets for the development of quantitative criteria and converting them into financial standards to reflect the different aspects an organization's activities and presentation of the detailed plans and policies of the work and coordination across different departments (Frezatti, Andson, Guerreiro and Gouvea (2011). On the other hand, in the control function, it requires a clear and specific plan that shows the desired objectives and defines the foundations on which results are evaluated and analyzed in order to correct distractions.

This function is regarded as a practical test of decision making and implementation, follow up the actual implementation in accordance with the plans, policies and standards established, the discovery of deviations and correct them, provide reasons to protect the property of the shareholders and the preservation of their interests, resource development and follow up the activity of the organization, and to achieve the desired goals, thus ensuring the effectiveness of the organization (Onaolapo and Odetayo, 2012). Computerized accounting tools as integral part of AIS are directly related to the economic and financial results of firms (Urquía, Pérez, and Muñoz, 2011). Advantages of an optimal use of AIS in an organization might include: Better adaptation to a changing environment, better management of internal business transactions and a high degree of competitiveness. There is also a boost to the dynamic nature of firms with a greater flow of information between different staff levels and the possibility of new business on the network and improved external relationships for the organization, mainly with foreign customers accessed through the firm's web (Pérez, Urquía and Muñoz, 2010).

Subsystems of Accounting Information System

According to Hall (2008) an accounting information system may be divided into four major sub-systems including the transaction processing system, general ledger/financial reporting system, fixed asset system and management reporting system. The transaction processing system supports daily business operations with numerous documents and messages for users throughout the organization. Transaction processing systems (TPS) are the basic business systems that serve the operational level of the organization. A transaction processing system is a computerized system that performs and records the daily routine transactions necessary to the conduct of the business (Laudon and Laudon, 2006). The general ledger/financial reporting system produces the traditional financial statements, such as income statements, balance sheets, statements of cash flows, tax returns, and other reports required by law. This system is designed to collect data and information on AIS, customers, suppliers and wages, closure of accounting books, preparation of trial balance and a list of results and the budget of the organization and the reports of income and expenses and submit these statements to the owners and investors (Samer, 2016). The reliance of this system on the computer help the organization in cutting costs and using the fewest number of workers as well as in the completion of the accounting task in an accurate and orderly manner, and conducting financial control process. Fixed asset system processes transactions pertaining to the acquisition, maintenance, and disposal of fixed assets, while the management reporting system, which provides internal management with special purpose financial reports and information needed for decision making, such as budgets, variance reports, and responsibility reports.

Samer (2016) also identified some subsystems of accounting information system to include inventory control system, customer accounts system, suppliers account system and payroll system. The inventory control system is designed to process the bills of stored materials, identify materials that need to be re-supply, and generate reports showing the inventory situation. The reliance of this system on the computer helps the organization in customer service, recording changes in the level of inventory, reducing costs, and preparing documents. Customers' accounts system is designed to determine amounts owed by customers in accordance with the information of payment and purchase processes. Additionally, the system is intended to produce a monthly customer accounts and credit reports. A computer-based customer accounts system provides the organization with accurate bills and monthly reports on credit provided to customers, which in turn enhances the processes of payment, collection and provision of liquidity. Suppliers accounting system provides daily information on procurement and payment to suppliers, preparing checks, pay bills and treasury reports. The reliance of this system on the computer, results in establishing good working relationships and achieving a good credit price and taking advantage of discounts through the payment to suppliers quickly and accurately, and financial control on the amounts paid by the organization. Payroll system is designed to display daily data on workers and attendance cards, generate payment checks and workers' payrolls, prepare special reports on work analysis The reliance of the system on the computer help the organization in the preparation and submission of special reports related to tax, returns, deductions and analysis of labour productivity and labour costs. The lists of subsystems of accounting information systems are not limited as these systems are designed for management of firms to meet their day-to-day accounting need.

Oil and Gas Industry in Nigeria

The Nigerian oil and gas industry has been vibrant since the discovery of crude oil in 1956 by the Shell Group. However, the sector was largely dominated by multinationalcorporations until the early 1990s when Nigerian companies began to make a foray into the industry. Local participation was boosted with theimplementation of the Nigerian Content Directives issued by the Nigerian National Petroleum Corporation (NNPC) about a decade ago, and eventually, by the promulgation of the Nigerian Oil and Gas Industry Content Development (NOGIC) Act (The Act) in 2010. The Act seeks to promote the use of Nigerian companies/resources in the award of oil licenses, contracts and projects. In terms of structure, the industry is broadly divided into: Upstream sector and Downstream Sector. Upstream sector is characterized by exploration and production of crude oil and gas (petroleum operations). The upstream oil sector is the single most important sector in the Nigerian economy, accounting for over 90% of the country's exports and about 80% of the Federal Government (FG's) revenue. The Downstream Sector on the other hand consists of; Transmission and Conveyance which involves the transportation of oil and gas to the refinery and gas stations. There is a pipeline network from the wellhead to the refinery or plant. Tankers and purpose-built vessels are also used for this purpose; Refining which involves transforming the crude to products such as PMS, diesel, kerosene, etc. and; Distribution and Marketing- which entails the distribution and marketing of refined petroleum products and other complementary activities. Distribution also involves the transportation of refined petroleum products from the refineries through pipelines, coastal vessels, road trucks, rail wagon etc. to the storage/sale depots.

Return on Assets

This is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. It is calculated by dividing a company's annual earnings by its total assets. It is computed as follows:

ROA = Net income (EBIT)/Total assets (expressed as a percentage)

ROA tells us what earnings were generated from invested capital (assets). ROA for public companies can vary substantially and will be highly dependent on the industry.

Return on Capital Employed

ROCE indicates the efficiency and profitability of a company's capital investment. It is one of the most important operating ratios that can be used to assess corporate profitability. It is expressed as a percentage and can be very revealing about the industry in which a company operates in, the skills of management and occasionally the general business climate. As a general rule, a firm with a high return on capital employed will probably be a very profitable business. ROCE is calculated as follows:

ROCE = PBIT (Net Income)/Capital Employed

Where: Capital Employed = Total Assets – Current Liabilities = Equity + Non-Current Liabilities.

Return on Equity

Return on equity (ROE) is a measure of financial performance calculated by dividing net income by shareholders' equity. Because shareholders' equity is equal to a company's assets minus its debt, ROE is considered the return on net assets. ROE is considered a measure of the profitability of a corporation in relation to stockholders' equity. ROE is expressed as a percentage and can be calculated for any company if net income and equity are both positive numbers. Net income is calculated before dividends paid to common shareholders and after dividends to preferred shareholders and interest to lenders.

Return on Equity= Net Income/Average Shareholder Equity

Empirical Review

Olaofe, Akanni, Ekundayo, Ajibola and Ajibola (2020) This research examines accounting information system on performance of corporate organizations in Nigeria. The role of professionals in accounting, information technology and academics were explored. To attain the aim of the study, 30 questionnaires were administered and 25 retrieved which was analysed and the single factor ANOVA technique was used to test the hypothesis. Findings from the research depicted accounting information systems have a positive impact on corporate organizations performance in Nigeria because the observed F of 251.43 obtained was greater than F critical value of 2.74. As recommended, corporate organizations should massively invest in accounting information system, adopt merit-based recruitment and ensure periodic training of accounting information systems personnel. Abdallah, (2013) and Adrian-Cosmin (2015) test the impact of the accounting information systems on the quality of financial statements. They found there is a strong effect of using the accounting information systems on the quality of financial statements. Onaolapo and Odetayo (2012) found that Accounting Information System (AIS) enhance organizational performance especially in global technology advancement, agree with Patel (2015), who detect the importance of accounting information systems, that helps in facilitating decision making and amend organization's environment, structure and requirements of task, furthermore, emphasizes accounting information plays an necessary role in decision making process related to the financial and economic issues such as cost accounting system, management accounting system, price and profitability which provide the useful information to the manager to make the financial and economic decisions, also they a certain that (AIS) played a significant role in survival of organization.

Tan (2016), test the impact of AIS on internal auditors in Turkey, he revealed the importance role of accounting information systems in companies through enable all levels of management to access comprehensive information that goes into the planning and controlling of activities within business organizations. In addition, AIS provide high quality of information to internal and external users and typically cover six main aspects: people, procedures, data, software, information technology infrastructure and internal controls. Hla and Teru (2015), examined the efficiency of accounting information system and performance measures – literature review**.** The main objective s of many businesses to adopt this system are to improve their business efficiency and increase competitiveness. The qualitative characteristic of any Accounting Information System can be maintained if there is a sound internal control system. Internal control is run to ensure the achievement of operational goals and performance. Therefore the purpose of this study is to examine the efficiency of Accounting Information System on performance measures using the secondary data in which it was found that accounting information system is of great importance to both businesses and organization in which it helps in facilitating management decision making, internal controls ,quality of the financial report ,and it facilitates the company's transaction and it also plays an important role in economic system, and the study recommends that businesses, firms and organization should adopt the use of AIS because adequate accounting information is essential for every effective decision making process and adequate information is possible if accounting information systems are run efficiently also, efficient Accounting Information Systems ensures that all levels of management get sufficient, adequate, relevant and true information for planning and controlling activities of the business organization.

Akanbi and Aruwaii (2018) also examined the impact of accounting information systems (AIS) adoption by manufacturing industries on their general accounting activities and also to estimate the relationship that exist between AIS devices and accounting activities. Regression and correlation analyses were used to analyse and interpret the objectives. The regression model results that F-value ($0.000 < 0.050$) and Adj $R2 = 0.6970$ showed that AIS devices has 68.70% impact on the efficiency of accounting activities in the manufacturing industries if properly implemented. The result of Kendall's correlation matrix showed the statistical coefficient of 62% indicating that there is a strong correlation between dependent and independent variables, the coefficient of determination ($R2) = 0.418$ revealed that there is a significant relationship in using accounting information system to fast track accounting activities. The tested hypotheses of this study were measured at level of 95% confidence interval. The study concluded that accounting information systems devices are spontaneously and simultaneously appropriate for manufacturing industries engaging in accounting activities, also revealed that there is a significant relationship between accounting activities and Accounting information systems. The study also concludes that accounting information systems adoption in manufacturing firms has the following benefits: facilitation of financial statements preparation, enhancement of inventory valuations, enhancement of budgetary management, and favoring General Accepted Accounting Principles adoption. Therefore, manufacturing firms should embrace more and well-structured accounting information systems to enhance accounting activities.

Theoretical Framework

Contingency Theory

The contingency theory was first proposed by Fiedler in 1964 as managerial leadership theory. According to Fiedler (1964) the contingency theory suggest that there is no one best way of leading and that a leadership style that is effective in one situation may not be successful in others. Gordon and Miller (1976) however laid out the basic framework for considering accounting information systems from a contingency perspective where the accounting information systems also need to be adaptive to the specific decisions being considered within a framework. Contingency theory suggests that an accounting information system need to be adapting to desired specific decisions while considering the environment and organizational structure confronting an organization (Dandago and Rufai, 2014). Applying this to the subject, contingency theory suggests that in order to improve performance, managers of firms must devote particular attention to their use of accounting information system, taking care to adopt the systems best tailored to their special circumstances. There are some criticisms of the Fiedler's contingency theory. However, one of the biggest criticisms of the contingency theory that best relates to the study under review is lack of flexibility (Mitchell, Biglan, Oncken, and Fiedler, 2017). Fiedler (1964) believed that because natural leadership style is fixed, the most effective way to handle situations is to change the leader. The theory does not allow for flexibility in leaders (Mind Tools, 2018). Relating this to the study indicates that managers will incur more cost to change accounting information system that does not tender to their required decision needs rather than carryout modifications.

Resource-based view Theory

The resource-based view theory was propounded by Barney in 1991. According to Barney (1991) the resource-based view avers that the source of sustainable advantage derives from doing things in a superior manner; by developing superior capabilities and resources. The resource-based view proffers a means of evaluating potential factors that can be deployed to confer a competitive edge for business organizations. A key insight arising from the resource-based view is that not all resources are of equal importance, nor do they possess the potential to become a source of sustainable competitive advantage. The resource-based theory is divided into three levels; capability, competence and skills. (Cragg, Caldeira and Ward, 2011). Capability refers to how firms manage their resources; competence, refers to how well those resources are managed, and skills are associated with ranges of skills such as technical, managerial and general management skills. Accounting information systems also form part of resources available to firms. Inclining the resource-based view theory with accounting information systems and performance will imply that firms properly and adequately manage accounting information systems to utilize its capability competence and skill sets for improved organizational performance. The resource-based view theory has faced several criticisms. One of such criticism is that the theory lacks substantial managerial implications or operational validity (Priem& Butler, 2001). It seems to tell managers to develop and obtain valuable, rare, inimitable, and non-substitutable resources and develop an appropriate organization, but it is silent on how this should be done (Connor, 2002; Miller, 2003). (Lado, Boyd, Wright and Kroll, 2006) also argues the resource-based view theory suffers a tension between descriptive and prescriptive theorizing. However, Barney and Clark (2007) posits that the resource-based view theory is a theory aspiring to explain the sustained competitive advantage of some firms over others and, as such, was never intended to provide managerial prescriptions. In concurrence with this assertion, any explanations the resource-based view theory might provide may not be indicative, yet still of value to managers, so there may be no reason to oblige the resource-based view theory to generate theoretically compelling prescriptions.

Agency Theory

The agency theory was championed by Jensen and Meckling in 1976. The agency theory describes theowners' (principals') delegated authority to manager (the agent) to run the firm on his or her behalf with the owners' welfare depending on the manager accordingly (Jensen and Meckling, 1976). The agency theory seeks to address the potential conflict of interests between owners and managers, because the interests of managers may opportunistically utilize firm resources to satisfy their personal interests (Brammer and Millington, 2008). Basically, firms aim to maximize the wealth of shareholders, and it might be different with personal interest of managers. The agent (managers) might have more relevant information compared with shareholders, the information asymmetry occurs, and this would raise the possibilities that agent can behave in ways to pursue their own interests.

METHODOLOGY

This study employed the longitudinal research design since the research work assesses the impact of the explanatory variables on the dependent variable.The population of the study is all the fourteen (14) oil and gas companies quoted on the Nigerian Stock Exchange before 1st January, 2011 and had been trading till 31st December, 2020. The period covered by the study is ten years from 2011-2020. The study employed census sampling approach, sample of eight (8) oil and gas companies listed on the Nigerian Stock Exchange as at the beginning of 2011 and had traded till 31st December, 2020and whose annual reports were available during the period under study was adopted as the statistical sample for the study. This includes (Conoil Plc, Eternal Oil Plc, Forte Oil Plc, Japaul Oil and Martime Services Plc., Mobile Oil Nigeria Plc., MRS Oil Plc, Oando Oil Plc and Total Nigeria Plc. The study used secondary source of data and the data required on the independent and control variables for the study was obtained from the annual reports of the studied oil and gas companies while the data on the dependent variable was obtained from the price list on the Nigerian Stock Exchange respectively. This study used descriptive and panel regression technique in analyzing the data obtained for the research with the help of Stata-13 package.

The proxies that have been used by the study for the output of accounting information system are total assets (TA), working capital (WC), operating assets (OA) and earnings after tax (EAT) while performance management is proxied by the return on equity (ROE). The model is specified based on empirical framework using the variables to be studied as explained.

$ROE_{it} = \beta_0 + \beta_1 LNTA + \beta_2 LNWC + \beta_3 LNOA + \beta_3 LNEAT + e_{it}$……………………….(i)

Where;

i= Company
t = time period
LNTA = Log of total assets
LNWC = Log of working capital
LNOA = Log of operating assets
LNEAT = Log of earnings after tax
ROE = Return on Equity

RESULT AND DISCUSSION

Table 1: Descriptive Analysis Result

```
. summarize TA WC OA EAT ROE
```

Variable	Obs	Mean	Std. Dev.	Min	Max
TA	80	3580.432	10238.55	3.525	50520.55
WC	80	685.9885	1919.708	.173	8279.7
OA	80	2404.194	7143.092	.111	41736.3
EAT	80	.7989375	1.475737	-4.543	4.567
ROE	80	.09767	.5210958	-3.6471	1.001

Source: Stata-13

Table 1 depicts the result of the dependent and independent variables used in the study during the period of the research. The above statistics is obtained using STATA version 13 statistical package. The mean values of TA, WC, OA, EAT and ROE are 3580.4, 685.9, 2404.2, 0.8 and 0.09 respectively. The common feature of these variables is that they all have positive mean values. This means that each of the variables display increasing tendency throughout the sampling period.

Table 2: Panel Regressions Analysis

```
. regress LNROE LNTA LNWC LNOA LNEAT
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Source	SS	df	MS
Model	1.71821234	4	.429553085
Residual	19.7335143	75	.263113524
Total	21.4517266	79	.271540843

Number of obs	= 80
F(4, 75)	= 1.63
Prob > F	= 0.1749
R-squared	= 0.0801
Adj R-squared	= 0.0310
Root MSE	= .51295

LNROE	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
LNTA	9.01e-06	.000026	0.35	0.729	-.0000427	.0000607
LNWC	-.0000556	.0001543	-0.36	0.720	-.0003629	.0002518
LNOA	.0000142	.0000176	0.81	0.423	-.0000209	.0000492
LNEAT	.0901355	.0397126	2.27	0.026	.011024	.169247
_cons	-.002573	.0705173	-0.04	0.971	-.1430508	.1379047

Source: Stata-13

Discussion of Findings

The results indicate that the value of the coefficient of determination (R^2) is 0.08. The R-square value is 0.08; and it means that the model has not successfully predicted the variables. This therefore means that other determinants of AIS not considered in this study contribute 92% to the variation of performance of the quoted oil and gas companies in Nigeria during the period under review. The adjusted R-Square is the coefficient of determination which explains the variation in the dependent variable as a result of changes in the independent variables. Therefore, from the result in table 2, the adjusted R^2 was 0.3 implying that there was variation of 3% on the performance of the oil and gas companies quoted on the Nigerian Stock Exchange caused by changes in total assets, working capital, operating assets, earning after tax and return on equity during the period under consideration. The Root MSE value of 0.51295 and the P-Value of 0.1749 as indicated in the table also show that the model is not fit for policy formulation.

Coefficient of earning after tax of 0.09 indicates a positive correlation between earning after tax and performance indicator. Also, the p-value of 0.026 indicates that relationship is significant at 5% significance level. These findings are the same as the output of the Ali et al. (2016) who also found a positive link among the AIS and performance management of the organization. Moreover, the results of the present study are also the same as the results of the Ahmad and Al-Shbiel (2019) who also examined the positive association among the performance management and AIS of the organization. These outputs are also matched with the output of Napitupulu (2018) who also found that the effective organizational culture is necessary for better performance management in the presence of AIS in the organization. Furthermore, these results are also same as the results of Ameen, Ahmed, and Abd

Hafez (2018) who also found that organizational culture plays a supportive role in the attaining the high-performance management with the help of AIS. Other accounting information system variables (total assets, working capital and operating assets) are found not to be significant.

CONCLUSION AND RECOMMENDATIONS

This study concluded that the oil and gas industry in Nigeria doesn't implemented the effective AIS in their organization that is the reason for the low performance of the management in the oil and gas industries under study. In addition, the organizational culture in the oil and gas industry in Nigeria is not effective and supportive to enhance the impact of AIS on the performance management of the organization. The study further recommends that the organizations should follow the AIS that enhance the performance management along with the focus on the organizational culture that should be effective and supportive to improve the AIS in the organization and enhance the firm performance. This study recommended to the management that they should provide their focus on the accounting information system implementation for the better performance of the organization. This research recommends that management of oil and gas companies in Nigeria should make use of automated Accounting Information System (AIS) known as 'Contract Plus – Financial & Project Accounting' package in their Finance Department. This software will generate financial data to be analysed by the accountants and subsequently used by top level of management for strategic decision making, thus, these managers could identify future opportunities and limitations face by the company and industry. In addition, management of the companies should engage those that are computer literate and highly experienced, they should also be trained with latest information technology ascertained competitive effectiveness of the organization.

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Impact of ICT Tools on Audit Process of Corporate Organizations in Nigeria

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Abstract

The dynamism in the global business environment has introduced a dramatic change in the Nigerian business environment. Corporate organisations have therefore increased their need for new ways to succeed and survive. Corporate organisations deployed various ICT tools in order to address the problems pose by disparate applications within functional areas and to achieve competitive advantages, as a result, auditors have been force to introduce and utilize various computer-based tools to assist their work. This study assesses, from an exploratory grounded theory approach and theoretical perspective, the impact Information and Communication Technology tools are currently having on Audit process as a whole. This includes audit task from the external auditors and the corporation they work for from the point of view of coordination, control, authority and structure. The focus is to identify whether changes exist when auditing an ICT-deployed environment compared to a traditional non ICT corporation and if such changes are beneficial to the auditors. The finding indicates that ICT tool is rapidly reshaping auditors role and output as well as audit organization structure which in turn, tremendously affect the audit process and procedures. The result further confirms that increase in control risk in auditing is eminent with the deployment of ICT tools. While the auditors appreciate the potentials of ICT tools functionalities in terms of efficient access to information, timely audit trail, improved audit quality and efficiency, the problem of data integrity is of utmost concern.

Keywords: ICT tools, Audit process, ICT environment, ICT Corporation

INTRODUCTION

The competitive pressure unleashed by the process of globalization, deregulation, privatization, merger and acquisition has introduced a dramatic change in the business environment. This has increased the need for companies to search for a new and better ways to survive and succeed (Spathis & Constantinides, 2004). One of the most important implementation of competitive strategy today is the "Business Process Re-engineering (BPE) most often simply called re-engineering. Re-engineering is a fundamental rethinking and radical redesign of business processes to achieve dramatic improvement in cost, quality, speed and services (O'Brien, 2004). It combines a strategy of promoting business innovation with the strategy of making major improvement to business processes so that a company can become a much stronger and more successful competitor in the market place. Innovative information and communication technology (ICT) offers the required tools that will aid the re-engineering process and enable corporations to respond effectively and efficiently to the dynamic nature of the business environment(Nicolou,1999). ICT tools provides a cross-functional infrastructural system that serves as a framework to integrate and automate many of the business processes that must be accomplished within the operations, production, logistics, distribution, Accounting, Finance and Human resource function of the business (ICAN study pack; 2004). ICT tools provided the basis for corporate business re-engineering, automation and integration of production, accounting, finance, distribution, logistics and human resources in the business process.

Information and Communication Technology tools have the potentials to facilitate both vertical and horizontal integration of business processes across a corporation through a system driven by synchronized suite of software modules that support the basic internal business processes of a corporation (Hunton. J, Wright. A and Wright. S, 2004). Thus, if the relevant ICT tools are deployed and successfully implemented, it can enable corporations to better manage supply chain, perform business re-engineering processes and reorganize their accounting processes along with different other functions (Herberman and scheer,2004). ICT tools solution providers such as Microsoft,SAP,Oracle etc. do refer to themselves as e-business providers. The reason according to O'Brien (2004) is that ICT tools are the technological backbone and forerunner of the e-business concept- a corporation-wide transaction framework with link into sales order processing, inventory management and control, production and distribution planning, accounting and Finance. In addition, ICT is becoming a necessary tool for corporations to remain competitive in this dynamic business environment rather than constituting a new strategic move. Its potentialities of combining information islands in different parts of a corporation will enable a corporation to have an integrated real-time view of its core business processes, track business resources (such as cash, raw materials, production capacity, etc.), and the status of commitment made by the corporation (such as customer order, employee payroll, etc.) no matter which department (production,purchasing,sales, accounting,finance, etc.) has entered the date into the system. The expectation is that it will provide real-time information on business processes. This expectation is engendered by the need for managers to have up-to-date information for decision making.

However, the changes in business processes that usually accompanied the deployment and implementation of ICT tools bring about changes in the internal control and separation of duties (Hunton et'al, 2004). Corporations such as Coca-Cola, Guinness, Nigeria Breweries, Nestle, etc., all experienced changes in their business processes at the introduction of major ICT tools. No doubt, corporations may need to make essential changes for the successful deployment and implementation of relevant ICT tools. Such changes brought about by deployment and implementation of relevant ICT tools affects the ways auditors perform their duties (Helms, 1999). In other words, ICT tools deployment and implementation influences business processes by providing real-time information for decision making. To inspire confidence in, and ensure validity of this real-time information, there is the need to align the mechanism of assurance with the prevailing changes. Traditionally, this assurance comes in the form of AUDIT. Again, Wright.S and Wright A.M (2004) observed that auditors are faced with the daunting task of auditing in such an ICT environment where internal control systems seem compromised. Accordingly, they noted that ICT tools deployment and implementation in many corporations has led to increased audit related risk due to automated interdependencies among business processes and integrated relational database. Hence, as technology knowledge persisted, Auditors may need to expand their technological knowledge and skills in order to perform effectively and efficiently in audit functions. ICT tools enable corporations to significantly increase the volume and complexities of transactions processes which concurrently complicates the audit process. According to a survey done by Bagranoff and Vendrzyk (2000), many auditors are of the opinion that academic accounting and MIS or ICT department (as the case may be) needed to merge to be able to produce the ideal job candidate that can successfully face the current challenges. While this seems to be an ideal suggestion, there is need to juxtapose the relevant ICT tools and the audit process, ascertain and appraise the impact it has on audit process in order to make headway.

ICT tools deployment and implementation have a dramatic impact on virtually every phase of the business process- including the Audit process, which in turn increased the potentials for control weakness resulting to financial statement errors, leading to increase audit risk. This could jeopardize the reliability, integrity and objectivity of the auditors' assessment.Hence, Auditors need to adjust to cope with the ever changing trends brought about by the deployment and implementation of the relevant ICT tools. This is necessary because the changes are usually inconsistent with the traditional audit system. Auditors are faced with the situation of relying on internal control processes which are possibly, weakened by this ICT tools. Auditors must therefore, expand their technological know-how and skills, devise more effective and efficient audit approach by taking advantages of technology and design different types of audit test tools to respond to new business processes emanating from the deployment and implementation of this relevant ICT tools. ICT tools pose a serious threat to the economic viability of auditing. Auditors will need to change their mindset and embrace a continuous reporting environment while acquiring and updating the requisite technical skills and knowledge of the subject matter to meet the demands that emanates from the environmental dynamism.

Generally speaking, for real-time data to be assured, and for that assurance to be feasible, audit approaches and tools need to be tightly incorporated within corporation systems. It is therefore pertinent to understand how ICT tools are affecting auditors work and responsibilities. Although several researchers have advocated the need for auditors to adapt to the changes brought about with ICT evolution, understanding how these changes affect auditors and audit processes is of utmost significance. Furthermore, it is essential to understand how these changes can improve the work of the auditor or otherwise. This means that truly, there is the need to look, analyze and appraise the impact of ICT tools on the audit process of corporations in Nigeria. Quest for increased reliability, integrity, objectivity, independence, efficiency, effectiveness and professionalism in the audit profession by users of financial statement has present enormous challenges to the audit profession. For an auditor to justifies his raison deter, he must rise to the challenges presented by the relevant ICT tools. Objectively therefore, this study intends to examine the impact of deploying and implementing relevant ICT tools in Nigerian corporations, and also to understand how changes in business processes brought about by ICT tools can influence, affect or benefit the audit process.

LITERATURE REVIEW

Conceptual Discussions

Concept of Auditing

The American Accounting Association Committee on Basic Auditing Concepts defined auditing as "a systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria and communicating the result to interested users (ASOBAC 1972:18). Adeniji (2010) defined auditing as "the independent examination of and expression of opinion on the financial statements by an appointed auditor in pursuance of that appointment and in compliance with any relevant statutory obligation. Demand for auditing arose from the need to bridge the asymmetric information gap existing between the provider and the user of accounting information. Accordingly, Adeniji (2010) concluded that the separation of ownership from management and the need to safeguard the interest of the owner who does not participate in the day-to-day decision of the corporation necessitates the emergence of Auditing. It is safe therefore, to conclude that demand for auditing was necessary due to external users' reluctance to rely upon internally generated financial information. With globalization, privatization, deregulation, mergers, acquisition and the increased competition pushing businesses, there is the need to inspire confidence in, and to ensure the validity, integrity, objectivity and reliability of information. Arens et'al (2006) further suggested that auditing reduced information risk. They identified four factors that necessitates the demand for auditing and these are; Remoteness of information; Biases and Motive of the providers; Voluminous data and Complex exchange transaction. In recognition of the Nigeria business environment and its peculiarity, the demand for audit could be attributed to; The separation of ownership from management and the need to safeguard the interest of the owners who do not participate in the day-to-day decision of the entity by management.. Secondly is the CAMA 2004 (as Amended) provides that every company shall, at each annual general meeting, appoint an Auditor or Auditors to audit the financial statement of the company; and Providing credibility on report and account prepared by directors.

Auditing helped minimize bias by acting as a monitor of the financial information reported by management. According to Hermanson R, Loeb S, Saad J and Strawse R (1976), auditing does not alter the primary communication process between subject matter and the users of financial statement; it added a secondary communication process between auditors and users.

There is a significance difference between the Accounting process by which financial statements are prepared and the process of auditing these statements. Cosserat (2014) observed that accounting process involves identifying, measuring, recording, classifying, and summarizing events and transactions that affect the corporation. The outcome of this process is the preparation and distribution of financial statements in accordance with accounting standards and regulatory requirements. Conversely, the audit of financial statements involves obtaining evaluating evidence on management financial statement assertions. Thus, rather than creating new information, auditing adds credibility to the financial statements prepared by a corporations.

Audit process in a Corporation

According to Arens et'al (2006), An audit process refers to a well define methodology for organizing an audit to ensure that the evidence gathered is both sufficient and competent, and that all appropriate audit objectives are both specified and met. Audit process thus implies all the stages involved in auditing a corporation. The audit processes are usually summarized into several stages depending on the author. For instance, Adeniji (2010) summarized audit process into twelve stages. Damagum (2010) acknowledge four stages in audit process. Arens et'al (2006) noted that while every audit project is unique, the audit process is similar for almost all engagements. To this end, they summarized the audit process into four phases.

Plan and Design of Audit Approach

In order to conduct an audit effectively and efficiently, the work needs to be properly planned and controlled. For statutory audit, the scope is clearly defined in the companies act as expanded by standards of current best practices. A letter of engagement will be submitted or confirmed before the start of any audit. Other important aspect of audit plan and approaches includes Team mobilization, Client information gathering, risk assessment, and audit program preparation. The objective here is to accomplish a comprehensive plan and approach.

Internal Control System

The Institute of Chartered Accountant in England and Wales (ICAEW) has defined internal control as not only internal checks and internal audit, but all systems of control, financial and otherwise, established by the management of a corporation in order to safeguard its assets and promote operational efficiency. Damagum (2008) defined internal control system as any mechanism that the management of a corporation puts in place to ensure adequate protection of the corporation's assets against illegal use, theft and other fraudulent abuses. Again, according to the international standard on auditing (ISA400), the term "internal control system means all the policies and procedures (internal controls) adopted by the management of an entity to assist in achieving managements objective of ensuring, as far as practicable, the orderly and efficient conduct of business, including adherence to management policies, the safeguarding of assets, the prevention and detection of fraud and error, the accuracy and completeness of accounting records, and the timely preparation of reliable financial information". Internal control system is one of the most widely accepted concepts in the theory and practice of auditing. It is often regarded as a process effected by management and other personnel, design to provide reasonable assurance regarding the corporations objectives in the following aspect; Effectiveness and efficiency of operations; Reliability of financial reporting and ;Compliance with applicable laws and regulations.

A closer look at the definition of internal control system reveals that it is not fundamentally different from management control, which has an essential component of control such as planning, organizing, staffing and directing (Boynton W D and JohnsonR.W 2006). Reviewing and evaluating the adequacy and effectiveness of a corporations internal control system and the quality of performance in carrying out assigned responsibilities is a representative of several primary core activities of audit work. In addition, Arens et'al (2006) suggested that auditors must assess the control risk by considering both the design and operation of controls to evaluate whether they will be effective in meeting transaction related objective. The auditor's review of internal control is done to determine whether such controls are capable of reducing to a minimum the possibilities of error and defalcation, and whether the prescribed controls are currently operating effectively. Auditors must therefore, ascertain that internal control measures are kept in operation. Adeniji (2010) observed that internal control system extend beyond those matters which relates directly to the functions of accounting systems and comprises those in the control environment and control procedures. Summarily, to successfully study and evaluate the internal control system, the auditor would need to do the following:

i. Undertake a preliminary review of the system (Obtain a general understanding of the flow of transactions and assess the control environment);
ii. Complete the system review (obtain a detailed understanding of the prescribed general and application controls and document);
iii. Conduct compliance test; and
iv. Evaluate the result

Test of Control

One of the requirements of an external auditor is to test the effectiveness of the internal controls in order to assess the control risk. Consequently, the auditor must always test the extent to which established procedures and controls are functioning as intended. These test are usually referred to as test of controls and they determine the extent to which the auditor can rely on the internal control system. Yang and Guan (2004) defined test of control as the procedures directed toward either the effectiveness of the design or operation of a control. Auditors use test of control work to determine whether the internal control system generates reliable and accurate data and may therefore be relied upon. The scope of the test should be sufficiently thorough to allow the auditor draw conclusion as to whether controls have operated effectively and in a consistent manner. The auditor will almost certainly refer to the internal control evaluation questionnaire (ICQ) completed for each component part of the system to select the controls to be tested and provide information as to their strength and importance (Adeniji, 2010). Internal control questionnaire highlights the objectives of internal controls that interest auditors, while the audit tests on control are designed to show whether these objectives have been achieved.

Substantive Test

Substantive test consist of test of details and analytical procedures and are auditing procedures intended to verify the correctness of transaction amounts. These tests certify the transaction accuracy. Substantive test leads to a decision on the acceptability of client's representation; a client's book value is either acceptable or unacceptable depending on whether it falls inside or outside a chosen confidence interval. The essential in substantive test is to provide audit evidence in relation to the completeness, accuracy and validity of information contained in the accounting records or in the financial statement. Substantive test is considered as a very fundamental part of system (ICT) based audit, the extent of substantive testing is dependent on the result of test of controls, because the extent of substantive test depends on the assessed level of control risk

Analytical Procedure

This is an approach used to ensure that overall account balances and other data in the financial statement are stated reasonably. Usually, auditors develop expectations of each account balance and set an acceptable threshold. In addition, they compare these threshold with the actual value. Usually, a significant difference in the value will lead to detailed examination of supporting documents, extending analytical procedures and performing a comprehensive substantive test.

Detailed Test of Transaction

The objective of the detailed test of transaction also known as substantive testing of transactions is to determine whether the reveal financial statement is as a result of genuine and bonafide transaction (Adeniji, 2010). The auditors use tests of transaction to evaluate whether erroneous or irregular processing of a transaction has led to a material misstatement of financial statement (ICAN study pack-MIS, 2020). Typical test of transactions include tracing journal entries to their source documents, and testing computational accuracy. From an operational perspective, auditors use test of transactions to evaluate whether transactions or events have been handled effectively and efficiently. Auditors make professional judgement regarding the extent of test which can be vary from a sample size to all transaction depending on the level of assurance the auditor wishes to obtain.

Detailed Test of Balances

Auditors conduct tests of balances to obtain sufficient evidence for making final judgement on the extent of losses that occur when the control procedures fails to safeguard assets, maintain data integrity and achieve system effectiveness and efficiency. Test of balances is the most expensive test in the audit process (ICAN study pack-MIS, 2020). Detailed test of balances is also aimed at confirming the genuine ownership, valuation, existence, pledging and internal control adequacies of items revealed in the financial statement. The test also seeks to ascertain the level of compliance of the revealed financial statement to relevant regulations and legislations (Damagum, 2008)

Post Balance sheet Event and Off Balance sheet Engagement

According to Damagum (2008), in addition to the proper verification and audit of all items contained in the financial statement of their clients, it is equally necessary for auditors to consider those elements referred to as part of balance sheet events as well as off balance sheet engagements. The reason for such considerations is; to afford auditors the opportunity to determine whether current financial statements would require adjustment in the light of information concerning post balance sheet events and off balance sheet engagements. Also the need to assess all possible impact of such events on future operations of the corporation currently audited and; to provide opportunity towards obtaining further information to enable auditors express the most appropriate opinions on the state of affairs of their clients.

Audit Report

This is the final stage of the audit engagement process. The result of the steps mentioned earlier are assessed, summarized and reported. Usually, each member of the audit team report his/her work to the senior auditor (Adeniji, 2010). Consequently, the auditor in charge shall perform the final review to ensure that audit task is diligently performed and sufficient evidence gathered. Based on the accumulation of audit evidences and findings, the auditor can issue an opinion which can be qualified or not unqualified (A H Milichamp, 2004). The audit report expresses the auditors' opinion on the true and fair view of the financial statement results from the evidence examined. Auditors usually arrange a clearance meeting with the client when the audit report is ready. Audit report is also made mandatory by section 359 of CAMA 2004 Cap C20 (as amended) which requires auditors to state explicitly the position of their opinion.

Concept of Information and Communication Technology (ICT)

The term "Information and Communication Technology" means the use of modern technologies to manage and treat the vast amount of data on the political, economic, scientific and social life. And the meaning of the information is the facts resulting from the processing of data. Hence, there is a difference between information and data. The Information is data has been processed and give its owner the opportunity to take the right decision at the right time. Thus, the information society is a society that deals with information continuously, sophisticated and effectively. ICT possesses a cross-functional system that serves as a framework to integrate and automate many business processes that must be accomplished within the operations, production, logistics, distribution, accounting, finance and human resources functions (ICAN study pack (MIS) 2006). According to O'Brien (2004), ICT serves as a cross functional backbone that integrates and automates many internal business processes and information system with vital operations of a corporation. When we talk about information then we mean talking about information technology. The term of Technology mean is the computer and related communications equipment and computer software enable to deal in an independent framework or networking with other devices. The information technology is the use of modern technology tools and one of them by the computer in data collection and processing. Here Informatics mean that there are three basic elements: physical entity like a computer of and related equipment and devices, and software that run on computer operation and do different tasks, and of knowledge resources (Conference at Al-Najah University in Palestine)

ICT and the Audit process of Corporations in Nigeria

Audit firms tend to advanced auditing methodology by integrating information and communication technologies (ICT) (Manson, McCartney, & Sherer, 2001). However, the omnipresence of the ICT in audit firms and utilization of computer-assisted audit tools and techniques (CAATTs) has generated a broad range of consequences on the carriers of a profession as well to the profession as such. Over the past decades, two research streams were segregated in connection with roles and impacts that ICT brought to audit profession and auditors as carriers of the profession. On the one hand, literature indicated that audit firms tend to turn to the ICT in order to increase work efficiency and quality of the audit reports, whichthey use as a tool to yield biggerprofits while shortening the engagementtimeand servicing more clients in a unit of time (Abdolmohammadi & Usoff, 2001; Banker, Chang, & Kao, 2002; Janvrin, Bierstaker, & Lowe, 2008, Elliot, Kielich, & Marwick, 1985). Additionally, literature shows that socially designed technology provides a wide range of audit tools that may support almost any audit task that span from data extraction to data analysis (Pedrosa & Costa, 2012), which contributes to productivity and disburdening auditors, but also reducing the level of auditors' responsibilities. The second group of studies revealed that utilization of auditing tools during audit engagement might moderate the structure and sequence of auditing procedures. Thus, ICT-based audit tools have potential to facilitate auditors' thoughts (Pieptea & Anderson, 1987) through which the ICT tools generates a list of tasks that keeps auditor's focus to those that are estimated to be essential for a particular engagement (Abdolmohammadi & Usoff, 2001). Glover, Prawitt & Spilker (1997) argued that ICT tools relax the need for professional assistance for newcomers as tools enable relatively inexperienced auditors to approach tasks mechanistically.

However, besides the simplification, literature stressed that technology may affect auditor's judgment and impact the quality of final reasoning (Bonner, 1999; Bell et al., 2002) as auditor's judgment may be moderated by technologically predetermined procedures, which consequently may constrain appearance of multiple opinions (O'Leary & Watkins, 1989) and discourage professional discussions. All these have raised an additional concern about the consequences that utilization of ICT tools in auditing had on generating professional judgment since profit incentives, efficiency and effectiveness gains, and cost reductions, notably affected auditors' judgmental and decision-making skills (Adler, 1987). In the overall, literature emphasized that integration of the ICT-based audit tools both enhances auditor's performance by increasing productivity and efficiency of their work, but also may propel the issue of deskilling professionals, as according to Swinney (1999) auditors that use ICT tend to over-rely on technologically generated output. However, a comparative study by Brazel, Agoglia & Hatfield (2004) showed that even though ICT tools increases efficiency, auditors that manually conducted audit engagement tend to feel more accountable to their correspondents in relation with delivered opinion, which proves that judgment is merely a cognitive process, and may create the feeling of importance. This extends Pentland's (1993) argument that auditor judgment, besides of cognitive, is also a result of an emotional resource when a feeling of comfort gives an additional input to the auditor while constructing the opinion. This implies that professional judgment is comprised of both cognitive and emotional parts, which both are personal. In relation to this, I assert that due to technology, the possibility of experiencing comfort becomes significantly diminished as technologies and audit tools are becoming more reliable carriers of the audit profession

Empirical Framework

Several studies have discussed, in particular, the implications and consequences of ICT tools on the audit process of corporations regardless of potential divergences that might be apparent at different professional ranks. A comparative study by Brazel, Agoglia & Hatfield (2004) showed that even though ICT tools increases efficiency, auditors that manually conducted audit engagement tend to feel more accountable to their correspondents in relation with delivered opinion, which proves that judgment is merely a cognitive process, and may create the feeling of importance. This extends Pentland's (1993) argument that auditor judgment, besides of cognitive, is also a result of an emotional resource when a feeling of comfort gives an additional input to the auditor while constructing the opinion. This implies that professional judgment is comprised of both cognitive and emotional parts, which both are personal. In relation to this, I assert that due to technology, the possibility of experiencing comfort becomes significantly diminished as technologies and audit tools are becoming more reliable carriers of the audit profession. Obrien (2004) found major business value in deploying and implementing ICT tools in corporate organizations. This values according to Obrien include: Quality and Efficiency from ICT tools integration prowess resulting in improving customer service efficiency, production and distribution, Decreased cost due to reduction in transaction processing cost, Decision support as a result of the real-time information and improved enterprise agility as a result of a more flexible organizational structures and managerial responsibilities or work roles, hence, a more agile and adaptive organization workforce that can easily capitalize on opportunities.

Nwankpa (2007) and Ross (1999) relate the life cycle in deploying and implementing ICT tools to the Audit implications of each of the cycle. Accordingly, the summarized ICT deployment and implementation life cycle into three phases - Pre-implementation phase, Implementation phase and post-implementation phase - each with its audit implication. This implications include continuous data auditing in the pre-implementation phase. This involves monitoring, recording, analyzing and reporting database activity on a periodic basis to capture violations or unauthorized access. Information gathering in this phase is through Database transaction log and Database built-in-event notification mechanism. Implementation phase comes it its own audit implications. The major concern is systems security, database security and audit risk due to business process interdependency. Consequently, Auditors need to evaluate systems and business processes to ensure that security and control systems are not compromised which in turn helps to ensure compliance to standards, Systems design and configuration. The post implementation phase audit implication involves the evaluation of control risk associated with multiple users and this call for the utilization of different computer assisted audit tools (CAAT) which in themselves are also ICT tools. Importantly, the auditor is required to adopt an exception reporting approach to assess data that are in some way different and critical. Yang and Guan (2004) study tries to show the effect of information and communication technology on audit profession and standard. In their paper “the evolution of IT auditing and internal control standards in financial statement audits: a case study of the United States” investigates the evolution of IT, auditing and internal control standards in financial statements audit. Their research established that rapid escalation of technology would lead to more pronouncement and guideline to aid auditors in their profession. They established that IT auditing and internal control had a symmetric relationship and that standards were established to be consistent with conducting audit. Thus, as new ICT tools emerge, more standards are pronounced to ensure internal control integrity. This research therefore shows the need for auditors to change their methods and procedures when auditing an ICT implementing environment

O’Brien (2010) introduces an ethical and moral dimension in auditing an ICT tools implementing corporation. That because auditing is essential to accountability, the public expect auditors who conduct their work in accordance with generally accepted auditing standards to follow ethical principles. Management of the Audit organization sets tone for ethical behaviors throughout the organization maintaining an ethical and moral culture, clearly communicating acceptable behavior and expectation from each auditor and creating an environment that reinforces and encourages ethical behavior throughout all the levels of the organisation. According to O’Brien, conducting audit work in accordance with ethical principles is a matter of personal and organizational responsibility. Ethical principles apply in preserving audit independence and quality of work. The integration process typical of ICT tools seems to jeopardize certain standards of ethics such as independence. There is therefore, a huge number of demands that must be balanced in order to ensure that organization functions efficiently, responsibly and legally. Hence, managers must deal with moral, ethical, professional and legal issues that often conflict with one another as a result of ICT tools implementation. Iacono (2001) yet observed from particular empirical context that audit service is characteristic as teams that conduct particular audit engagement are assembled of members that belong to diverse professional ranks, from junior auditors to audit partners, where the number of those involved in single engagement depends on client's paperwork complexity. Since the extent to what auditors use ICT differs across the ranks, the implications that technologies have on their subjective perception of consequences that ICT have on their work, might be significantly different between them. Despite that previous research provided with some of the critical reflections on the utilization of ICT in auditing on various aspects, the literature has not yet observed howthe use ofICT tools influenced differently ranked auditors. Also, studies neglected to inspect whether and how perceptions about ICT differ across various audit levels. To overcome the limitations of previous studies, this empirical framework will serve as a tool that has the capacity to challenge previous streams of literature through the case study that will enable putting incentives for productivity and comfort-related deskilling effects into the foundation of current tensions that are observable in the audit profession. Therefore, study here concentrates on how mechanisms of trust in carriers of the profession, ICT, and humans, mutually challenge one another. According to this, I argue that superiors and subordinates are expected to have dissimilar perceptions of implications of the ICT that could, in auditing context, be ascribed as comfort, which might consequently impact the social interaction between auditors belonging to different professional ranks. In particular, this study focuses on how both subordinated audit staff, which make use of ICT tools, and superiors that hold productivity incentives, but do not utilize it, individually perceive (1) the ICT as regards the advantages and disadvantages of their deployment and implementation on themselves, and (2) the other audit ranks through the functional properties of the ICT tools.

To put ICT tools adequately into the research context, a case of risk-based audit methodology, named global audit methodology (GAM) that has recently been implemented among audit firms at the global level is introduce. Integration of GAM into the ICT aims at ensuring a consistent approach to all audit engagements, which provides auditors with guidance through the auditing process. This article has been inspired by Sorensen & Sorensen (1974) study on conflicts in bureaucratic organizations that were caused by differences in a rank-based professional aims. For the purpose of this study I distinguish two groups of professional ranks; Superiors (audit managers and partners) and; Subordinates (interns, junior and senior auditors). Through the qualitative, cross-sectional investigation, this study exposes the unfolding of sources of a focal entity to answer the following research question: How and why does the implementation of GAM into ICT impact the relationship between superiors and subordinates in the auditing process? Finally, previous literature has primarily emphasized empirical impact of information and communication technologies from the holistic corporation perspective and that of the auditors irrespective of the theory used (Bierstaker, Burnaby, & Thibodeau, 2001)

Theoretical Discussion

This discussion proposes theoretical standpoint of the study by concentrating on Giddens (1990) conceptualization of modern social order that will further serve as a tool for understanding tensions at the focal social context. Giddens (1990) propounded a theory of institutional analysis of modernity associating the concept of modernity with time period and location of a current. The concept of modernity refers to modes of social life that are no longer driven by manufacturing system since current institutional transformations have moved the system towards the one centrally concerned with information. That information-based system implies that information organize the social order as they moderate interactions between social actors. Marx and Durkheim preceded development of theory of modernity where both saw modern era as troubled, but believed that benefits would outweigh its negative characteristics. But Giddens' (1990) theory had substantially different point of origin located in a term of discontinuity. The term was unrelated to historical materialism - as a transition from one form of social system to another, but included the following features: pace of change, scope of change and intrinsic nature of modern institutions. For Giddens, modernity is multidimensional on the level of institution. Society (and sociology) is an important but ambiguous concept that carries the central notion of 'boundedness' of a social system that has an objective to solve the problem of social order. According to Giddens, the problem of social order in modern societies directs attention on how social system "bind" time and space. He sees the social order through "distanciation" of space and time, which is a condition based on which these two connect presence and absence, so it is essential to understand how modern institutions are situated in the particular space and time. A term of institution here refers to inter-subjective interactions, form and nature of that relation. The notion of distanciation enabled him to argue that every social interaction at the very encounter has its ordinance in distance. This implies that any present social interaction, in a variety of social contexts, is distantly molded through its institutionalized form, i.e. no encounter is organized at the spot of occurrence but its nature is already specified somewhere before.

Therefore, materialization of social interactions occurs only at the encounter, but the character of it is both enabled and directed outside of that encounter through different forms of standardization. Unlike the traditional approach, in this way conceptualized modernity has capacity to connect local and global up to previously traditionally unthinkable perspectives. The core of this theory of modernity is in two interconnected mechanisms that hold distinctive properties and which could be identified in any context that involves social interaction. Put forward by Antony Giddens (1990) the theory of modernity conjectures the existence of two mechanisms that drive almost any social interaction: disembedding and reembedding. Firstly, disembedding is a mechanism that "lifts out" the locality of social relation and restructures it across an indefinite span of time and space (Giddens, 1990, p. 21). Therefore, social practices are removed from immediacies of context, and their localized experience becomes shaped through impersonal and abstract processes that occur on the other side of the world (Stones, 2012). When interactions do not take place, disembedding mechanisms would not reify but they will still exist, however, only in their abstract forms. An objective of these mechanisms is to explicate a power of modern institutions to shape the nature of interactions at the global extent and secure social order. Disembedding is a necessary condition (Stones, 2012) for spreading two impersonal and abstract mechanisms central to dynamics of modernity, namely: (a) symbolic tokens, and (b) expert systems (Giddens, 1990, p. 22). Both of these mechanisms take a role in coordinating social interactions between distant and the absent others. Symbolic tokens are media of interchange based on which social interactions are regulated. They are spread around in a form of regulations, which apply only to those social actors that materialize particular form of interaction at a particular time. Symbolic tokens have a function to standardize expectations and possible outcomes of social interactions and prohibit unethical actions. On the other hand, expert systems are systems of professional expertise and technical accomplishments that enable purposeful social interaction to occur, such as establishing relations with lawyers, architects etc. (Giddens, 1990, pp. 24–7). Thus, expert systems are capacitated to organize large areas of material and social environment where social interactions occur. Coupled together, both symbolic token and expert system assemble the abstract system.

Abstract systems require trust in both of its constitutive elements. In particular, trust in a symbolic token is shared and grounded on the abstract capacities of what couples individuals at the encounter. It does not create trust in individuals as a "whole", but only to those "parts" of individuals that share the same values in the abstract mechanism during the interaction. But, expert systems are based on the faith in the professional expertise that is continuously developed. Giddens argues that the nature of the modern interaction is deeply bound with the trust in abstract systems, but particularly in the part of it related to the expert system (Giddens, 1990, p. 83). Giddens (1990) couples the previous mechanism with one of reembedding. He argues that reembedding mechanism is a reappropriation or contextualization of previously distantly specified interaction to its already predetermined form. Therefore, reembedding mechanism (Giddens, 1990, p. 79) pins down all of the elements of the abstract system to the encounter where interaction between social actors becomes materialized, as it suggests the nature and the content of realization. Reembedding mechanism distinguishes two commitments: facework and faceless. Facework commitment refers to a personalized trust that exists and becomes experienced by social actors when the encounter occurs. Faceless commitment refers to the concerns of development of faith in the abstract system. In order to achieve functional appropriation of disembedding and reembedding mechanisms, Giddens (1990) emphasizes the importance of trust in abstract systems. The level of trust enables social actors to estimate costs and benefits of a particular expert system, the selection and potential utilization of it. This theoretical approach is selected as it enables observing of how trusts in different abstract systems, which are integrated into the same context, challenge social interactions. Concretely, these mechanisms enable analysis of relationships between superiors and subordinates whose interaction has been challenged by prevailing trust in an alternative abstract system that became reembedded in the contextual setting. In particular, the moderating effect of the abstract system at the social encounter is the main mechanism that is in the focus of an empirical setting. The two-dimensional approach that integrates mutually interactive mechanisms is found to be conductive for a proper approach to the issues that try-outs of trust in a modern assembly of social interactions may have on human agency at the professional encounter. I believe that this analytical framework provides an adequate approach to understanding how trust in distantly regulated procedures and technological accomplishments actually produce negotiation of trust in human carriers of the profession at the focal context of auditing, which ultimately influenced relations.

METHODOLOGY

This study adopted an exploratory grounded theory approach as it allows determining the sequence of necessary steps and tasks in the process of conceptualization and identification of relations between concepts in newly established working environment of assurance services – Audit - in audit firms. Corbin and Strauss (1990) argued that qualitative methods could be systematically evaluated only if procedures and canons are made explicit. They have proposed canons of a 'good science' as a procedure that should be followed to help a researcher to develop a well-integrated set of concepts, which will provide the theoretical explanation of social phenomena under study. Since the literature on deployment and implementation of ICT in audit services have already recognized several core concepts that resulted from impacts that ICT made on auditing and auditors (Abdolmohammadi & Usoff, 2001; Banker et al., 2002; Bierstakeret al., 2001; Janvrin et al., 2008), the canons of grounded theory here aim at serving as a tool for extending and as well understanding relations between concepts. Hence, some of the tools utilized is assessment and observation. This helps in objectively, reviewing research work done by other researchers in the field of ICT and Audit. It is a qualitative method that looks in-depth at non-numerical data to explain the impact between ICT tools and Audit process of corporations in Nigeria. The method attempted to analyze the impact of ICT tools on audit process of corporations in relation to:

i. The effect of ICT tools deployment and implementation on the audit process of corporations in Nigeria.
ii. The influence of ICT tools on control risk in Auditing.
iii. Improvement in Audit quality and efficiency due to ICT tools deployment and implementation

Additionally, the above key areas were phenomenologically approached. This approached investigates ICT as a phenomenon or event with auditing as the target variable. Essentially, various arguments in favour and against ICT tools impact in the field of the research were much appreciated. However, it should be noted that within the limited scope of this study, not all areas of impact on the audit process by ICT tools were fully captured and explored, but the method adopted helps in the analysis and explanation of the impact of ICT tools on the audit process of corporations in Nigeria. Note that the reason for adopting this method is because of its flexibility, natural setting, meaningful insight and its ability to generate new ideas.

RESULT AND DISCUSSION

Effect of ICT tools Deployment and Implementation on the Audit process of Corporations in Nigeria

ICT tools deployment and implementation will affect the audit process of corporations in Nigeria by introducing changes in the audit procedures and processes. This is due to the outcome of the following variables after ICT tools deployment and implementation; changes in audit processes and procedures, change in audit approach; information system auditors involvement; audit tools utilize and time spent in understanding business processes. The empirical result revealed that auditors agreed that they experienced changes in traditional audit process and procedures, when auditing an ICT implementing corporations. Furthermore, the assessment indicated that those changes were not as a result of using different auditing tools as the result from the observation and review of empirical evidence on auditing tools difference did not support this view. Thus this finding suggested that the cause of changes did not arise from auditing tools. The findings also discovered that a different approach was inevitable when auditing an ICT Tools implementing corporations. This variation in approach also supports the fact that the ICT tools deployment and implementation thus affects the audit process. Additionally, the level of involvement of IS auditors was measured to determine whether it was considered a necessity in auditing an ICT implementing corporations. As expected, the result presented a clear indication that auditors considered information system auditors as an important member of the audit team in an ICT tools deployed environment. The effect on audit process here is that ICT implementing corporations required more expertise than typically needed in a traditional non-ICT environment.

Influence of ICT tools on Control Risk in Auditing

Based on the empirical and theoretical review, assessment and observation, Auditors will experience increased control risk after ICT tools are deployed and implemented. The variable used to measure the level of control risk were time spent in assessing control risk, time spent in test of controls, decreased in substantive testing and interrelated problems. On the time spent in assessing control risk, the findings indicated that auditors spend more time in assessing control risk in an ICT tools implementing corporation compared to non ICT or traditional corporations. This can be interpreted that auditors believed that control could be potentially compromised in an ICT implementing corporation and as such commit more time to ensure reliability. Again, auditors agreed that they spent more time in test of control in an ICT implementing corporation compared to a traditional environment. This finding confirms that control was of enormous concern for auditors in an ICT implementing corporation audit. Furthermore, the findings revealed that auditors conducted less substantive testing in an ICT implementing corporations. This could be partly because ICT tools offered an integrated solution to company’s business processes and thereby limiting the need for rigorous substantive testing in such an environment. This finding is considered very significant in this study because it also collaborated the findings in 4.1 (above). Additionally, the finding also observed that auditors were very concerned about a problem in one business process leading to a problem in a related business process. The theoretical and empirical review and assessment suggested that auditors overwhelmingly expressed this issue as eminent when auditing an ICT implementing corporation. From this findings, it can be interpreted that auditor perceived an increase in control risk when auditing in an ICT tools implementing environment.

Improvement in Audit Quality and Efficiency due to ICT tools Deployment and Implementation

ICT tools implementation has brought about some quality and efficiency to bear on the audit process. The variables used to determine this qualities were the involvement of information system auditors, time spent by auditors to trace audit trail, time spent to assess and retrieve information and the functionalities of an ICT system as a whole. Based on the empirical result, it was deduced that it was necessary for an information system auditor to be part of the implementation team when a corporation wants to deploy and implement ICT tools. Auditors believe that including an IS auditor was vital in solving some of the control and integrity concerns that they face when auditing such a corporation. This is with a view of improving the quality and efficiency of the audit exercise, surprisingly, despite the real time information provided by the ICT tools; the theoretical and empirical**.** Review and assessment indicated that an auditor does not spend less time to trace audit trails in an ICT tools deployed corporation. This was unexpected because it was assume that ICT tools with its real-time capabilities would have provided auditors with less time consuming audit trails. However, it can be argued that since the earlier findings in 4.1 indicated that more time was spent by auditors to understand the business process in an ICT implementing corporation, therefore, it may be that such time was lost in understanding the system and business processes rather than in tracing the audit trail. Consequently, this finding did not provide any support as regards, improvement to audit quality and efficiency. Again, the findings with regards to time spent in assessing and retrieving information in an ICT environment was also surprising as one would assume that information retrieval in an ICT environment will be on a real time basis, this finding was also consistent with previous result on the time spent to trace audit trail. On functionalities that can enhance auditing and audit processes, the findings revealed that such functionalities abound in ICT tools. This observation was important because it demonstrated that although ICT tools implementing corporation audit did not provide less time in audit trail and information retrieval, however, ICT tools could improve and enhance auditing and audit process. Juxtaposing this finding with previous findings, it clearly revealed that the improvement brought about by this real time information is not in the form of less time audit trails or assessing and retrieving information.

CONCLUSION AND RECOMMENDATIONS

It is important to note that the role of an auditor in assuring accountability cannot be overemphasized. The auditor remains a catalyst as far as the reliability of financial statement is concerned. The auditor is therefore a pillar of accountability and must strive to maintain his relevance regardless of the changes brought about by business process integration via ICT tools deployment and implementation. Based on the objectives of this study which is to appreciate the impact of ICT tools on audit process of corporations in Nigeria, the following conclusions were arrived at based on the result from the discussion and findings which utilizes both theoretical and empirical results. The deployment and implementation of ICT tools in corporations will affect the audit process and procedures. This is because of the significant changes experience by auditors when auditing such environment. These changes were in the areas of audit approach, audit tools, audit team composition and timing. Also, there is an increase in control risk after ICT tools deployment and implementation. This is an indication that the ICT tools deployment and implementation brought about concern for auditors in the areas of access controls. Auditors consider control procedures to be vulnerable after ICT tools deployment and implementation and as such spend much time and resource to ensure that control processes were not compromised. Similarly, not all anticipated benefit and improvement in audit quality and efficiency were generated in an ICT environment audit, although ICT tools provides a real time information flow, it did not imply that auditor would spend less time in audit trail and information retrieval. However, the Auditors noted that ICT tools had inbuilt functionalities that can enhance or improve audit quality and efficiency but that such functionalities were not in the areas of audit trail or information retrieval.

Since the auditor is saddle with the task and responsibility of investigating and examine the "True and fair" view of a financial statement, He must be proactive and not reactive in devising measures to counter the negative changes that might emanate from business process integration typical of the ICT tools. It is in this light that the researcher proposes the following recommendation are being put forward:

i. Auditor indicated that it was very essential in an ICT environment audit to have an information system auditor as part of the audit team. This means that there is the need for auditor to be technologically equipped in order to handle future challenges as more corporations deployed and implement ICT tools.

ii. Since there is an increase in control risk vulnerability with the deployment and implementation of ICT tools, information system auditor must play active role in the implementation phase of a corporation to ensure that controls systems are not compromised.

iii. Auditors need to have the technological expertise to achieve efficient utilization of the ICT tools function in an audit engagement. This requirement should be enforceable through legislation and/or regulations.

iv. There is the need for a methodological framework for dealing with complex problem of evaluating an ICT implementation project. This requirement could be in the form of improved built- in audit embedded modules (AEM) in the ICT system software.

v. Today state of the art continuous assurance include data base replication or mass extraction routines to a data warehouse for additional analysis, while the method had been proved to be beneficial, it should be much more efficient for auditors to follow a “client-server” model for data acquisition and analysis, while the ICT system embeddedwith audit tools that can be assessable and configurable by the auditor, to allow automated data extraction.

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