

Effect of Loan Loss Provision on Revenue Recognition of Deposit Money Banks (DMBs) in Nigeria

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Abstract

This study examines the effect of loan loss provision on revenue recognition of listed deposit money banks (DMBs) in Nigeria. Secondary sources of data were used from the annual reports, and financial statement of the twelve (12) deposit money banks selected for the period between 2014 and 2018. The methodology employed was panel data analysis including pooled Ordinary least square estimation with fixed effect estimation. The variables studied were Revenue Recognition (RR), Loan Loss Provision (LLR), Income Smoothing (IS) and Value Relevance (VR). The results revealed that income smoothing, Loan Loss Provision and Value Relevance impacted negatively on revenue recognition; however, only the effect of LLP is found to be statistically significant in pre- IFRS adoption while loan loss provision and value relevance impacted positively on revenue recognition and income smoothing impacted negatively on revenue recognition in post- IFRS adoption respectively. However, loan loss provision and value relevance have significant impact on revenue recognition in post IFRS adoption. The study therefore concluded that, the adoption of international financial reporting standard has had significant effects on the mechanics of loan loss provisioning in Nigerian Deposit Money Banks. It is therefore recommended that management should congruence the loan loss provision because it has a critical effect on revenue recognition which will have an inevitable effect on profitability and sustainability.

Keywords: Income smoothing, IFRS, Loan loss Provision and Revenue Recognition.

INTRODUCTION

The adoption of the International Financial Reporting Standard (IFRS) was brought about by the entire issue of globalization, and the driving forces of globalization have resulted in changes, which enhances unifying the world and improving the financial sector for international competition (ECB, 2001). Though the change leads to all kind of challenges, it unlocks endless opportunities which can be exploited for long term benefits (Camacho, 2011). The globalization of financial reporting is an unchangeable process that has many potential advantages to be gained from commonly recognized and respected international accounting standards. The adoption of uniform standards decreases the costs of doing business beyond borders by reducing the need for additional information and enhances more comparability of data by improving evaluation and analysis by users of financial statements (Adekayo, 2011).

The global financial crisis has indeed influenced the importance of financial reporting in the banking and commercial sectors. Recently, there has been deliberation on the way and manner in which the banking sector accounts for specific features such as the fair value. Fair value accounting has been assumed to be the contributive factor to the bank crisis and increasing the effects of the financial meltdown. However, the recent controversy around fair value accounting neglects the fact that the vital part of Interest revenues of the deposit money bank is generated principally from loans, and the loans are measured on a cost basis both by local GAAP and IFRS requirement. Non-performing loans are recognized by loan loss provision by applying the impairment rules of the particular accounting year.

Effect of Loan Loss Provision on Revenue Recognition of Deposit Money Banks (DMBs) in Nigeria

Loan loss provisions are a crucial accounting decision that significantly affects the reported revenue of deposit money banks. The mandatory adoption of IFRS by deposit money banks represents a significant change in the revenue recognition and measurement of the loan loss provision. However, the IFRS conditions of measurement and revenue recognition of incurred losses and that of loss provisions are substantially different from the local GAAP. The banks recognized losses in part to anticipate the losses expected to occur due to future events. However, the principles based rules gave considerable room for the banks to use discretion, which enhances smoothing of income. With the fundamental changes in the recognition measurement of loan loss provision, it is assumed to have a significant influence on the reported revenue recognized by the deposit money banks. Therefore, this study seeks to determine the effect of loan loss provision on revenue recognition of the deposit money banks. In order to achieve the main objective of the study, the following null hypotheses are those which underlines the study:

H01: Loan loss provision does not have a significant effect on revenue recognition of the listed DMBs in Nigeria during pre and post IFRS adoption

H02: Income smoothing does not have a significant effect on revenue recognition of the listed DMBs in Nigeria during pre and post IFRS adoption

LITERATURE REVIEW

Conceptual Framework

Concept of Loan Loss Provision

Loan loss provision is a non-cash expense that banks need to account for as a result of likely future losses due to the default of loan payment. It is a provision the Banks make on the assumption that a certain percentage of loans will not be paid as at when due. Loan loss provision is a vital accounting decision that significantly determines the incomes and capital demands of banks (Curcio & Hasan; 2013). In giving out loans, banks stand the risk that borrowers may fail, and the full amount of the loan might not be recovered. A possible loan loss provision is made to guide the default or future loss. Loan loss provision is an essential subject to investors, bank regulators, standard setters and bank's management Based on the operations of a bank, an annual provisional charge to the income statement creates a loan loss reserve (shown in the bank's position statement). The loan loss provision allocated each year increases with the perceived riskiness of the loans advanced to customers. The loan loss provisions are categorized into two namely: specific provisions and general provisions. The specific loan loss provision is losses expected from individual or loans, which are identified as impaired while general provision for loans that may be impaired that is losses expected as a result of future event may not be recognized (Lobo, 2016).

Consequently, a bank making fewer risky loans will have a low loan loss provision compared to banks making higher risky loans. Before the compulsory adoption of IFRS, Nigerian banks operated under the CBN Prudential Guidelines 2010, which allowed loss provisions for specific loans identified as impaired and a general requirement for loans that may be impaired. The normal practice used by the bank is that banks are expected to make provision for future losses as a result of non-performance of the loans. The prudential guidelines categorized non-performing loans into three, namely: sub-standard, doubtful, and loss with their respective percentage of provision as; Sub-Standard- 10% provision of the outstanding balance is made for loans that remain unpaid for both principal and interest for more than 90days but less than 180days. Doubtful- 5% provision should be made for the outstanding balance, which remains unpaid for at least 180days but less than 360days without a legal or secured asset as collateral. Loss Loan- 100% provision should be made for a loan that remains unpaid for 360days or more without any legal or secured collateral, while each deposit money bank is expected to make at least 1% general provision for the risky credit facility (CBN, 2010). When IFRS was adopted in Nigeria in 2012, Banks were required to make provisions for loans as prescribed in the relevant IFRS Standards. Loan loss provision is recognized based on the requirement of IFRS in the income statement. Though the regulations for IFRS should be compared with rule determined under prudential guidelines and the changes in general reserve should be

recognized as follows: when that of prudential guideline Provision is greater than the provision under IFRS, the difference should be transferred from the general reserve to a non-distributable regulatory reserve. When prudential guideline Provision however is less than IFRS provision; the excess charges should be moved from the statutory reserve account to general reserve to the extent of the non-distributable reserve previously recognized (Atoyebi & Simeon; 2018).

Concept of Income Smoothing

Income smoothing is described as an effort to reduce the amount of recognized revenue if actual income is higher than regular profits and attempts to increase the number of revenues recognized if actual earnings are smaller than regular profits (Amanza, 2012). Income smoothing is a kind of earnings management. It can also be stated as manipulating an accrual item in the income statement to smooth the firm's reported earnings. The need for income smoothing arises as a result of reducing information asymmetry which will help the DMB to reduce the risk from activities that are outside management control and boost investor confidence. It will also decrease the cost of capital and increase firm value. Income smoothing happens when bank authority undervalues expected loan losses to increase net income and capital in the current year (Benston and Wall, 2005). Ozili and Thankom (2018), state that Income smoothing is the process of recognizing a steady profit over time. Loan loss provisions are regarded as the primary tool for income smoothing because the estimate for loan loss provisions is determined based on the discretion of the authority of the deposit money banks, which make loan loss provisions a useful tool in the hand of the banks, that give them easy access to manipulate or alter the financial statement to suit the expected outcome of profit (Ozili & Outa, 2017). However, managerial discretion in loan loss provision for income smoothing purposes can be limited by strict accounting standards.

Concept of Value Relevance

Value relevance is a kind of measure used in ascertaining financial quality. Barth (2000) defines value relevance as the extent to which the accounting value is associated with some measure of value, such as shares prices. Value relevance can also be referred to as “the ability of information that is presented in financial statements to capture and summarize firm value” (Kargin, 2013). Barth et al. (2001) expect that firms with higher financial quality have higher connections between share price, earnings and equity book value because higher accounting quality has a better reflection on the firm's actual value. Prather-Kinsey et al. (2008) study the influence of IFRS on value-relevance, information quality, and cost of capital by using 157 listed companies in Europe. They find the adoption of IFRS enhances the value relevance of accounting information, reduces the cost of equity, and improve the accounting quality.

Concept of Revenue Recognition (IAS18 replaced with IFRS 15)

Revenue, as defined by IAS 18, is the gross inflow of the economic benefit during an accounting period of an organization. The different types of revenue classified under IAS 18 are goods sold, services rendered, interest received or receivable, dividend received and commissions, etc. IAS 18 is now replaced by IFRS 15(Revenue contracts with customers). The core principles of the standard are to determine revenue recognition and to depict the transfer of promised goods and services to customers that reflect the consideration to which the entity expects to be entitled in exchange for goods and services. Adeadebayo (2018), which presented the five core principles of delivering the model framework according to the requirement of IFRS 15 states thus:

- i. Identify the contract with a customer;
- ii. Identify the performance obligation in the contract;
- iii. Determine the transfer price;
- iv. Allocate the transaction price to the performance obligation in the contract;
- v. Recognize revenue when or as the entity satisfies a performance obligation

Revenue Recognition and Measurement

Revenues of the DMBs are obtained mainly from banking business, and other related activities including net interest income and non-interest income (KPMG, 2017). Revenue is recognized on an accrual basis in the period in which it accrues. Net Interest Income and expenses are recognized in the statement of profit or loss on an accrual basis, applying the effective interest rate. The effective rate is discounted to expected future cash flow in accordance with the estimated life of the financial assets. But if the financial assets are impaired, the interest income will be recognized on the impaired amount at the original effective interest rate. While other expenses incurred directly as a result of bringing margin-yielding assets on the statement of financial position are amortized through interest income over the life of the asset. Commission income is generally recognized when the related services are provided or on the execution of a significant act. Fees charged for servicing a loan are recognized as revenue when the service is rendered. Net income of other financial instruments at fair value relates to derivatives held for risk management purposes and includes all realized and unrealized fair value changes and foreign exchange differences.

Accounting for Loan Loss Provision under IFRS

Banks may only provide for credit risks when there is "objective evidence" that impairment occurred as of the date of the statement of financial position. Expected losses as a result of events expected to occur after the date of statement financial of position must not be recognized. IAS 39 provides even a non-exclusive list of "triggering events," which serve as indicators of impairment. Moreover, a general loan loss provision for credit risk that is not specified is not allowed under IAS39 rule. In the case of impairment, the standard requires that loss is measured as the difference between the carrying value of the assets and the present value in order to estimate the future value without the future credit losses that were incurred within the period discounted at the financial assets original effective interest rate (ie, the effective interest rate computed at initial recognition). The requirement of a triggering event means that a loss is only recognized if the probability of default approaches 100%. In this respect, accounting rules under IFRS are even more restrictive than GAAP. The restrictive loss recognition rules under IFRS are expected to discourage banks from adjusting their estimates of expected loss as a tool for smoothing net income. In the absent of this rule; a bank could materially reduce and later increase reported net income by making changes in expected probabilities of default or loss given default of a magnitude that would be difficult for any outside party to disprove or even verify (Benston & Wall; 2005).

In addition to specific impairments, banks are supposed to provide general loan loss provisions for latent risks in the loan portfolio. Therefore, banks are permitted to anticipate and recognize expected future losses in their accounts through general loan loss provisions. Depending on how fast accounting rules allow incorporating changes in the probability of default in financial statements and on which discount rate (e.g., original effective interest rate or current market interest rate) banks use to discount expected cash flows accounting, loan values will reflect with economic value to a larger or lesser extent. The effect on the market valuation of the loan loss allowances and it's discretionary and nondiscretionary components will depend on how the content and the precision of loan loss information provided under IFRS differ from that supplied under local GAAP. If nondiscretionary loan losses were measured at their fair value, the theory would have us believe in value displacement. While in a valuation regression where the coefficient on the loan loss estimate coefficients can be different from -1; however, in practice, estimated factors can be different from -1, due to the following reasons; under the local GAAP and international accounting rules, loan loss allowances are an imperfect measure of economic impairment. For instance, IFRS rules strictly prohibit the recognition of anticipated future credit losses. If consequently omitted impairments correlate with the reported loan loss allowance, the valuation coefficient could exceed -1 (Beaver & Engel, 1996).

Given the difficulty of predicting future credit losses, loan loss allowances are measured with non-opportunistic error, which might be substantial. To the extent that the application of IFRS rules results in a reduction of non-opportunistic error in estimating loan loss allowance, we might expect a coefficient closer to its theoretical displacement value after IFRS adoption.

Empirical Review

Albian (2019) examined the impact of IFRS 9 on the banks' loan loss provision. The study determines the relationship between recognized loan loss provision and the determinant of an incurred loss. The research suggests that there is a significant decrease in the relationship between loan loss provision and the loss model determinant between the post-IFRS and pre-adoption of IFRS. And also, find no changes in the association of LLP and changes in non-performing loans for banks reporting under the U.S. GAAP reporting standards (benchmark), which were not subject to the same regulatory changes during the same period. Ejike (2018) examined the implication of IFRS adoption on loan losses in Nigeria Financial institutions. The research used secondary data, and the data collected was analyzed by using the Z- Test technique to determine the extent to which the banking sector of Nigeria is being affected by the adoption of IFRS on loan loss before and after the adoption of IFRS. The finding of the study suggests that IFRS adoption will not lead to less timely loan losses recognition in Nigerian banks. There is also a significant increase in the revenue of the banks after the adoption of IFRS following the hypothesis test that was carried out, indicating 66% positive response and 34% negative responses from the questioners.

Atoyebi and Simeon (2018) examined the impact of International Financial Reporting Standards (IFRSs) Adoption on Financial Reporting Practice of listed deposit money banks in Nigeria from the period of 2006 to 2016. The study used secondary data extracted from the annual financial statement of Fifteen (15) deposit money banks. OLS pooled regression was employed to show the relationship between dependent and independent variables. The empirical results showed that there is a positive and significant relationship between Loan Loss Provision and earnings management for both pre- and post-IFRS adoption. Also, in the results, Loan loss Provision was found to have a positive and insignificant impact on capital management for both pre and post IFRS adoption. it concludes that there was a sign of accentuated earning management behavior when utilizing Loan Loss Provision in the sampled deposit money banks in Nigeria during the post – IFRS regime. Ozili (2017) investigated whether discretionary 'loan loss provisioning' by Western European banks is driven by income smoothing or credit risk considerations. The study used the ordinary least square regression to examine the relationship between loan loss provision and earnings before tax and loan loss provisions in the post-financial crisis period. The findings of the study revealed that listed banks in Western Europe carry out discretionary provisioning, which is driven by income smoothing incentives in the post-financial crisis period. The study also observed that discretionary provisioning is significantly influenced by credit risk factors, mainly, non-performing loans and loan growth. Overall, the results of the study imply that discretionary provisioning among Western European banks is driven by both income smoothing and credit risk considerations.

Sanyaolu, Iyoha, and Ojeka (2017) examined the effect of adopted International Financial Reporting Standards (IFRS) adoption on the earnings yield (EY) and earning per share (EPS) of quoted banks in Nigeria. The study made use of cross-sectional data obtained for a period of 6 years from 2009 to 2014, while the panel ordinary least method of analysis was used to examine the impact of IFRS adoption on the earnings of all 15 quoted banks in the Nigerian Stock Exchange. The study found a significant and positive relationship between IFRS adoption and the earnings yield of quoted banks in Nigeria. The study also found a substantial and positive relationship between IFRS adoption and EPS of quoted banks in Nigeria. The study concludes that IFRS adoption has improved the decision making capability of the various stakeholders, thus, increasing investor confidence and the inflow of capital in the country through foreign direct investment. Bello, Abubakar, and Adeyemi (2016) investigated the effects of IFRS adoption on earnings management of non-financial quoted companies in Nigeria. They utilized a sample of seventy-five non-financial quoted companies in Nigeria that have consistently published their audited annual financial reports between 2010 and 2014. They used a dummy variable to separate the period of pre and post-adoption period; before January 2012 and the year-end 2014. The data collected were subjected to descriptive analysis, correlation analysis and a panel multiple regression analysis to explore both trends and possible effects of IFRS adoption on general earnings management. Their findings revealed that IFRS adoption in Nigeria does not significantly affect the tendency of Nigerian companies

to manipulate earnings. Explicitly, this is contrary to the general belief that IFRS, as high-quality accounting standards will reduce the possibility of earnings management.

Eneje, Obidike, and Chukwujekwu; (2016) examined the effect of IFRS adoption on the mechanics of loan loss provisioning for Nigerian Banks. In line with the objectives of this study, secondary data were obtained from the deposit money banks' annual reports and accounts covering the period of 2005 to 2015. Descriptive statistics and the ordinary least square multiple regression analytical method was used for the data analysis. It was found that the limitation to recognize only incurred losses under IAS 39 significantly reduces income smoothing and delay recognition of future expected losses. Based on the sampled bank dataset and results, this paper has shown that the post- IFRS has had significant effects on the mechanics of loan loss provisioning compared to the pre-IFRS era in the Nigerian Money Deposit Banks. Yahaya, Kutigi, and Mohammed (2015) investigated how the change in the recognition and measurement of banks' loan loss provision affects earnings management behavior. They investigated the post-adoption of IFRS and value relevance of accounting information of quoted banks in Nigeria. Using the price model and the returned model, their study found that the EPS increased in the post-adoption than in the pre-adoption periods. The study concluded that the restriction to incur losses under IFRS significantly reduced the ability of banks to engage in earnings manipulation. The study recommended that investors should understand the IFRS adoption process to avoid overvaluation of the economy when the financial markets are doing well. Ahmed, Mohammed, and Adisa; (2014) explored the relationship between loan losses Provision and earnings management in Nigerian DMBs. Secondary data were obtained from the eight banks' financial reports for the period of 2006 to 2011; the study employed the robust regression tool for data analysis. The result indicated that there is a positive relationship between the provision for loan losses and earnings management in Nigerian DMBs.

Theoretical Review

Value Maximization Theory

This work is anchored on Jensen (2001) Value Maximization theory. The fundamental reason of firm's Financial Statement being disclosure in compliance with IFRS is to maximize firm's value at the long run. This theory states that it exists primarily for 2 main reasons. That is, to maximize profit within the short run or maximize shareholder's wealth within the long run; this means that management or drivers of organizations business should take choices, which will enhance shareholders' wealth within the long run. It's imperative to notice that wealth maximization during this context doesn't imply maximizing shareholders' wealth alone; however, extends to maximizing the interest of different money claimants particularly the debt and warrant holders. This theory state that the first objective and purpose of a firm breathing is to enhance shareholder's wealth, that is maximize shareholder's wealth within the long-standing time (Abdul- Baki, Uthman, &Sanni, 2014). It also explains that every activity of the company whether or not charitable or otherwise, is largely to make profit. This theory states that at the long-run there will be maximization of different stakeholders and money claimants like debt and warrant holders(Abdul-Baki, Uthman, &Sanni, 2014) The research work thus noted that the basic reason or essence of a firm's plan being revealing it compliance with IFRS is to maximize mangers' and firm's worth at the long-standing time.

Legitimacy Theory

The legitimacy theory is derived from the broader political economy perspective and has also been used as a further academic theory in accounting literature to explain managements' motivations for particular voluntarily information disclosure. Specifically, this theory has been employed extensively as an explanatory theory by earlier accounting scholars to explain the motives behind voluntary corporate social and environmental disclosures (Cowana & Deegan; 2011). According to Tyler (2006), legitimacy is a perceived commitment to social authorities or to present social arrangements. The concept of "legitimacy" is "loosely referring to socially accepted and expected structures or behaviors" (Mitchell et al., 1997).

In terms of organizational legitimacy, O'Donovan (2002) claimed the following: The status of a corporation's legality may be challenging to establish, given that a corporation's legitimacy is based on social perceptions and values, which can and do change over time. In order to manage legitimacy, corporations need to know how legitimacy can be gained, maintained, or lost. Suchman (1995) distinguishes between three broad types of corporate organizational legitimacy; pragmatic legitimacy, moral legitimacy, and cognitive legitimacy. The first type, pragmatic legitimacy, is based on the self-interested calculations of a company's most immediate stakeholders. The second type, moral legitimacy, is based on judgments about whether the activity is "the right thing to do," rather than whether the activity benefits a company evaluator (stakeholders). A third type, cognitive legitimacy, is based on comprehensibility or 'taken-for-granted', rather than on the stakeholders' self-interest.

Each type of legitimacy utilized an appropriate strategy for gaining, maintaining, and repairing legitimacy. In addition, Suchman (1995) remarks about all three types of organizational corporate legitimacy (pragmatic legitimacy, moral legitimacy, and cognitive legitimacy): All three types involve a generalized perception or assumption that regulatory activities are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions. However, each type of legitimacy rests on a somewhat different behavioral dynamic. This theory suggests that voluntary information disclosures are part of a process of legitimating and used as a device for economic entities to demonstrate that their activities are in consensus with the bounds and norms of their respective society. Besides, according to the legitimacy-based arguments, voluntarily disclosing additional information in corporate annual reports in an effort to alleviate public pressure or legitimate a company's actions. As predicted by legitimacy theory, managers of firms would voluntarily disclose more information of actions if they perceived that the specific actions were expected by the public in which their companies operate (Guthrie et al., 2004). Based upon the theoretical perspectives provided by legitimacy theory, it seems this theory may not provide a comprehensive foundation for an explanation of overall voluntary disclosure practices by financial and non-financial companies; however, it can partially give a reason for managerial motivation to disclose social and environmental information voluntarily.

Stakeholder theory

Edward Freeman's first advanced stakeholder theory in 1984. A stakeholder is a person, group of individuals, or entity that can affect or be affected by the operations of an organization. The responsibility of accountability is not limited to shareholders only but a broad range of bank stakeholders. This proposes corporate accountability to a full range of stakeholders. It is based on companies being so large, and their impact on society being so significant that they cannot just be responsible to their shareholders. Stakeholders should be seen not only as existing but as making legitimate demands upon an organization. The relationship should be seen as a two-way relationship. What stakeholders want from an organization will vary. Some will actively seek to influence what the organization does; others may be concerned with limiting the effects of the organization's activities upon themselves. A range of corporate constituencies – customers, employees, suppliers, creditors, and communities – should have a say in the running of the firm. A stakeholder, according to this point of view, is one who has an interest in the enterprise and is at risk if it fails. An employee who may find it difficult to secure another employment if the enterprise closes; a creditor whose claims will not be met in full if the company enters insolvency; suppliers with close ties to a particular producer; and a community which has come to depend on a significant local employer, are all in a position where they have a stake in the enterprise's sustainability. The corporate enterprise cannot be maintained without the inputs of a series of constituencies; investors, lenders, suppliers, managers, workers, unions and communities.

This research work is underpinned under the value maximization theory because the fundamental reason for the firm's Financial Statement being disclosed is to ensure it compliance with IFRS and to maximize the firm's value in the long run.

METHODOLOGY

In examining, the effect of loan loss provision on revenue recognition of listed Deposit Money Banks in Nigeria. The study adapts the cross-sectional model of Atoyebi and Simeon (2018) who examined the impact of International Financial Reporting Standards (IFRS) Adoption on Financial Reporting practice in Nigerian Banking sector.

Model specification

The model is specified as follow

$$RR = \alpha_0 + \alpha_1 IS_{it} + \alpha_2 LLP_{it} + \alpha_3 VR_{it} + u_t$$

Where:

RR = Revenue Recognition

IS = Income Smoothing

LLP = Loan Loss Provision

VR = Value Relevance

i = cross-sectional variable from 1,2, 3,.....12

t = time series variable form 1, 2, 3, 4

$\alpha_0, \alpha_1, \alpha_2, \alpha_3$ are parameter estimates corresponding to the explanatory variable and the constant term, is the cross sectional unit effect, while u_t is the idiosyncratic error term

Measurement of Variables

S/N	PROXY	TYPE	MEASUREMENT
1	Revenue Recognition	Dependent	Current Year Revenue-Previous Year Revenue X 100 _____ Previous Year Revenue 1
2	Income Smoothing	Independent	Net income/operation cash flow
3	Loan Loss Provision	Independent	Loan loss/total assets
4	Value Relevance	Independent	average price of equity share

Source: Authors computation (2020)

The data employed for the study is mainly secondary data. The data used to represent these variables are annual time series data from the period 2004 to 2018 and was sourced from the audited annual financial reports of the selected banks. The data was collected over a period of 15 years which covers pre-IFRS adoption and post-IFRS adoption, ranging from 2004-2018, excluding 2011 which is the year of adoption. The period from 2004 –2010 form the pre-adoption, while 2012 – 2018 form the post-adoption. In order to achieve the objectives of this study and provide relevant answer to those research question raised; the study shall employ Ordinary Least Square (OLS) method because of its unique properties which makes it the most widely used technique of estimation. The analysis includes pooled ordinary least square estimation fixed effect estimation.

Greece

RESULT AND DISCUSSION

This section presents the empirical analysis and interpretation of impact of loan loss provision on revenue recognitions of money deposit banks in both pre and post IFRS adoption.

Descriptive Statistics

Table 1: Descriptive Statistics of variables

	RR	IS	LLP	VR	rr	is	Llp	Vr
Mean	40615483	586.3419	2.40E+08	1.23E+08	16.34148	5.785249	18.23260	17.52726
Median	20778348	198.1000	87163067	70376126	16.84942	5.288772	18.28329	18.06936
Maximum	2.10E+08	2374.730	9.63E+08	3.81E+08	19.16387	7.772639	20.68602	19.75903
Minimum	213171.0	113.6800	1110943.	466223.0	12.26985	4.733387	13.92072	13.05242
Std. Dev.	57980743	724.3151	2.77E+08	1.27E+08	1.962327	1.021023	1.979367	2.123953
Skewness	1.835088	1.464013	1.185437	0.757720	-0.745337	0.952259	-0.992931	-1.066799
Kurtosis	5.110824	3.543778	3.232081	2.149582	2.783754	2.291163	3.146717	3.062964
Jarque-Bera	20.16650	9.977663	6.384273	3.397241	2.552478	4.645842	4.460823	5.125729
Probability	0.000042	0.006814	0.041084	0.182936	0.279085	0.097987	0.107484	0.077084
Observations	27	27	27	27	27	27	27	27

Source: Authors computation using E-Views 10 (2020)

The first four columns described the pre- IFRS adoption level of the variables while the columns with lowercase label described the variables after IFRS-adoption. It can be seen clearly from the table that the variables in pre-IFRS contain much variations in them while the post- IFRS have little variations; consequently, we shall focus on post IFRS estimates

The expected means and medians for all the variables are positive in sign with loan loss provision (llp) having the highest followed by value relevance (vr), revenue recognition (rr) and income smoothening (is) respectively. It can be shown that rr, llp, and vr were negatively skewed, while only is has positive skewness. The implication of this is that the negatively skewed variables have more falls than rises and vice-versa for the positively skewed variable. The probability values of the Jarque-Bera normality test are statistically insignificant for rr and llp at the conventional level, and this implies that they were normally distributed. However, the probability value of is and vrJarque-Bera test is significant at 10% level. However, this issue of non-normality may not be necessary due to the asymptotic theory or the law of large number.

Hausman Test

The Hausman test is sometimes described as a test for model specification in panel data analysis, the hausman test is employed to choose between fixed effects model or random effects model. Accepting null hypothesis means that the preferred model is random effects while alternative hypothesis means that the preferred model is fixed effects. If the p -value is less than 0.05, reject null hypothesis that the preferred model is fixed effects.

Table 2: Hausman Test Table

Null hypothesis	Chi-square stat	Probability
Difference in estimate of fixed effect and random is not systematic	10.15	0.0030

Source: Authors computation using E-view 10 (2020)

Result of Hausman test reported chi-square value of 10.15 alongside probability values of 0.0030, This implies that here is enough evidence to reject the null hypothesis with differences in estimates of fixed effect and random is not systematic in favour of the alternative hypothesis that difference in estimate of fixed effect and random is systematic. It thus stands that error component model (random effect) estimator is not appropriate because the random effects are probably correlated with one or more regressors. Thus, the most consistent and efficient estimation for the study is the fixed effect cross-sectional specific estimation presented in table 1 above.

PRE IFRS ESTIMATION

Dependent Variable: LOG(RR)

Method: Panel Least Squares

Date: 03/24/20 Time: 16:55

Sample: 2004 2018

Periods included: 15

Cross-sections included: 12

Total panel (balanced) observations: 180

White diagonal standard errors & covariance (no d.f. correction)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.439842	1.834589	-0.784831	0.4406
LOG(IS)	-0.146513	0.166707	-0.878867	0.3886
LOG(LLP)	-0.839447	0.312757	-2.684022	0.0133
LOG(VR)	-0.092907	0.314429	-0.295478	0.7703
R-squared	0.835748	Mean dependent var		16.34148
Adjusted R-squared	0.814324	S.D. dependent var		1.962327
S.E. of regression	0.845571	Akaike info criterion		2.638343
Sum squared resid	16.44476	Schwarz criterion		2.830319
Log likelihood	-31.61764	Hannan-Quinn criter.		2.695428
F-statistic	39.00950	Durbin-Watson stat		1.050993
Prob(F-statistic)	0.000000			

Regression Output

POST IFRS ESTIMATION

Dependent Variable: LOG(RR)

Method: Panel Least Squares

Date: 03/24/20 Time: 16:55

Sample: 2004 2018

Periods included: 15

Cross-sections included: 12

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Total panel (balanced) observations: 180

White diagonal standard errors & covariance (no d.f. correction)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.934646	2.126495	-0.439524	0.6648
LOG(IS)	-0.125790	0.255889	-0.491578	0.6281
LOG(LLP)	0.673408	0.179912	3.742977	0.0012
LOG(VR)	0.326684	0.159693	2.045695	0.0535

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.925452	Mean dependent var	16.34148
Adjusted R-squared	0.907703	S.D. dependent var	1.962327
S.E. of regression	0.596165	Akaike info criterion	1.996531
Sum squared resid	7.463660	Schwarz criterion	2.284494
Log likelihood	-20.95316	Hannan-Quinn criter.	2.082157
F-statistic	52.13957	Durbin-Watson stat	2.359944
Prob(F-statistic)	0.000000		

Redundant Fixed Effects Tests

Equation: EQ01

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	12.634759	(2,21)	0.0002
Cross-section Chi-square	21.328946	2	0.0000

Summary of Regression Output

Table 3

	Pre-IFRS		Post- IFRS	
	Fixed-Effects Estimates		Fixed-Effects Estimates	
Variable	Coefficient	Prob.	Coefficient	Prob.
C	-1.439842	0.4406	-0.934646	0.6648
IS	-0.146513	0.3886	-0.125790	0.6281
LLP	-0.839447	0.0133**	0.673408	0.0012***
VR	-0.092907	0.7703	0.326684	0.0535*
R^2	0.84		0.93	
\hat{R}^2	0.81		0.91	
F-stat.	39.0	0.000***	52.1	0.000***

Source: Authors computation using E-view 10

(*) (**) (***) denotes significance at 10%, 5% and 1% level

The table above presents the regression estimation output based on the Fixed-Effect estimators for the pre-IFRS and the post-IFRS performance. It can be seen clearly under the pre-IFRS adoption that income

smoothing (IS), Loan Loss Provision (**LLP**) and Value Relevance (VR) impacted negatively on **revenue recognition because of their negative coefficients**; however, only the effect of **LLP** is found to be statistically significant because of its low probability level of 0.0133 while other variables are not significant because of their high probability value above 1%, 5% and 10% respectively. The estimates reveal that if IS, LLP and VR fall by one percent, the average value of RR will decrease by 0.14%, 0.83% and 0.09% respectively. The value of adjusted R^2 for pre-IFRS adoption shows that about 81% of variation in RR is explained by IS, LLP, and VR, and the probability value of the F-stat is highly significant in accepting the hypothesis that all the regressors jointly differ from zero.

On the other hand, post-IFRS adoption estimates show that LLP and VR impacted positively on RR, while IS impacted negatively on RR respectively. However, only the effect of LLP and VR are found to be statistically significant because of their low probability value of 0.0012 and 0.0535 respectively. The estimates reveal that if LLP and VR rise by one percent, the average value of RR goes up by 0.67% and 0.32% respectively. The value of adjusted R^2 for the Fixed-Effect regression shows that about 91% of variation in RR is explained by IS, LLP, and VR, and the probability value of the F-stat (0.000) is highly significant in accepting the hypothesis that all the regressors jointly differ from zero. Therefore, all the variables are jointly significant.

CONCLUSION AND RECOMMENDATION

This paper examines the effect of loan loss provision on revenue recognition of money deposit banks in Nigeria in pre and post IFRS adoption. The empirical results showed that loan loss provision has negative and significant effect on revenue recognition in pre-IFRS adoption while it has positive and significant impact on revenue recognition in post-IFRS adoption. This result indicates that the adoption of international financial reporting standard has had significant effects on the mechanics of loan loss provisioning in Nigerian Money Deposit Bank. Based on the findings and conclusion above, the following recommendations are made; the management of Deposit money bank in Nigeria should congruence the loan loss provision because it has significant effect on revenue recognition which inevitable effect of profitability and sustainability of the bank. Management should be mindful and concise of income smoothing because it has a significant impact on the revenue recognition. Finally, management should strictly comply with the standard requirement of revenue recognition (IAS 18, Replaced with IFRS 15).

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Effect of Loan Loss Provision on Revenue Recognition of Deposit Money Banks (DMBs) in Nigeria

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Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria

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Abstract

It is reasonable to have reforms, policies, procedures and tools that unifies all bank accounts belonging to Ministries, Departments and Agencies (MDAs) in a single unit for the effective management of government finances. The study examines the impact of ICT tool on the performance of financial management in public sector in Nigeria. This paper sought to review the impact of Information Communication Technology Tool which is the Treasury Single Account (TSA) in Nigeria. It was found out that despite the numerous benefits of TSA such as curbing multiple government bank accounts, abuse of government funds, limiting financial leakages among others. its challenges such as inconsistencies of remittance collection of revenue, issues of hackers, lack of infrastructures to monitor the financial report of collecting consultants and so on. The researchers employ Ordinary Least Square (Simple Regression Analysis) for analysing the data collected through the instrumentality of Eviews, version 10. The R-square value is 0.91; it means that the model has successfully predicted the variables. This implies that 91% changes in the Recurrent Non-debt Budget are explained by the changes in Revenue Generated after the introduction of TSA. The value of 88% of the Adjusted R-squared indicates that there is strong relationship between the Revenue Generated after the introduction of TSA and the Recurrent Non-debt Budget; while 12% Adjusted R-squared indicates a low revenue leakages in the Nigerian Federal Polytechnics. Finally, the P-value is 0.011309, is less than 0.05. We therefore, reject the null hypothesis and conclude that Revenue generated through Treasury Single Account (TSA) has a significant impact on the Nigerian economic growth through Budget Implementation (BI). The study recommends that government must try to put idle cash into proper application into meaningful people oriented projects. The commercial banks must be creative in generating means of finance to stay in operation. The national assembly must endeavor to pass a bill to solidify TSA.

Keywords: Treasury Single Account, Financial Leakage, Reform, Government, ICT Tools

INTRODUCTION

Many African countries struggle when it comes to reforming public financial institutions and management. Studies indicate that institutional systems and processes that deal with various aspects of public sector finances are weak and non-transparent. Often they are incapable of drawing adequate budgets, monitoring public expenditures, using public funds and investments efficiently, and providing reliable data for micro/macroeconomic modelling. Basman

Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria

(2013) posit that when an investigation identifies problem areas and weaknesses, implementing reforms becomes a problem. The necessary adjustment processes are complex and often deal with interrelated issues to solve this problem, and it is therefore important to adopt a new financial management system. Cendon (2016) posit Public Sector Financial management as a whole demand for overhaul or reform that can form network and centralized system. Nigeria, like many other developing countries, employed fragmented systems in handling government receipts and payments. Aminatu (2017) stressed that according to International Monetary Fund (IMF) and (CBN), the need for the establishment of a unified structure or a single account would reduce borrowing costs, extend credit and improve government's fiscal policy among other benefits. The introduction of the Treasury Single Account (TSA) policy therefore was vital in reducing the proliferation of bank accounts operated by Ministries, Departments and Agencies (MDAs) towards promoting financial accountability among governmental organs. Babajide (2016), pointed out that the compliance with the policy in Nigeria created challenges for majority of the MDAs. Commercial banks in Nigeria remitted over 2 trillion Naira worth of idle and active governments deposits with full implementation of this policy in 2016. Meanwhile, the bankers' committee of the country has declared their support for the policy. Through Remita, the integrated electronic payments and collections platform developed by a company called System Specs, the TSA initiative has enabled the Federal Government of Nigeria to take full control of over 3 trillion Naira (\$15 billion) of its cash assets as at the end of the first quarter of 2016, (OAGF, 2016).

Youngsun (2009) opined that financial management is concerned with the ethical conduct with which public institutions carry themselves while handling public finances. Following the implementation of the TSA by the Government of Nigeria, this study seeks to answer the question; does electronic transaction processing play a role in enhancing financial performance in the public institutions that is capable of reducing or eradicating financial leakages? According to Cendon (2016), there is broad agreement that a fully functioning TSA can improve governance by providing real time financial information that financial managers and Administrators can use to administer programs effectively, formulate budgets, and manage resources. Sound TSA system, fixed with the adoption of centralized treasury operations, can not only help governments gain effective control over their finances, but also enhance transparency and accountability, reducing political discretion, curtail multiple bank accounts and acting as a deterrent to corruption and fraud. Daniel (2015) exclaim Worries by the high rate at which resource-rich African countries lose huge revenues through leakages, illegal transfers of profits and money laundering abroad. Report on Illicit Financial Flows from Africa, particularly from the public sector domain compiled by an African Union (AU) panel led by former South African President Thabo Mbeki, saying that Africa loses an estimated \$60 billion (about N10.08 trillion) annually through such transfers. This revenue leakage was due to lack of control measures such as single treasure account. The report was presented in April at a summit in Addis Ababa, Ethiopia. The report has stirred massive concerns in Nigeria, which is said to account for over \$40.9billion (about N6.87trillion), or 68 per cent of the total figure. Cumulatively, Nigeria also topped the list of ten African countries with highest incidence of illicit financial transfers between 1970 and 2008, from 2010 to date is doubled with resounding impunity recording about \$217.7billion (about N36.57trillion), or 30.5% of the total in the continent. The issue of accountability and probity by top government officials has always been a source of serious concern in Nigeria.

Robin (2008), postulate that recent government, in Nigeria has continued to roll out figures of unaccounted revenues. These include N3.8 trillion allegedly withheld by the Nigerian National Petroleum Corporation (NNPC) out of the N8.1 trillion the country earned from crude oil sales between 2012 and 2015. Others are N109.7 billion royalty from oil companies, allegedly not remitted by the Department of Petroleum Resources (DPR); unaccounted N183 billion by the Niger Delta Development Commission (NDDC) and other \$13 billion dividends from the Nigeria Liquefied Natural Gas (NLNG). Also on the seeming endless list are unapproved withdrawals of \$2.1 billion from the Excess Crude Account (ECA); \$1 billion allegedly withdrawn from public treasury for Jonathan's campaign and an alleged \$6 billion stolen by a former minister, among others. These financial leakages in the public sector domain is said to be worrisome. (Eme, Emmanuel Chukwurah & Daniel 2015). With this worries, the current government is poised to find a lasting solution to this damming menace through application of Information technology Tool (ICTT) assisted mechanisms. Enofe (2017), Stressed on the trends of human centric systems which are more common and popular but are now slowly and gradually diminishing from public and private corporate establishments. The most versatile and efficient technique which is the basic approach is computer centric modus

Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria

operandi, embraced by the modern day institutional practices. This is to promote management thinking used by governments to transform and modernize their public sector in order to enhance the efficiency, effectiveness, integrity and accountability of public service delivery.

This research seminar statement of the problem constitutes the search for solutions to reducing financial leakage that the present administration is poised to achieve and to also see if revenue generated through TSA have efficient impact on economic growth through budget implementation in Nigeria. Some of the tools suggested to be utilized are full implementation of the Information Communication Technology Tool (ICTT) such as TSA. The question therefore that is pertinent is, will these measures or ICT tool effectively curb financial leakages? Financial leakage refers to illegal diversion of public funds. African Union (2008) quoted N6.87 trillions government financial leakages from Nigeria. The leakage is perpetrated by corruption on a daily basis in Nigeria public sector majorly. Today, the present government is poised to forestall or reduce the menace by introducing financial management reforms stated above and full trial of officers found to be involved in financial leakage activities. The researcher intends to find out if the ICT mechanisms will positively impact or restrain financial leakages in the public sector in Nigeria. This Seminar study sought to establish the impact of Information Communication Technology Tools in the public sector financial management in Nigeria with emphasis on the Federal Polytechnics. The researcher hopes that reforms introduced in the Nigeria public sector financial management to enhance transparency, efficiency and accountability and to combat financial leakages would be the best to the nation. The following objectives will be brought to limelight and to examine the impact of ICT Tool on the performance of financial management in Nigeria public sector that would lead to the growth of Nigerian BI. Again, to determine at what extend the use of TSA streamline government revenue and eliminate financial leakages in the Public sector financial management. Assess the impact of TSA in stamping out Multiple Bank Accounts in which public sector revenue streams in Nigeria. Thus, this paper constitutes its statement of hypothesis as follows.

Ho: Revenue generated through Treasury Single Account (TSA) has no significant impact on the Nigerian economic growth through Budget Implementation (BI).

LITERATURE REVIEW

Conceptual Framework

Concept of Financial Leakage

Leakage occurs when income is taken out through taxes, savings and imports. In retail, leakage refers to consumers who spend money outside of the local market. Revenue Leakage has been a universal phenomenon, it is considered as illegal diversion of revenue or income. Financial Dictionary (2014), considers financial leakage as process of removing money from the economy. Savings or taxes are leaked out of an economy. Leakage occurs when money leaves an economy. Dong (2018) posits that leakage refers to unauthorized or unanticipated dissemination of information. Leakage matters because it represents revenue lost. It can have many forms; interest rates are just one way for money to leak out of an economy. Dada (2014) broadly describes it in form of corruption, and suggests financial leakage as: (i) dishonest or illegal behaviour, especially of people in authority; (ii) the act or effect of making somebody change from moral to immoral standards of behaviour. This definition linked financial leakage with two important variables: authority and morality according to Afiangbe (2017). Financial leakage affects almost all parts of society as cited in Shabbir and Anwar (2007) has identified financial leakage as the single greatest obstacle to economic and social development. It undermines development by distorting the rule of law and weakening the institutional foundation on which economic growth depends. Financial leakage is not peculiar to developing nations alone or Nigeria.

Concept of Treasury Single Account (TSA)

In 2011, the Federal Government (under President Goodluck Jonathan) mandated the commencement of the TSA initiative in Nigeria. A pilot commenced in 2012 on TSA payments (outbound transactions only)

Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria

with just over 100 Ministries Departments and Agencies (MDAs). This was later extended to additional MDAs. Onyekpere (2015) defines Treasury Single Account as a unified structure of government bank accounts enabling consolidation and optimal utilization of government cash resources. It is a bank account or a set of linked bank accounts through which the government transacts all its receipts and payments and gets a consolidated view of its cash position at any given time. This presidential directive would end the previous public accounting situation of several fragmented accounts for government revenues, incomes and receipts, which in the recent past has meant the loss or leakages of legitimate income for the federation account.

The Treasury Single Account is a process and tool for effective management of government's finances, banking and cash position (Eme, Okechukwu, Innocent, Chukwurah, & Daniel, 2015). In accordance with the name (TSA), it pools and unifies all government accounts through a single treasury account. The advantages and benefits of the TSA are legion. The consolidation into a TSA paves way for the timely capture and payment of all due revenues into government coffers without the intermediation of multiple banking arrangements. This prevents revenue leakages in terms of revenue loss and mismanagement by operators of all revenue-generating agencies. Chukwu (2015) define Treasury Single Account (TSA) as a network of subsidiary account linked to a main account such that, transactions are effected in the subsidiary accounts but closing balances on these subsidiary accounts are transferred to the main account, at the end of each business day. As a result, Ministries, Departments and Agencies (MDAs) maintain their individual accounts with the commercial banks, but daily funding of their disbursements are made from the central or main account, which is resident with the Central Bank, just as their closing balances at the end of day are transferred to the main account. The TSA is principally a cash management tool for efficient management of the cash position. Prior to the implementation of the TSA, government was incurring finance cost on debit balances in some MDA's accounts while it was earning close to nothing on the credit balances of other MDAs. With the TSA, the net balances on all the MDA accounts now reside with the Central Bank; hence, the government avoid incurring interest costs when it has positive net position (Eme, 2015).

Electronic Payments (E-payment)

Electronic payment (E-payment) is an electronic payment that is non-cash payment and that it doesn't involve a paper check. Methods of electronic payments include credit cards, debit cards and the Automated Clearing House (ACH) network. Bouaka (2002) sees it as a one-time customer-to-vendor payment which is commonly used when it involves shop online at an e-commerce site, such as Amazon. Dada (2014) posits E-cash is a form of an electronic payment system, where a certain amount of money is stored on a client's device and made accessible for online transactions. Electronic payment has come a long way in Nigeria, but still struggles to compete with the Nigerians love for cash. Nigerians love their cash so much that most transactions in the country are done with cash. Cash remains the preferred medium for payment in the country. Poor awareness of e-payment solutions, ignorance, poor banking culture, lack of trust, illiteracy and the love for the status quo have been fingered as responsible for the high volume of cash transactions in Nigeria.

Concept of Public Financial Management

Financial management made reference to set of administrative function in an organization which are related with arrangement of cash and credit so that organization may have the means to carry out its objective as satisfactorily as possible. Amos (2012) sees Public Sector finance as a field of economics concerned with paying for collective or governmental activities, and with the administration and design of those activities. The field is often divided into questions of what the government or collective organizations should do or are doing, and questions of how to pay for those activities. Management in business and human activity, in simple terms means the act of getting people together to accomplish desired goals. Management comprises planning, organizing, resourcing, leading or directing, and controlling an organization (a group of one or more people or entities) or effort for the purpose of accomplishing a goal. Resourcing encompasses the deployment and manipulation of human resources, financial resources, technological resources, and natural resources.

Concept of Performance

According to David, (2012) Performance is the ultimate result of all the efforts of a company or an organization. These efforts are to do good things, good way quickly, at the right time, at the lowest cost to produce good results that meet the needs and expectations of customers and or clients, their satisfaction and achieve the goals set by the organization. Since the measure of performance within the framework of this research concerns the activities of public sector financial management, the researcher believes that there is need to consider performance from the perspective of effective and efficient public sector financial performance and the perceived performance. Waziri (2010) states that the real or effective performance might not correspond to the perceived performance filled with financial leakage or corruption, the effective, efficient and real financial management performance that involve the utilization of ICT tools involving E-payment Systems, and TSA (Waziri, 2010). Mathias (2014) posits that Public financial management (PFM) is a central element of a functioning administration, underlying all government activities. It encompasses the mechanisms through which public resources are collected, allocated, spent and accounted for. As such, PSFM processes comprise the whole budget cycle, public procurement, audit practices and revenue collection. Sound, transparent and accountable public financial management is a key pillar of governance reform and of vital importance to provide public Sector services of good quality to citizens, as well as to create and maintain fair and sustainable economic and social conditions in a country. According to Waziri (2010), Public finance is said to be the role of the government in the economy. It is the branch of economics that assesses the government revenue and government expenditure of the public authorities and the adjustment of one or the other to achieve desirable effects and avoid undesirable ones. The purview of public finance is considered to be threefold: governmental effects on (i) efficient allocation of resources, (ii) distribution of income, and (iii) macroeconomic stabilization.

Empirical Literature

Amos Ganyam (2018) his study examined the effect of Treasury Single Account (TSA) on financial accountability, corruption and financial discipline in the Nigerian public sector. Using survey research design, data were obtained from questionnaire issued to 95 senior and management staff from 5 MDAs in Benue State, Nigeria. The data were analysed using the ANOVA test at 5% level of significance. The study found that TSA significantly promotes accountability of public funds in Nigeria, reduces the level of corruption in the Nigerian public sector and enhances financial discipline in the Nigerian public sector. The study concluded that TSA has a significant and positive effect on the accountability of public funds, reduction in the level of corruption and enhancing financial discipline. The study recommended that the federal government must demonstrate the political will to ensure the sustainability of TSA policy and also tenaciously pursue its implementation by states and local governments in the country. The study is however limited to primary source of data collection, but this study looks at the secondary data from Federal Polytechnics in Nigeria. Saheed (2017) conducted a study on effect of Federal Government of Nigeria (FGN) Deposit Withdrawals into the Treasury Single Account (TSA) on Deposit Money Banks' liquidity performance in Nigeria. Secondary data were obtained from Central Bank of Nigeria (CBN) Statistical Bulletin covering pre and post implementation years (2012 to 2017). The dependent variable was represented by Deposit Money banks' liquidity ratio while the independent variable was represented by Federal Government Deposits at the Deposit Money Banks. The study used correlational research design to determine the effect of TSA on Deposit Money Banks' liquidity in the country. Also, the study employed Feasible Generalized Least Square (FGLS) technique of data analysis. It was then found that Federal Government Deposit (FGD) had a positive and significant effect on the Deposit Money Banks' liquidity position in the Pre-TSA Era whereas Federal Government Deposit (FGD) had a negative and significant effect on the Deposit Money Banks' liquidity performance in the Post-TSA Era. It was therefore recommended that the Nigerian Government should consider the hybrid TSA model as a way of boosting the Deposit Money Banks (dmbs) liquidity position. It was then suggested that further researchers could widen the scope by including factors such as BI, Exchange Rate, Inflation Rate excluded in this study.

Ndubuaku, Ohaegbu and Nina (2017) embark on study on the Impact of Treasury Single Account on the Performance of the Banking Sector in Nigeria. This research study sought to determine the impact of TSA on Credit to the Private Sector, Deposit mobilization and Loans and Advances respectively. Secondary

Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria

and time series data were obtained from the CBN statistical bulletin 2015. The data were analysed using regression and correlation analysis. The results from the research analysis confirmed that the TSA had a significant impact on Credit to the Private Sector, Deposit Mobilization and Loans and Advances also recommends that the government of the day is advised to implement TSA to its fullest maximum to make best use of its potentials of reducing corruption. Opeyemi (2017) in his study on effect of TSA on the liquidity of banks in Nigeria, asserts that the existence of numerous corrupt practices in the Nigerian Public Accounting System has led to the inauguration of Treasury Single Account (TSA). This paper assesses the impact of TSA implementation on the liquidity base of banks in Nigeria. Fifteen (15) listed banks were used as sample size for this study. Data was obtained by the use of annual reports and it was examined using Descriptive statistics and Paired sample t-test. The results obtained confirmed that the implementation of Treasury Single Account impacted negatively on the liquidity base of banks in Nigeria. Also, there is significant difference in the Profit after Tax (PAT) of Banks in Nigeria before and after Treasury Single Account (TSA) Adoption. It was recommended that if the policy is executed it will lead to the prompt payment of all income going into the nation's purse without the intermediation of multiple banking arrangements.

Agha, (2017) embark on a crucial contemporary financial management research involving single treasury account TSA and corruption investigation. He examined financial management reforms in Nigeria public sector. A survey research design was adopted in the study and a sample of ninety (90) respondents which consist of 40 staff from federal Ministries, Departments and Agencies (MDAs), 30 from Edo state MDAs and 20 from local government MDAs. The study employed ordinary least square (OLS), using SPSS in analysing the bio-data and Eview8 in analysing the research questions as the statistical tool. The study found that Treasury Single Account (TSA) had a negative relationship with Corruption but positive level of significance. The study recommends that the government of the day is advised to implement TSA to its fullest maximum to make best use of its potential of reducing corruption. Festus (2019) in his research on The implementation of Treasury Single Account (TSA) in Nigeria ushered in some drastic changes such that Central Bank of Nigeria (CBN) takes over the custodian of public fund and Deposit Money Banks (DMBs) serve as collecting agent throughout the federation. This seems to be affecting the liquidity state of DMBs. A bank with high liquidity problem might not be able to withstand negative shocks and contribute to the stability of the financial system. An in-depth analysis of the impact of TSA on the profitability of Money Deposit banks will not only clarify the disaggregated findings reported by previous studies, but also provide suggestions on how DMBs could improve their liquidity state. Based on incremental and stakeholders' theory, this research examines the impact of Treasury Single Account (TSA) on the Profitability of Deposit Money Banks (DMBs) in Nigeria. Out of all the listed Deposit Money Banks (DMBs) in Nigeria, purposive sampling technique was used to select all the 6 Systematically Important Banks (SIB) and data were collected on four indicators of profitability of banks such as Earning per Share (EPS), Profit after Tax (PAT), Return on Equity (ROE) and Return on Assets for the period of 6 years divided into Pre-TSA (2012-2014) and Post-TSA (2015-2017). It was discovered that through the analysis carried out via paired sampled t-test that TSA exerts a positive insignificant impact on all the indicators of profitability covered by this study except Profit after Tax (PAT) that has a negative insignificant impact. Finally, it was recommended that managers of DMBs should work out modalities that will foster the embracement of the core values of the banking system to collect depositors' funds, keep them safe and engage in intermediation to create wealth and jobs for the economy. Consequently, overdependence on government fund for operational activities should be discouraged

Theoretical Framework

Meta Theory Model

Ruchala and Mauldin (1999), argue that previously Information Technology (IT) was used in accounting systems merely to process transactions that would reciprocate the old order (manual processes). Meta theory is the formation of technical orientations, cognitive as well as the holistic models in the discovery of Accounting Information System. The theory has consequently been useful in tackling the current limitations in IT that are

Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria

inevitable and highlighted in former studies such as the inability to acknowledge the responsibility to which Information Technology is being applied, the failure to consider the suitable nature of a false process, incapability to account for scientific design in the real field of study and failure to direct the procedure for selecting the required decisions and handling all the transactions equally.

Public Finance Management Theory

This theory assumes that all aspects of financial resources - mobilization and expenditure should be well managed in government for the benefits of the citizenry. It comprises resource mobilization, prioritization of programs, budgetary procedures, efficient management of resources and applying control to guide against threats. Treasury Single Account (TSA) primarily is to avoid misapplication of public funds.

Agency Theory

The broad agency theory perspective led reformers to emphasize the totality of the relationship between principals and agents and, therefore, to move beyond the previous attempts at reform that had focused on particular management improvements. Instead, the translation of these concepts into practical policy design emerged in a set of principle that were applied in a reasonable, uniform way across the government (Boston & Pallot, 1997). A government's public management reform strategy is clearly broad and diverse. It does not draw upon any single theory of how to improve organizational performance in the public sector (other than the meta -theory that central government can improve services by issuing management prescriptions to local agencies). Walsh, (1995) argues that the public (as principals), on whose behalf politicians and bureaucrats (as agents) are supposed to govern, is unable to hold the latter accountable because of insufficient information (information asymmetry), the incompleteness of the contracts of employment, and the problems of monitoring behaviour (Walsh, 1995; Lane, 1995). The public sector under performs because state officials pursue their own narrow self-interests rather than the public interest.

Modern Monetary Theory

This theory `deals with how sovereign government should act, operate, especially in terms of the management of finance and the impact of her action on the economy. Udo and Esara (2016) are of the view that the government should aggregate all government revenue into one single account. This theory advocates for the concurrent existence of the Treasury Single Account (TSA) and the Central Bank of Nigeria such that the Central Bank of Nigeria, being the apex bank is allowed to be in charges and in control of the TSA. According to Éric and Wray (2013) Modern Monetary Theory labels any transactions between the government sector and the non-government sector as a vertical transaction. The government sector is considered to include the treasury and the central bank, whereas the non-government sector includes private individuals and firms (including the private banking system) and the external sector – that is, foreign buyers and sellers.

Resource Curse Theory

The clamour for public sector financial management reforms are encouraged by the argument presented under the “resource curse theory”. Studies and life experiences had shown that resource producing countries like Nigeria are faced with challenges of resource and revenue management of which the populace are daily struggling and clamouring for government to do more. People realized that the effectiveness and efficiency of government financial control is not felt on the life of people and their economy. The resource curse theory put light to the understanding of the great danger that lay ahead of resource producing countries like Nigeria. Scott; Ball & Dale, (1997), emphasize that the revenue funds are derived from depleting an exhaustible asset and can, in some occasions, be generated without the scrutiny of taxpayers, donors, and lenders, resource revenues may pose important intergenerational, political, economy, civil unrest and governance challenges. Other curses are abandonment of other sources of revenue like tourism, agriculture, taxation, and so on. Resource curse theory explains a complex phenomenon through which an abundance of resource revenues can translate into stagnation, waste, corruption and conflict.

Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria

This research aligns to the theory of “resource curse”. Studies and life experiences had shown that resource producing countries like Nigeria are faced with challenges of resource and revenue management of which the populace are daily struggling and clamouring for government to do more. People realized that the effectiveness and efficiency of government financial control is not felt on the life of the citizens and their economy. Resource curse theory explains a complex phenomenon through which an abundance of resource revenues can translate into stagnation, waste, corruption, financial leakages and conflict. Due to this clamouring, government are now putting more effort to make meaningful financial management reforms through the application of ICT tool such as TSA to curb financial leakage that would boost the budget implementation (BI) in Nigeria.

METHODOLOGY

The research design used for this study is ex-post-facto research design. The study examines the impact of ICT tool on the performance of financial management in public sector in Nigeria. The researcher employs Ordinary Least Square (Simple Regression Analysis) for analysing the data collected via the help of Eviews, version 10. The dependent variable in the model is defined in terms of Budget Implementation (BI). However, the independent variable is defined as the revenue generated through the use of TSA.

Model Specification.

The research employs simple regression analysis. The general form of this econometric model is as follows:

$$BI = \beta_0 + \beta_1 RVTSA + e$$

Where:

BI = Budget Implementation

β_0 = Intercept (constant term)

$\beta_1 RVTSA$ = Revenue generated through TSA

e = Error term.

Capital and Recurrent Budget Appropriation serves as proxy for Budget Implementation (dependent variable) and Revenue generated through TSA and proxy for ICT Tool stands for moderating (M) variable.

Apriori Expectation

It is expected that $\beta_1 > 0$

Design and Analysis Technique

This study strictly used secondary data and time series taking the scope between 2011 to 2019. The nature of this secondary data is financial and a Pre and Post Research design. A pre-test post-test otherwise called "difference in mean" design is an experiment where measurements are taken both before and after a treatment. The design suggests that the researcher is able to assess the impacts of some type of treatment on a group. The rationale for this design is because the study will compare the past revenues generated by the Nigerian Federal Polytechnics before the introduction of TSA and budget implementation before the introduction of TSA (that is from 2011 to 2014), and past revenues generated by the Nigerian Federal Polytechnics after the introduction of TSA and budget implementation after the introduction of TSA (i.e from 2015 to 2019), so as to ascertain the impact TSA has on the growth and improvement on the institution's capital and recurrent budget appropriation between this pre and post periods. The population of this study consists of all the Accredited Federal Polytechnics in Nigeria from 2011 to 2019. The study population is 21 Federal Polytechnics in Nigeria. These periods are considered long enough for the variables to form a pattern in combination with economic activities of the institutions. The judgmental sampling technique was utilized in this study to determine the sample size. The sample size for this study is six (6) Accredited Federal Polytechnics in Nigeria. The Polytechnics are among the best ten Federal Polytechnics in Nigeria. They include Auchu Polytechnic, Yaba College of Technology, Federal Polytechnic Ilaro, Federal Polytechnic Nekede, Kaduna Polytechnic and Nassarawa Polytechnic.

RESULT AND DISCUSSION

Graphical Representation

Time Series Plot of Revenue Generated by Nigerian Federal Polytechnics

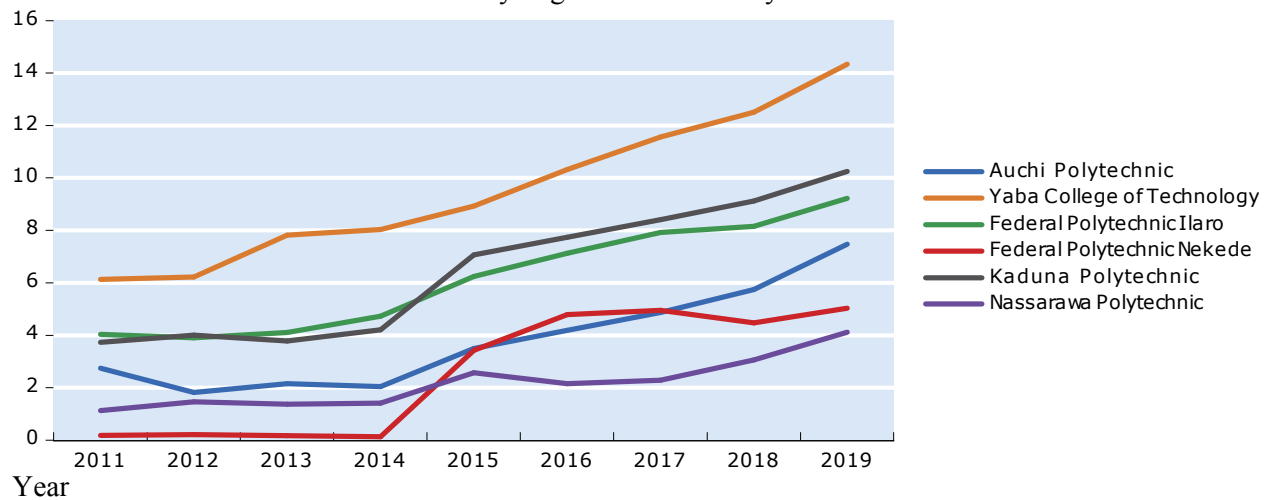


Figure 1: Time Series Plot of Revenue Generated by Nigerian Federal Polytechnics before and after the introduction of TSA

The above graph shows that in 2011 before the introduction of TSA, Yaba College of Technology generated the highest revenue of ₦6.13b while Federal Polytechnic, Nekede generated the lowest revenue of ₦0.18b. Besides, at the inception of the introduction of TSA in 2015, Yaba College of Technology also generated the highest revenue of ₦8.93b while Nasarawa Polytechnic generated the lowest revenue of ₦2.57b. Similarly, in 2019, Yaba College of Technology also generated the highest revenue of ₦14.33b while Nasarawa Polytechnic generated the lowest revenue of ₦4.12b. This implies that among the Nigerian Federal Polytechnics, Yaba College of Technology, Lagos effectively and efficiently generated revenue internally before and after the introduction of TSA.

Inferential Statistics

Test of Hypotheses

The result of tests of hypothesis is presented in this section

Decision Rule

The hypothesis is tested using Least Square of the Regression model. The significance of the variables tested in the model is assessed by comparing the p-value against the level of significance (0.05). The H_0 is rejected if the p-value is less than the level of significant and we thus conclude that the variable under consideration is significant. Otherwise we accept the null hypothesis and conclude that the independent variable under consideration does not have significant effect on the dependent variable.

H_0 : Revenue generated through Treasury Single Account (TSA) has no significant impact on the Nigerian economic growth through Budget Implementation (BI).

Dependent Variable: Recurrent Non-debt Budget

Method: Least Squares

Date: 06/16/20 Time: 08:37

Sample: 2011 2014

Included observations: 4

Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.649496	8.871418	-0.524098	0.6525
Revenue_Generated before_the_ introduction_of_ TSA	2.121700	0.477923	4.439422	0.0572
R-squared	0.907870	Mean dependent var		34.65500
Adjusted R-squared	0.861805	S.D. dependent var		3.030649
S.E. of regression	1.126631	Akaike info criterion		3.383193
Sum squared resid	2.538594	Schwarz criterion		3.076340
Log likelihood	-4.766386	Hannan-Quinn criter.		2.709827
F-statistic	19.70847	Durbin-Watson stat		2.584499
Prob(F-statistic)	0.057178			

Source: Compilation of the author, base on the analysis results using Eviews.

The R-square value is 0.91; it means that the model has successfully predicted the variables. This implies that 91% changes in the Recurrent Non-debt Budget are explained by the changes in Revenue Generated before the introduction of TSA. The value of 86% of the Adjusted R-squared value indicates that there is a high revenue leakage in the Nigerian Federal Polytechnics and a 14% weak relationship between the Recurrent Non-debt Budget and the Revenue Generated before the introduction of TSA. Finally, the P-value is 0.057178, greater than 0.05. We therefore, accept the null hypothesis and conclude that the revenue generated before the introduction of TSA has no any significant impact on the Nigerian economic growth through Budget Implementation.

Dependent Variable: Recurrent Non-debt Budget
Method: Least Squares
Date: 06/16/20 Time: 08:46
Sample: 2015 2019
Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-10.72466	11.46413	-0.935497	0.4185
Revenue_Generated after _the_introduction_of_ TSA	1.571587	0.281161	5.589630	0.0113
R-squared	0.912393	Mean dependent var		52.58200
Adjusted R-squared	0.883191	S.D. dependent var		11.61933
S.E. of regression	3.971177	Akaike info criterion		5.885176
Sum squared resid	47.31074	Schwarz criterion		5.728952
Log likelihood	-12.71294	Hannan-Quinn criter.		5.465884
F-statistic	31.24396	Durbin-Watson stat		1.499800
Prob(F-statistic)	0.011309			

Source: Compilation of the author, base on the analysis results using Eviews

The R-square value is 0.91; it means that the model has successfully predicted the variables. This implies that 91% changes in the Recurrent Non-debt Budget are explained by the changes in Revenue Generated after the introduction of TSA. The value of 88% of the Adjusted R-squared indicates that there is strong relationship between the Revenue Generated after the introduction of TSA and the Recurrent Non-debt Budget; while 12% Adjusted R-squared indicates low revenue leakages in the Nigerian Federal Polytechnics. Finally, the P-value is 0.011309, is less than 0.05. We therefore, reject the null hypothesis

Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria

and conclude that Revenue generated through Treasury Single Account (TSA) has a significant impact on the Nigerian economic growth through Budget Implementation (BI).

Discussion of Findings

The results showed a negative and insignificant relationship between the revenue generated internally by the Nigerian Federal Polytechnics before the introduction of TSA and the Nigerian economic growth through Budget Implementation. The results indicated that there was a high revenue leakage in the Nigerian Federal Polytechnics. This implies that Nigerian Federal Polytechnics have been experiencing an alarming rate of frauds and financial crimes for some years; and those frauds and financial crimes affect the institutions negatively. Besides, the results showed a positive and also a statistically significant relationship existing between the revenue generated internally by the Nigerian Federal Polytechnics after the introduction of TSA and the Nigerian economic growth through Budget Implementation. This implies that with the advents of TSA, a lot of financial leakages and loopholes have reduced; and efforts have been made to reduce the rate of fraudulent activities and embezzlement in Nigerian institutions. Therefore, the application of TSA should highly be recommended in every Nigerian public sector in order to improve the economy. These findings corroborate the findings of Amos (2018) in the research titled effect of Treasury Single Account (TSA) on financial accountability, corruption and financial discipline in the Nigerian public sector. Findings from the study revealed that TSA significantly promotes accountability of public funds in Nigeria reduces the level of corruption in the Nigerian public sector and enhances financial discipline in the Nigerian public sector. The study concluded that TSA has a significant and positive effect on the accountability of public funds, reduction in the level of corruption and enhancing financial discipline. Similarly, these findings are also consistent with Ndubaku, Ohaegbu, and Nina (2017) who embarked on study -Impact of Treasury Single Account on the Performance of the Banking Sector in Nigeria. This research study sought to determine the impact of TSA on Credit to the Private Sector, Deposit mobilization and Loans and Advances respectively. The results from the research analysis confirmed that the TSA had a significant impact on Credit to the Private Sector, Deposit Mobilization and Loans and Advances also recommends that the government of the day is advised to implement TSA to its fullest maximum to make best use of its potentials of reducing corruption.

However, findings of this study are inconsistent with Saheed (2017) which examined effect of Federal Government of Nigeria (FGN) Deposit Withdrawals into the Treasury Single Account (TSA) on Deposit Money Banks' liquidity performance in Nigeria. The study found that Federal Government Deposit (FGD) had a positive and significant effect on the Deposit Money Banks' liquidity position in the Pre-TSA Era whereas Federal Government Deposit (FGD) had a negative and significant effect on the Deposit Money Banks' liquidity performance in the Post-TSA Era. Besides, the findings disagree with Festus (2019) in his research on the implementation of Treasury Single Account (TSA) in Nigeria ushered in some drastic changes such that Central Bank of Nigeria (CBN) takes over the custodian of public fund and Deposit Money Banks (DMBs) serve as collecting agent throughout the federation. This seems to be affecting the liquidity state of DMBs. A bank with high liquidity problem might not be able to withstand negative shocks and contribute to the stability of the financial system. An in-depth analysis of the impact of TSA on the profitability of Money Deposit banks will not only clarify the disaggregated findings reported by previous studies, but also provide suggestions on how DMBs could improve their liquidity state. It was discovered that through the analysis carried out via paired sampled t-test that TSA exerts a positive insignificant impact on all the indicators of profitability covered by this study except Profit after Tax (PAT) that has a negative insignificant impact.

CONCLUSION AND RECOMMENDATION

Treasury Single Account (TSA) aims at ensuring accountability and proper control of government revenue, enhance transparency and avoid misapplication of public funds as well as curtail financial leakages. Adoption of Treasury Single Account is helping to ensure proper cash management by eliminating idle funds usually left with different commercial banks and in a way to enhance reconciliation of revenue collection and payment. The different TSA account types analyses above explained the need that the financial reform is worthwhile in Nigeria public sector financial management especially in

Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria

Nigerian educational sector. Given the foregoing, the following recommendations are germane:

- i. The Nigerian government should promote efficient management of domestic borrowing at minimal cost; allow optimal investment of idle cash; block loopholes in revenue management; establish an efficient disbursement of the collected Government funds.
- ii. The implementation of the TSA, no doubt presents an opportunity for banks to creative means of raising money, there are fears that the concentration of government funds in the TSA may affect the liquidity of some banks leading to their collapse and an increase in unemployment.
- iii. Government should endeavor to play the game with the rule and all sense of purpose by ensuring that the funding of projects by the Government and the sale of treasury bills and bonds as may be approved from time to time are done through commercial banks to enable the commercial banks raise funds and stay operational.
- iv. Government is expected to sponsor a bill on TSA to the National Assembly. This, if done will open up the financial activities of the Government in the budgetary process and its implementation. And Government should not be selective in punishing any of those charged with the governance of MDAs that violates the dictate of the TSA.

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Effect of Working Capital Management on Market Value of Quoted Food and Beverages Manufacturing Firms in Nigeria

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Abstract

The success of a firm relies ultimately on its ability to generate cash receipt more than disbursement. Hence, business survival depends largely on its ability to manage its resources most especially its working capital, which are cash and other related short term assets. Therefore, this study examined the effect of working capital management on market value of quoted food and beverages manufacturing firms in Nigeria. Working capital management is proxied by cash conversion cycle, current ratio and quick ratio as independent variables while market value is proxied by market capitalization as dependent variable. Ten years period was covered in the study from 2008 to 2017. Descriptive research design was adopted in the study and multiple regression analysis was used to ascertain the effect of working capital management on firm market value. The result revealed that cash conversion cycle has a negative significant effect on market value of food and beverages manufacturing firms in Nigeria. Current ratio has a positive but insignificant effect on market capitalization and quick ratio has a positive insignificant effect on market capitalization of food and beverages companies in Nigeria. The study concludes that an increase in cash conversion cycle will reduce market capitalization of food and beverages manufacturing firms in Nigeria. The study therefore recommends that food and beverages firms in Nigeria should reduce their conversion cycle in order to generate more profit since it has a negative significant effect on market value.

Keywords: Working Capital, Market Value, Food and Beverages Companies, Nigerian Stock Exchange

INTRODUCTION

Survival of any business depends largely on its ability to manage its resources most especially its working capital, which are cash and other related short term assets. The manufacturing unit is one of the largest units of the Nigerian economy, and it plays a vital role in developing a nation's economy (Rafiq, 2017). The success of a firm relies ultimately on its ability to generate cash receipt more than disbursement. Flow of cash challenges of numerous businesses are exacerbated by poor management of finances and specifically inadequate planning of cash requirement (Ystrom, 2010). If firms did not consider profit, their survival is not guarantee at long run. In contrast, firms that do not care about cash, might encounter the challenge of bankruptcy, for these purpose management of working capital ought to be a paramount focus since it ultimately influence the profitability of the organization (Ricci & Vito, 2000). Working capital management is important to manufacturing companies with most of their assets being current assets (Saleem&Rehman, 2011). The nexus between profitability and liquidity is important because it determines success or failure of business. If management of working capital is not properly given adequate attention, the firm may fail and go bankrupt (Kargar&Blumenthal, 1994). Each entity(whether profit focused organization or not),regardless of size as well as nature of operations, require the management of

Effect of Working Capital Management on Market Value of Quoted Food and Beverages Manufacturing Firms in Nigeria

working capital for organizational survival. Working capital is a significant determinant for profitability, solvency, and survival of business (Mukhopadhyay, 2004). Management of working capital is a critical area while making cash as well as profitability comparisons among entities which involve the choice of the amount and composition of short term assets needed and means of financing the business (Eljelley, 2004). The greater the comparative proportion of short term assets, the lesser the risk of running out of liquidity, all other outcome being equal (Ehiedu, 2014). Shin and Soenen (1998) contend that shareholders value creation depends on the efficient working capital management while Smith (1980) opined that profitability and liquidity are the salient goals of working capital management.

The need of capital in a business operations whether retail shop or large manufacturing company cannot be overlooked. This is because capital is the most frequent determinants in both small as well as large company group (Adebisi&Gbegi, 2013). Therefore, good management of capital that is put into the business results in effective management of finance. All business organizations need an adequate level of working capital. The influence of working capital on profitability is very significant therefore, it should be managed very well (Ehiedu, 2014). In a situation where there is an excess capital for routine operations, it may result in unnecessary acquisition and stockpiling of inventories which may lead to waste. In contrast organization cannot pay day-to-day expenditure of running its activities without proper management of fund. Efficient management of working capital influences liquidity as well as profitability of organizations. However, maintaining an optimal level of working capital is the central part of the problem as it is strongly related to the trade-off between risk and return. Nonetheless, it is difficult to point out as to how much working capital is needed by a particular business organization. The level of financial performance displayed in Nigeria by most business organizations is not sufficient especially with regards to working capital management (Abiodun& Samuel, 2014). In spite of the effort made to attain a good working capital management, there is continuous declining in the level of working capital in the nature of inadequate inflow of cash which cannot sustain daily cash needs of the manufacturing firms. Reduced working capital specifically limit cash, in the long run, causes poor financial performance and survival for the business as it cannot easily pay off creditors (Egbide, Uwuigbe&Uwalomwa, 2013). Therefore, efficient cash management is a basic component of the overall organization policy which assists in generating fund to shareholder.

Some research has been conducted on how working capital management influences profitability and only a few studies have been carried out on market value. Based on the findings currently available, only one study was conducted in food and beverages by Ademola and Kemisola (2014) by using the Account Payment Period (APP), Cash conversion Circle, Stock Conversion duration, Creditors Collection duration, as working capital management measures. The study majorly aimed at achieving how the market value of listed food and beverages manufacturing firms in Nigeria are affected by working capital management while the specific objectives are to:

- i. Ascertain the effect of cash conversion cycle on market value of food and beverages manufacturing firms in Nigeria.
- ii. Examine current ratio effect on market value of quoted food and beverages manufacturing firms in Nigeria.
- iii. Determine the effect of quick ratio on the market value of quoted food and beverages manufacturing firms in Nigeria.

From the above objectives, the following hypotheses were formulated.

- H₀₁:** Cash Conversion Cycle has no significant effect on the market value of quoted food and beverages manufacturing firms in Nigeria.
- H₀₂:** Current ratio has no significant effect on market value of quoted food and beverages manufacturing firms in Nigeria.
- H₀₃:** Quick ratio has no significant effect on market value of quoted food and beverages manufacturing firms in Nigeria.

Thus, the importance of this study cannot be overstated, as it is expected to add to the existing literature and encourage further research.

LITERATURE REVIEW

Conceptual Framework

Concept of Working Capital Management

Working capital is a financial term which means the amount of capital that is available for business daily transaction. Nwaezeaku (2006) defined working capital as the degree of convertibility to cash with which any asset can be exchanged for cash (sold at a fair market price). Osisioma (1996) opines that the difference between current assets and current liabilities is referred to as working capital which forms the stocks available in meeting future financial demands and contingencies of the organization. Working capital management had become an important issue in organisations where lots of financial administrators, are finding it difficult to recognize the necessary drivers in the form of the determinant of working capital. Therefore, when a business does not manage its working capital properly, it will suffer cash shortages and this may lead to difficulties in paying obligations. As a result, in addition to profitability and value creation, working capital management is vital for ongoing concerns.

Concept of Market Value

The market value of a firm is the sum of the present value of all assets held by the firm. The market value of a firm can also be taken as the replacement value of its tangible assets (Wang, Lu, Huang & Lee, 2013). The market value of a firm is easiest to estimate for Exchange-traded products such as stocks, share prices, and commodities, since their market prices are widely publicized and readily available and is a little more challenging to determine for over-the-counter instruments like fixed income securities. The concept of market value is mostly used in inefficient markets or in situations of disproportion where prices do not reflect the real market value. The market value is also different from fair value; because fair value depends on the two parties involved in a transaction contrary to market value. Fair value is used as a certainty of the market value of an asset for which a market price cannot usually be determined because there is no established market for the asset (Tsamis & Liapis, 2014).

Concept of Cash Conversion Cycle

Stewart (1995) ascribed that cash conversion cycle is a complex indicator relating the domicile investment amount in the property into a foreign currency gathered from a customer. Besley and Brigham (2005) as cited in (Gupta, 2017) opined that the duration of period from the purchase and raw materials payment to produce a finished goods is still the collection of debtors receivable linked with high market value in cash conversion cycle since it enhances the effectiveness of using the capital for business operations. Thus, duration of cash conversion cycle is a significant determinant of the effectiveness of management of capital available for operations. The cash conversion cycle according to Richards and Laughlin (2005) is an influential performance indicator for relating how better an organization is managing its capital.

Concept of Current Ratio

According to Singh (2004), current ratio is a liquidity ratio that measures a company's ability to pay short-term obligations or those due within one year. It tells investors and analysts how a company can maximize the current assets on its balance sheet to satisfy its current debt and other payables.

Empirical Review

Effect of Working Capital Management on Market Value of Quoted Food and Beverages Manufacturing Firms in Nigeria

Working capital management had become an important issue in organisations where lots of financial administrators, are finding it difficult to recognize the necessary drivers in the form of the determinant of working capital (Lamberson, 1995). Ademola and Kemisola (2014) ascertained the association between working capital efficiency and firm value using Nigerian Stock Exchange-listed food and beverages firms employing survey research design and primary data. Working capital management indicators are debtors Collection Period, stock Conversion duration, creditors Payment duration, Cash conversion Cycle, as well as Aggressive Investment Policy while market value was measure by Tobin Q. They found that ACP, ICP, APP, and CCC had a significantly positive effect on market value (Tobin Q). Also, AIP had a positive effect on Tobin Q. The method of data collection used by Ademola and Kemisola may lead to biased result since not every staff will decide to give accurate information about their working capital hence, the result may be misleading.

Emmanuel and Agyapong (2017) study correlation among working capital management and firm value of quoted firms in South African. Regression analysis was employed to obtain the outcome for 75 companies spanned 2003-2012. A significant positive correlation among company value and both inventory conversion as well as receivables conversion periods were obtained from the study. Also, the correlation among the cash conversion cycle and company value is positive but insignificant; while there is a significant positive correlation among accounts payable deferral duration as well as profitability; company size as well as value are significantly positively associated, and there is a significant inverse correlation among leverage and firm value. Limin (2012) study the data of 47 companies airline companies within 2003-2011 on the influence of working capital management on firm value. Working capital management was measure by cash conversion cycle, and the firm value was measure by market value. The outcome indicated a significant inverse correlation among cash conversion cycle and firm value. Therefore, the inverse association becomes weaker after adding more control determinants like-current ratio. This is because working capital management influence entity liquidity and finally affects its value, centred on the outcome, managers can create firm value by decreasing cash conversion cycle.

Bandara (2015) ascertained working capital management policy impact on firm value in Sri Lankan Companies. Data were obtained from 74 listed companies spanning 2009/10-2013/14 with total of 370 firm-year observations. Descriptive statistics, association as well as regression were used as determinants of analysis. Organization working capital investment strategy as well as working capital financing policy (WCFP) served as explanatory determinants. The firm value was determined regarding Market Value Addition (MVA) as a dependent indicator. Result indicates that WCIP as well as WCFP jointly indicated a negative correlation to MVA. A negative significant correlation exists among the firms' degree of aggressiveness of WCIP as well as MVA. It indicated that the minimum amount of investment in short term assets leads to having higher MVA of the entity, while there is no significant outcome to back the negative correlation among WCFP and MVA in any further results. Ehiedu (2014) studied the impact of liquidity on the profitability of some choosing companies using the financial statement analysis (FSA) approach. Ehiedu found that there is a positive significant association between current ratio and profitability, there is no definite significant association between Acid-test ratio and profitability, and there is no significant positive association among return on capital employed as well as profitability.

Egbide, Uwuigbe, and Uwalomwa, (2013) assessed the correlation among Liquidity Management and Profitability of Nigeria Manufacturing Companies, using 30 manufacturing companies spanning 2006-2010. Found that current ratio as well as liquid proportion index is positively related with profitability whereas cash conversion duration is inversely correlated to the profitability of firms, and the correlation in all the cases was, thus, insignificant, showing a small variation of liquidity effect on profitability. Khan, Jawaid, Arif and Khan (2011) assessed a separate analysis of the effect among working capital on profitability of Pakistanis companies. Evidence indicated average collection duration has insignificant influence on profitability apart for sugar as well as allied unit. Also, debt ratio also has the negligible effect on profitability apart for engineering industry. Therefore, average payment duration has negligible

influence only in sugar as well as allied unit. Stock turnover, current ratio, as well as company size have significant influence on profitability in all areas.

Wasiuzzaman (2015) ascertained the correlation among working capital efficiency and firm value and the influence of financing challenges on this association, in Malaysia. Using ordinary least square regression technique, the study finds that improvement in working capital efficiency via decrease in working capital investment leads to high firm value. Nevertheless, the association is influenced by the financing challenges faced by a firm. In terms of financially challenges by the firm, working capital efficiency significantly increases firm value, but it is discovered to be insignificant for unchallenged organizations.

Edi (2010) examined working capital management effect on market valuation and profitability of 172 Malaysian listed companies spanning 2003 to 2007. Working capital component was measured by cash conversion cycles, current proportion, current asset to total asset index, short term obligations to total asset index, as well as debt to asset ratio to the firm's performance by considering firm's value, Tobin Q, as well as profitability (return on asset and return on invested capital). Correlation as well as multiple regression analysis, was used and outcome indicate a significant negative correlation exist among working capital indicators and company's performance. Therefore, it indicates the significant of managing working capital requirements to ensure an improvement in company's market value and profitability and this characteristic must form part of the firm's strategic and operational thinking so as to operate successfully as well as efficiently.

Theoretical Framework

Operating Cycle theory

Richards and Laughlin (1980) in their seminar paper, invent this technique with working capital as the main structure of determinant term as the working capital duration. They maintained that the technique is greater to other types of working capital management determinations that depend on proportion analysis or a disintegration of working capital as maintained. Cash Conversion duration is determined by Lessing the payables deferral duration usually $360/\text{annual creditors turnover}$ from the total of the stock turning duration usually $360/\text{annual stock turnover}$ and the debtors conversion duration usually $360/\text{annual receivables turnover}$. Additional in recent times, the number of days per annum that appears in the denominator as 360 has been substituted by 365 to better accuracy. Jerome and Sydney (1968) recommended that to evaluate perfect level of working capital, operating cycle method has been considered as an effective tool, through which the flow of cash invested is identified throughout, from the stage of purchase of raw materials to finished goods and flow of cash back to business through cash sales or collection from debtors.

The theory of operating cycle centers on explaining a cycle that begins from the payment for the purchase of raw materials, through to its transformation and the emergence of new product, to the collection of receivables from the buyers and possible debtors of the interaction as a result of the stock sale. Undoubtedly, financial managers and all related financial analysts appreciate at least at an intuitive level that all working capital investments do not have the same life expectancy, and their transformation rate to usable flows of liquidity is always not at the same speed (Richard & Laughlin, 1980). Lambrix and Singhvi (1979) employing the working capital duration method to management of working capital further recommended that venture in working capital could be achieved well as flows of cash could be enhanced by decreasing the duration of time of the physical flow from receipt of unprocessed material to consignment of manufactured goods, that is stock management, and by recuperating the terms on which organizations sells goods as well as receipt of cash. According to operating cycle theory when organizations grant more open-minded credit conditions to its customers there is a higher propensity of having a bigger, but in due course less cash investment in cycle (that is, the stock turnover) indicated the number of times with which business organization convert the entirety of their unprocessed materials stock, their work-in-progress and in the end the manufactured goods into product sales.

Trade - off Theory

The trade-off theory means a design that organizations select the combinations of debt finance as well as equality fund to use by considering both the cost and benefits on it. The classical view of the hypothesis goes back to Kraus and Lichtenberger (1973) who taking a balance among the deed-weight. The cost of bankruptcy and the serving benefit of debt. Often agency costs are also included in the balance. Trade-off theory is seldom set up as a competitor theory to the pecking order theory of capital combination. The principal purpose of this theory is the exchange of information which states that corporation is normally financed partially with liability and partially with shares. It opined that there is an edge to fund with liability the tax benefits of debt and there is a cost of financing with debt the costs of financing distress including bankruptcy cost for instance staff leaving, creditors demanding disadvantage payment conditions, bondholder/stockholder internal strife, etc. the marginal benefits of additional increase in debt diminishes as debt proliferate while the marginal cost soars, so that the company that is perking up its total value will aim on this trade-off when selecting how much liability and equity to use for financing.

Though, some literatures had supported the liquidity/profitability trade-off theory. These comprised; Bhunia and Brahma (2011); Welch (2012); Sunny (2013); Ehiedu (2014) and Ravivathani (2015). In these literatures, the significantly negative correlation between liquidity management and profitability were the results. However, this study will draw its base from both the Trade-off Theory and Operating Cycle theory.

METHODOLOGY

Descriptive investigative design has been adopted for this study. We also employ the use of secondary source of data collected from the individual financial reports of the firms from 2008 to 2017(a period of 10 years).The study is limited to all the Food and Beverages manufacturing companies quoted on the Nigerian Stock Exchange as at December 2017 which are 16 while censor is used to sample 9 out of the population.The technique for analyzing the data is the econometric method which makes use of economic hypothesis in combination to estimate the economic variables.The analysis is aided by E-View 9 package andmultiple regression is our tool of analysis.The independent variable is measured using Cash conversion circle, current ratio and quick ratio while the dependent variable is market capitalization.

$$MC_{it} = \alpha_0 + \alpha_1 CCC_{it} + \alpha_2 CR_{it} + \alpha_3 QR_{it} + U_{it}$$

Where;

MC_{it} = Market Capitalization of firm i at time t

CCC_{it} = Cash Conversion Cycle of firm i at time t

CR_{it} = Current Ratio of firm i at time t

QR_{it} = Quick Ratio of firm i at time t

U_{it} = Disturbance Term of firm i at time t

α = Intercept

$\alpha_1 - \alpha_3$ = Coefficient of the Independent Variables.

Variables are in their natural logarithm form.The decision to test the hypothesis of the study is as follows: If the p-value of the t-coefficient is less than 1% (0.01) or 5% (0.05), the null hypothesis is rejected, and otherwise, we fail to reject it.

Multiple regression analysis is employ since it has the following edge: firstly, it has the benefit of giving more informative data as it consists of both the cross-sectional information and time series data which make it panel data for this study. The period is chosen to make the study more recent and the chosen population is considered so as to make a good generalisation on the analysis. Wasiuzzaman (2015), Usama (2012), Khan, Jawaid, Arif and Khan (2011), Ganesan (2007), Afza and Nazir (2007) also used the same method in their studies.

RESULT AND DISCUSSIONS

The data for the analysis comprises of cash conversion cycle, current ratio and quick ratio as the independent variables and market capitalisation as independent variable. The market capitalization is normalised by the log of the absolute value of company market capitalization. The analysis carried out include the descriptive statistics, variance inflation factor (VIF), of the independent variable, Heteroskedasticity test, correlation result, Histogram normality test and the regression result.

Data Analysis and Interpretation of Results

Table 1: Descriptive Statistics

	MC	CCC	CR	QR
Mean	7.567960	56.40000	0.924000	0.495000
Median	7.426748	73.00000	0.865000	0.430000
Maximum	8.066652	98.00000	1.440000	0.840000
Minimum	7.178017	8.000000	0.560000	0.240000
Std. Dev.	0.311785	38.20054	0.300992	0.212531
Skewness	0.512512	-0.302082	0.370848	0.382813
Kurtosis	1.694296	1.242283	1.724309	1.681797
Jarque-Bera	9.185118	11.51528	7.258329	7.746139
Probability	0.010127	0.003159	0.026538	0.020794
Sum	605.4368	4512.000	73.92000	39.60000
Sum Sq. Dev.	7.679588	115283.2	7.157120	3.568400
Observations	80	80	80	80

Source: Eview Output (2020)

Descriptive statistics summarize the variables of the study as well as the total population of study. Market capitalization (MC) has a Mean of 7.567960 which means that the addition to market value as measure by market capitalization is 7.567960 with Median of 7.426748. It also has a standard deviation of 0.311785. The market capitalization Skewness is 0.512512 and Kurtosis of 1.694296. The probability of Jarque-Bera indicates that it is not normally distributed because it has a probability which is less than 5. Cash conversion cycle (CCC) has a Mean of 56.40000 which means that the time taken for food and beverages firm to convert their raw material to cash is 56.40000 with Median of 73.00000. The maximum and minimum days taken to convert raw material to cash are 98 days and 8 days respectively. The standard deviation of cash conversion cycle is 38.20054 while, Skewness is -0.302082 and Kurtosis value of 1.242283. Cash conversion cycle is not normally distributed because the probability of Jarque-Bera is less than 5%. The current ratio (CR) mean is 0.924000 with a median of 0.865000. It also has a standard deviation of 0.300992 which signifies that current ratio not is normally distributed and skewness of 0.370848 while the kurtosis stand at 1.724309. In like manner, quick ratio has a mean of 0.775000 with median of 0.670000. Furthermore, its standard deviation is 0.495000 and 0.382813 for Skewness and 1.681797 for kurtosis.

Effect of Working Capital Management on Market Value of Quoted Food and Beverages Manufacturing Firms in Nigeria

From the result, it means that maximum market capitalisation of food and beverages firm in Nigeria is 8.066652 kobo as maximum addition based on the working capital management while its corresponding minimum value is 7.178017 kobo. In the same vain, Maximum CR is 1.440000 and 0.560000 for its minimum value. The maximum and minimum value of quick ratio is 0.80000 and 0.240000 which means that the current ratio has a maximum distribution based on working capital management to the extent of 0.80000. The total observation of the data is 80.

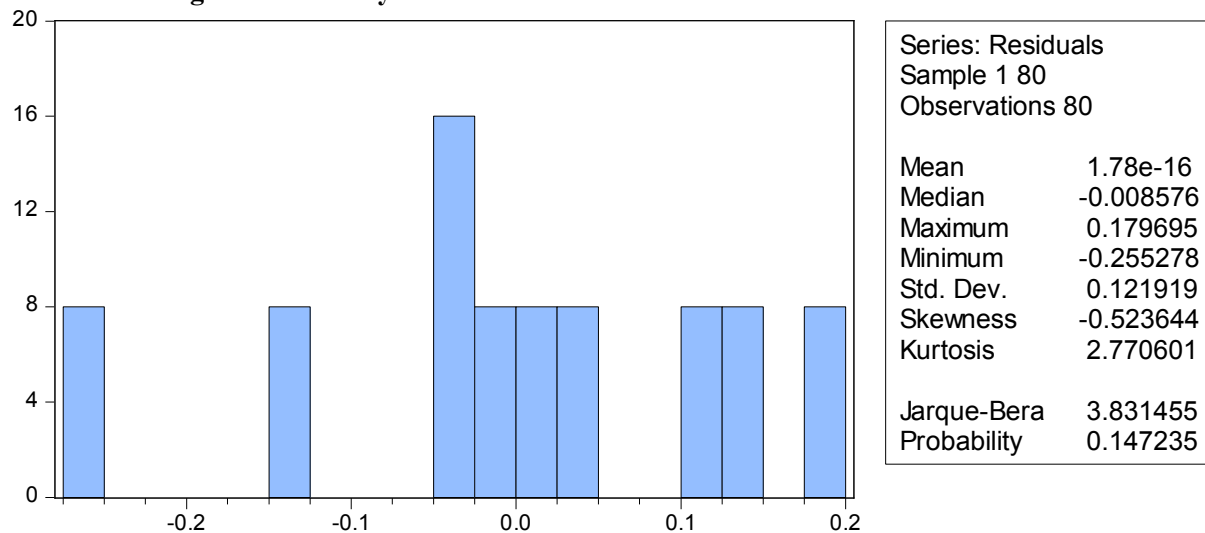
Table 2: Correlation Result

	MC	CCC	CR	QR
MC	1.000000	-0.917949	-0.726343	-0.622106
CCC	-0.917949	1.000000	0.831523	0.726925
CR	-0.726343	0.831523	1.000000	0.972602
QR	-0.622106	0.726925	0.972602	1.000000

Source: EviewOutput (2020)

The correlation result indicates that market capitalization has a negative correlation with all working capital management as indicated by the result with cash conversion cycle to the extent of -91.8% while -0.726343 to current ratio and -0.622106 to quick ratio.

Table 3: Histogram Normality Test



Source: EviewOutput (2020)

The result from the normality result indicates that the variables are normally distributed because the probability of Jarque-Bera is 0.147235 which is greater than 5%.

Table 4: Summary of Regression Result

Variables	Coefficient	t-values	P-values	VIF
Constant	7.931604	83.79022	0.0000	
CCC	-0.008232	-9.208415	0.0000	5.413815
CR	0.082517	0.246208	0.8062	4.723940
QR	0.049299	0.128401	0.8982	3.091025

Effect of Working Capital Management on Market Value of Quoted Food and Beverages Manufacturing Firms in Nigeria

R ²	0.847092			
Hausman	1.0000			
Adj. R ²	0.841057			
F-stat.	140.3441			
F-sig.	0.000000			
Heteroskedasticity Obs R-square	25.60505			
Heteroskedasticity Prob	0.3220			

Source: EviewOutput (2020)

Breusch-Pagan Godfrey was used to test for the presence of heteroskedasticity and the results shows Obs R-square and prob of 25.60505 and 0.3220 respectively. The result indicates the absence of heteroskedasticity. Variance inflation factor of cash conversion cycle, current ratio and quick ratio is 5.413815, 4.723940 and 3.091025 respectively which indicate that the independent variables are moderately correlated. Hence, there is no multicollinearity between the variables. From the result of Hausman test, random model is more appropriate because the P-value is 1.0000 which is greater than 5%. Therefore, the interpretation of the result is based on the random model result. The coefficient of determination R-square is 0.841057 which means that the independent variables used in the study explained variation in market value to the extent of 84% while the remaining variation is explained by other variables not captured in the model. The model is fit with f-statistics of 0.000000 and cash conversion cycle has a negative significant effect on market capitalization with p-value of 0.0000 which means that cash conversion cycle will influence market value of food and beverage manufacturing firms in Nigeria. Also, current ratio has a positive but insignificant effect on market capitalization with p-value of 0.8062 which is greater than 5% level of confidence. This means that current ratio has no significant influence on market value of food and beverages firms in Nigeria. Quick ratio has a positive but insignificant effect on market value of food and beverages firms in Nigeria. Cash conversion cycle has coefficient of -0.008232 which means that market value will decrease by same amount if firms does not minimize the number of cash conversion cycle and its t-statistics is -9.208415. Also, the coefficient value of current and quick ratio is 0.082517 and 0.049299 respectively. Since the variables have no significant effect on market value, it therefore means that current ratio as well as quick ratio will not influence market value of food and beverages firms in Nigeria. Its corresponding t-statistics is 0.246208 and 0.128401.

Discussion of Findings

The result of the model reveals that cash conversion cycle has negative significant effect on market value of food and beverages firms in Nigeria as shown by the p-value of 0.0000 which means that increase in cash conversion cycle will decrease the market value of food and beverage companies in Nigeria. It therefore means that food and beverages companies in Nigeria should shorten the days of cash conversion cycle which will translate to increase in their market value. The result of the effect of cash conversion cycle on market value of this study is consistent with the study conducted by Daniel and Ambrose (2013), Egbide, Uwuigbe and Uwalomwa (2013), Limin (2012), Quayyum(2012), Benos-Caballero, Garcia-Teruel and Martinez-Solano (2011), Alipour (2011), Raheman and Nasr (2007) that cash conversion cycle has a negative significant effect on market value but inconsistent with the studies of Ademola and Kemisola (2014), Usama (2012), Sharma and Kumar (2011), Samuel and Benjamin (2011), Lazaridis and Tryfonidis (2006) that cash conversion cycle has positive effect on market value.

Also, the result reveals that Current ratio has insignificant effect on market value of food and beverages firms in Nigeria which is align to the study of Hayajneh and Yassine (2011), Ganezsan (2007) and Lyroutdi and Lazardis (2000) but inconstant with the study of Ehiedu (2014) and Khan, Jawaaid, Arif and Khan (2011) that current ratio has significant effect on market value of firms. Furthermore, quick ratio has

Effect of Working Capital Management on Market Value of Quoted Food and Beverages Manufacturing Firms in Nigeria

positive insignificant effect on market value of food and beverages firms in Nigeria which is consistent with the findings of Ehiedu (2014) and Lyroutdi and Lazardis (2000). The result evidence that working capital management explained variation in market value to the extent of 32%. Also, from the result, current ratio and quick ratio has no significant effect on market value of food and beverages firms in Nigeria under the period of study.

CONCLUSION AND RECOMMENDATION

The study examined the effect of working capital management on market value of food and beverages companies in Nigeria. From the analysis, cash conversion cycle has negative significant effect on market capitalization. The study therefore concludes that, cash conversion will decrease market value if the company did not reduce their conversion cycle since it has negative significant effect on market value. Current ratio has positive insignificant effect on market capitalization of food and beverages companies in Nigeria. The study therefore concludes that other factors that influence market value should be look into since it has no significant effects its market value. Also, the study concludes that quick ratio has positive insignificant effect on market capitalization of food and beverages companies in Nigeria. Current ratio and quick ratio will not affect market value of food and beverages firms in Nigeria since they have insignificant p-values. Based on the finding of the study, the study recommends that:

- i. Food and beverages firms should understand the association that exists between various working capital components and market value and the direction that they affect the market capitalization for effective management of the working capital
- ii. Also, manager must increase the efficiency and effectiveness of working capital management most especially current ratio since Potential creditors use this ratio in determining whether or not to make short-term loans and also give a sense of the efficiency of a company's operating cycle or its ability to turn its product into cash.
- iii. Food and beverages companies should manage its quick ratio which is the management of short term financial liabilities because this will enhances the market value of an organization.

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Effect of Working Capital Management on Market Value of Quoted Food and Beverages Manufacturing Firms in Nigeria

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Effects of Audit Firm Size on Earning Management of Listed Consumer Goods Companies in Nigeria

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Abstract

Earnings management is a problem reported in many different backgrounds. many studies on audit quality highlighted that there is a connection between the audit quality and earnings management. The prior study's findings revealed that discretionary accruals decrease when the auditor is independent or if the audit firm is among the big 4, and advocate that big audit firms have advantage of enormous resources that enhances higher audit quality than the non-big 4 audit firms. This study examined the effect of audit firm size on earnings management proxied by discretionary accruals of listed consumer goods companies in Nigeria for a period of thirteen years from 2006-2018. Expost facto research design was adopted for the study. The result of the random effect regression analysis revealed that audit firm size has positive association and significant effect on earnings management. In view of the results, the study concluded and recommended that consumer goods companies who are interested should judge external audit firms on the basis of effectiveness, efficiency and output and not just the size of the audit firm as to whether they are among the big 4 or not. This is because audit firm size is not associated with less earnings management of consumer goods companies in Nigerian. Those who hire audit services in Nigeria should consider competence and experience of the audit firms rather than size that are likely to be associated with less earnings management of firms.

Keywords: Audit Firm Size, Earnings Management, Discretionary accruals, Consumer Goods Companies

INTRODUCTION

Poor external audit quality has been linked to corporate scandals, failures and earnings management in Nigeria and other parts of the world. This has necessitated reforms by different countries and institutions to improve audit quality. Some of the recent events that have contributed to the demand for high external audit quality of financial statements among others are the collapse of banks in Nigeria and other corporate failures around the globe such as Enron, WorldCom, Parmalat. This elicited interest of government, regulators, accounting profession and the public in the audit quality of companies. The consequences of weak external audit reporting in Enron led to the company's failure and the demise of its external audit firm Arthur Andersen one of the largest accounting firm in United States (Bryce, 2003). The uncertainty that arose from the global financial crisis which started in US in 2007 and spread to other countries was another catalyst that led to high demand for transparency in financial reporting and audit quality (Zureigat, 2011). With the emergence of financial scandals from a number of companies, such as Global Crossing, Xerox and WorldCom in the United States and Parmalat in Europe, the independence of the auditor, the role of the external audit companies and consequently the quality of the audit were called into

question (Bekiris & Doukakis; 2011). Generally, the demand for external audit is occasioned by the role audit plays. External audit enhances the credibility and reliability of financial statements. Stakeholders place more confidence on such statements if they have been examined by an independent auditor. External audit reduces the principal – agent conflict by ensuring that the financial statements are free from material errors and fraud (Wallace, 1980, & Imhoff, 2003). The higher the external audit quality, the greater the accuracy of information supplied by the audited statements (Davidson & Neu, 1993). Regulatory agencies have also intensified their watch over companies to possibly improve audit quality through monitoring activities of the board of directors.

The need for external audit may be seen as a response to the agency problem and the audit functions as a mechanism to attest to the accountability and stewardship of company management to reduce the possibility of innocent mistakes and deliberate misstatements such as fraud and management manipulation (Anderson, Francis & Stokes; 1993). This implies that, external audit plays crucial role in providing reasonable assurance to the quality of financial information presented to stockholders and other users of financial statements. It is believed that quality of financial statements is more credible when audit service is performed with high quality. However, provision of a high-quality audit is not a simple task and is affected by audit firm specific as well as client related factors. In a capital market where, financial reports are a key feature of communication with respect to public firms' performance and financial position, external audit is perceived as an effective tool which helps mitigate information asymmetry and conflict of interests between management and investors. Mansi, Maxwell and Miller (2004) identified two roles of an auditor namely the information role and the insurance role. As an information intermediary, an auditor is a person who independently and effectively verifies the correctness of company's financial statements before they are published. As an insurance provider, on the other hand, an auditor is a person who is legally accountable for damages to financial statement users. Auditors therefore carry out primary responsibility for promoting transparency in financial reporting processes that in turn generate high quality financial statements. In other words, auditors are one of the key drivers that help promote the transparency of the stock markets. The consequence of poor external audit in most cases manifest in financial scandals and failure of companies. The quality of reported earnings and the ability of external audit to effectively constrain earnings management (EM) of companies across the world and Nigeria in particular, have become considerably questionable due to recent accounting scandals (Badawi, 2008, & Enofe, 2010).

The recent financial scandals pose a great challenge to the veracity, credibility, utility or value relevance of the audit function. Badawi (2008) reported a list of companies involved in cases of accounting scandals related to poor external audit quality and earnings manipulations in the United States in the past decade. In Nigeria, corporate scandals such as the cases of Cadbury Nigeria Plc, African Petroleum plc, Savannah Bank plc, African International Bank plc, Wema Bank plc, Fin Bank plc and Spring Bank plc and more recently Intercontinental Bank Plc; Bank PHB; Oceanic Bank Plc. and Afri Bank Plc are well known publicly reported cases that resulted in misleading financial reports (Okolie & Aggoma 2008, Odia, 2015, Adeyemi & Fagbemi, 2010). There is therefore a concern about the quality of accounting reports and its relationship with the audit firm size. The issue is whether these corporate collapses as a result of earnings manipulation are as a result of the size of the audit firm. The conflicting results of prior studies such as Wijaya (2020), Lopes (2018), Affes and Smii (2016), Tyokoso and Tsegba (2016) who found positive relationship between Audit firm size and earnings management and those of Tyokoso and Tsegba (2015), Aliyu, Musa, and Zachariah (2015), Nawraish (2016), Tyokoso, Sabari, Dogarawa and Ibrahim (2016) who found a negative relationship between Audit quality and earnings management require that further studies be done to confirm or refute aspects of extant literature relating to audit quality and earnings management especially in developing economies like Nigeria. More also the studies mentioned above have some methodological limitations because they adopted ordinary least square regression as the method of data analysis to test the data collected. OLS has been critiqued for being simplistic and failing to adjust for unobserved time-invariant confounders that are largely industry/firm-specific (Woodridge, 2016). More also the above-mentioned studies did not test for normality multi-collinearity and heteroskedasticity properties of the data. However, when panel data are used for a study, regression is not adequate to analyze the data because it does not

account for the time and firm the above-mentioned studies did not conduct Hausman test to determine between fixed or random effect regressions which is more appropriate. Due to the lapses in methodology this study intends to fill the above-mentioned gap by adopting a robust methodology that will take care of the gap mentioned above. The main objective of the study is to examine the effect of Audit firm size on earnings management of consumer goods companies in Nigeria. In line with the objective stated above the following hypothesis was formulated and subsequently tested. The hypothesis is stated thus:

H₀₁: Audit firm size has no significant effect on earnings management of consumer goods firms in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Concept of Audit firm size

Arens, Elder, and Beasley (2012), define audit firm size as, “Certified Public Accountants (CPA) firms’ is a distinction of an audit firm based total revenues, number of partners, number of staff professionals, and number of offices. The four classifications based on such categories, are as follows: Big 4 international firms, national firms, regional and large local firms, and small local firms”. Colbert, Gary and Dennis, Murray (1999) state that audit firm size is, “a distinction of firm size based on number of CPA’s, number of partners, the total number of professional staff, and the total number of clients served by the firm”. CPA firms provide audit services, as well as other attestation and assurance services. Additional services provided by CPA firms include accounting and bookkeeping services, tax services, and management consulting services (Arens, et.al., 2012). Furthermore, Arens et.al. (2012) categorizes the size used to describe a public accountant office in the United States, namely:

- i. The Big Four International firms in which these firms have branches throughout the United States and around the world. The big four conducts audit services and other assurance services to mostly big companies in the United States and around the world.
- ii. National firms where the firm is large but much smaller than the big four. This firm has an affiliation with another firm in another country and has international capability.
- iii. Regional and large local firms where the firms have more than 100 professional staff. Some have only one office and serve clients primarily within commuting distances.
- iv. Small local firms have fewer than 25 professionals in a single-office firm. They perform audits and related services primarily for smaller businesses and not for profit entities.

Evidence suggests that many researchers including; DeAngelo, (1981), Palmorose (1988), Adeyemi and Fagbemi (2010) and Zureiget, (2011) use audit firm size as surrogate for audit quality. They assert that larger audit firms provide higher audit quality and command higher audit fees than smaller firms. Size is dichotomy classified; the larger audit firms are represented by big international audit firms. The international audit firms were the big 8 firms which as a result of mergers are now big 4 (Know, Lin and Tan, 2007). The big 8 firms existed in the 1980s and they were Arthur Andersen, Arthur Yong, Coopers and Leybrand, Eernest and Whinney, Deloitte, Haskins and Sells, KPMG, Peat Marwick, Price water house and Touche Ross. By 1989 they became big 6 when Ernest and Whinney merged with Arthur Yong to become Ernest and Yong and Deloitte Haskins and Sell merged with Touche Ross to form Deloitte and Touche. The big 6 became big 5 when in 1998 Coopers and Lebrand and Price water house merged to form Price water house Coopers. They became the big 4 after the demise of Arthur Andersen in 2001. The big 4 firms currently refer to Ernest and Yong, Deloitte and Touche, KPMG and Price water house Coopers, depends on the time period under consideration. Several reasons account for higher quality audit services provided by larger audit firms. First, no single client is too important to them, so they are less likely to compromise their independence (DeAngelo, 1981). Secondly, they have greater monitoring ability than smaller firms (Watts & Zimmerman, 1981). Thirdly, larger audit firms have greater valuable reputation to protect (DeAngelo, 1981). Fourthly, they have resources to provide robust training for their staff and with ‘deeper pockets’ they can withstand greater shocks from litigation (Dye, 1993). Fifthly, they invest more in audit technology as a differentiation strategy to provide high quality audit, whereas smaller firms provide more personalized services due to limited client portfolios and are expected to succumb to management requirements (Mahdi & Ali; 2009). Therefore, the size of audit firm is an important characteristic that reflects auditor independence. Thus, the issue of maintaining auditor

independence is more crucial for smaller firms than larger firms. A large body of research examines the relationship between audit firm size and audit earnings management

Concept of Earnings Management

According to Omoye and Eriki (2014) earnings management is recognized as attempts by management to influence or manipulate reported earnings by using specific accounting methods or accelerating expense or revenue transactions, or using other methods designed to influence short-term earnings. Earnings management according to them occurs when managers use of judgment in structuring transactions to alter financial reports, to either mislead some stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting information. According to Healy and Wahlen (1999) as cited in Algharaballi (2013) earnings management can be defined as managers use judgment in the financial reporting and in structuring transactions to alter financial reports to either mislead stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers. According to Algharaballi (2013) these definitions represent two common views of company management. The first view holds that management needs to exercise judgment in business operations and financial reporting since GAAP clearly requires management to make wise estimates and judgments. The second view is known as that of opportunistic earnings management, managers base their judgments and decisions on whether it will result in personal private gain (Healy &Wahlen, 1999, Jiraporn, Miller, Yoon, & Kim, 2008).

Earnings management may take different forms. But Matsuura (2008) identified two broad categories of earnings management namely, accruals earnings management and real earnings management. Accruals may be non-discretionary (normal), that is, accruals that derive from an entity's normal business activities, recognized within proper period but not paid or received for example, unpaid taxes and others bills. These are not subject to earnings management. Abnormal or discretionary accruals derive from adoption of accounting practices that are outside the rules in the preparation and presentation of financial information to achieve a desired objective. Accruals earning management is thus, the discretionary portion of accruals (Omar, Rahman, Danbatta and Suleiman (2014). Real earnings management is equated to discretionary cash flow from operations derived from the variance between actual cash flow and normal cash flow. Real earnings management is described by Roychowdhury (2006) as normal operational practices with the primary objective of meeting short-term earnings goals. Through accounting choices and intentional misapplication of accounting, managers may decrease earnings when earning are relatively high and increase earning when earnings are relatively low. This form of earning management is regarded as income smoothing, described by Rone and Yaari (2008) as "the dampening of fluctuations in reported earnings over time"

Empirical Literature

Wijaya (2020), examined the effect of audit quality on firm value in manufacturing companies listed on the Indonesian Stock Exchange in 2013 to 2017. Audit quality which is proxied by Big 4 and non-big 4 auditors has been proven to have a positive influence on firm value in manufacturing companies on the Indonesia Stock Exchange. Population of the study were all manufacturing companies listed on the Indonesian Stock Exchange. Sampling was carried out using a purposive sampling method. Research data were tested using multiple regression analysis. The results from the study show that audit quality has a positive effect on firm value in manufacturing companies on the Indonesian Stock Exchange. Lopes (2018), examined if there is a relationship between the manipulation of results and the quality of the audit, based on the study of the behavior of discretionary accruals in Portuguese non-listed companies. Collected on the SABI (Iberian Balance sheet Analysis System) database, the sample is composed of 4723 companies from 2013 to 2015. The empirical model of this study consists of a multiple linear regression in order to explain the relationship between the discretionary accruals and the audit firm size, debt, volume of business and profitability, based on the Modified Jones Model. The results suggest that

Effects of Audit Firm Size on Earning Management of Listed Consumer Goods Companies in Nigeria

there is a relationship between audit quality and earnings manipulation. The level of earnings management is significantly lower among companies contracting a Big 4 audit firm, as compared to companies using a non-Big 4 audit firm.

Afeeze and Smill (2016) investigated the impact of audit quality (proxy with audit firm size, auditor's reputation, and auditor's expertise) on earnings management (proxy with accounting earnings) of listed firms in Tunisia for a period of 5 years from 2005 – 2009. A sample of 20 companies listed on the Tunis stock exchange (TSE) belonging to the non-financial sector was selected for the study. Secondary data was collected from the financial reports of the selected companies for the five-year period under review. The data were analyzed using panel multiple regression. The findings revealed that audit quality has significant impact on earnings management. Specifically, the findings revealed that audit firm size, auditor's reputation, and auditor's expertise improve the quality of accounting earnings. Nawraiseh (2016) examined the effect of Audit quality (proxy with Audit fees, Audit tenure and affiliation with international big auditing firms) on earnings management (proxy with discretionary accruals) for the period of 5 years from 2006 to 2010. The study adopted *expost facto* research design. Secondary data were collected from a sample of 13 commercial banks listed on the Amman stock exchange (ASE) that had filed audit accounts and had had the external auditor for a five-year period were selected. The data were analyzed using the descriptive statistics and panel ordinary least square regression analysis via the help of E views 7 version. Hausman test and other pre and post diagnostic test were conducted on the panel data. The result showed that audit fees, audit tenure, and international big auditing firms have significance negative effect on earnings management.

Tyokoso, Sabari, Dogarawa and Ibrahim (2016) Examined the effect of Audit quality on earnings management of listed oil marketing companies in Nigeria for the period of 6 years from 2009-2014. The study adopted correlational research design based on positivist approach the design of the study composed of 10 oil and gas marketing companies listed on the Nigerian stock exchange out of which a sample of 9 were used based on availability of complete data. Secondary data were collected from annual reports and accounts of the sampled companies. The data were analyzed using panel multiple regression technique the result of Hausman specification test suggest that the fixed effect regression model is most appropriate for the data set. The result of the fixed effect regression model showed that audit firm size, auditor industrial specialization, client importance and audit committee financial expertise are positively associated with earnings management, while auditor tenure and auditor industry specialization are negatively associated with earnings management. Tyokoso and Tsegba (2015) investigated the effect of audit quality on earnings management of listed oil marketing companies in Nigeria for the period of 2004- 2013. The dependent variable earnings management was represented with discretionary accruals which were estimated using the modified jones model, while the independent variable audit quality was represented by audit firm size, auditor's industrial specialization and auditor tenure. The population and sample of the study consist of 10 oil marketing companies listed on the Nigerian Stock Exchange. Secondary data were collected from the annual reports and accounts of the sampled oil marketing companies listed on the Nigerian Stock Exchange. The data were analyzed using ordinary least square regression. The findings of the study indicated that both audit firm size and auditor's industrial specialization have insignificant negative effect on discretionary accruals, while auditor's tenure had a significant negative effect on discretionary accruals of the sampled oil marketing companies.

Aliyu, Musa and Zachariah (2015) examine the impact of audit quality proxy with (audit firm size, joint audit and auditor's financial independence) on earnings management of listed money deposit banks in Nigeria for a period of 8 years from 2006 to 2013 using secondary data and sample of 10 listed deposit money banks. The study used ordinary least square method of data analysis and adopted correlational research design. They found that audit quality has significant impact on earnings management. Also audit firm size and joint audit services have significant negative impact on earnings management, while a positive relationship exists between auditor financial independence and earnings management.

Theoretical Frame work

Signaling Theory

Michael Spence in 1973 propounded the theory, signalling theory is beneficial when relating to attitudes as soon as two parties (individuals or organisations) have access to different information. Naturally, one party the sender, must indicate how to communicate (signal) that information and the second party the receiver, must choose how to analyse the signal. The theory postulate that companies with good performance use financial information disclosure through the help of quality audit to send signals to the market. A high-quality audit sends a signal to the market that the financial statements are credible and reliable and this reduces information irregularity and increase company value. The signal of transparency, reliability and credibility gives assurance about the quality of company disclosure in financial statements to the stakeholders of safety of their investment and maximization of wealth. And this absolutely highlights the quality of the audit.

Theory of Inspired Confidence

Limperg, (1932) advocate both demand for and supply of audit services. The demand for audit services is primarily the need of interested parties of the company (that is shareholders and other stakeholders). These shareholders and stakeholders demand accountability from the management, in return for their investment to the company, because of a possible divergence between the interests of management and outside stakeholders, hence, audit of this information is necessary. However, the level of audit assurance that the auditor provide, depends on the ability of the auditor to act in such a way that he does not disappoint the expectations of outsider stakeholders, while, on the other hand, he should not arouse greater expectations in his report than his examination justifies. This theory links the stakeholders need for credible and reliable financial reports and the competence of the auditor to meet such need. According to Okolie (2014), the theory confers on the auditor high level of confidence as the only saviour that can give stakeholders all relevant information that will reduce information irregularity.

Agency Theory

According to Jansen and Meckling, (1976) the agency theory is very important in explaining the behavior when the principal (shareholders) delegate work to agent (manager) with expectation that the agent will make decision which are of the best interest to the principal. Agency theory explains the earnings management since managers are motivated to manage earnings in order to increase their bonus, compensations and commissions which are closely tied to the earnings of the firm (Booth & Schulz 2004, Shapiro, 2005). The agency theory is based on the relationship between the principal (shareholder) and the agent (managers). The separation of ownership from management and control in modern day business corporations provides the basis for the function of agency theory. This separation provides the opportunity for an agent (manager) to be appointed to manage the daily operations of the company. This relationship however, creates the potentials for conflicts of interests between the agent and principal, and requires monitoring costs associated with resolving these conflicts (Jensen & Meckling, 1976).

From the foregoing, agency theory explains better and clearer unethical practices in accounting and financial issues such as earning management (EM). This study therefore draws on agency theory to test the relationship between audit quality and the incidence of earning management in listed consumer goods companies in Nigeria. Agency theory is chosen because it better explains the motivation for earnings management and the association between audit quality as a monitoring mechanism, and earnings management than the other theories.

METHODOLOGY

The study adopts ex-post facto research design because the researchers do not have control over the variables mainly since the event have already occurred and cannot be changed by the researcher. The population of the study consist of 21 consumer goods firms listed on the Nigerian Stock Exchange as at 31st December 2018 out of which a sample of 17 firms were selected based on availability of data using

Effects of Audit Firm Size on Earning Management of Listed Consumer Goods Companies in Nigeria

purposive sampling technique. The study relied on historical data collected from annual reports and accounts of the sampled consumer goods firm for a period of 13 years, from 2006-2018. The period was selected to enable the study analyze the effect of audit firm size on earnings management over a long period of time as other studies mostly rely on three or five years. The data was analyzed using panel regression via the help of STATA 13 software.

Model Specification

Prior to estimating discretionary accruals, total accruals (TACC) were calculated as:

$$TACC_{it} = EARN_{it} - NCFO_{it} \dots\dots\dots(1)$$

$$DACC = TACC_{it-1}/TA_{it-1} = (1/TA_{it-1} + \Delta REV_{it} - \Delta REC/TA_{it-1}) + (PPE_{it}/TA_{it-1}) \dots\dots\dots(2)$$

Where:

DACC= discretionary accruals,

TACC_{it} = Total Accruals of Firm i, For Period t,

TA_{it-1} = the book value of the total assets of firm i for previous year,

ΔREV_{it} = firm i's change in revenues in year t,

ΔREC_{it} = firm i's change in receivables in year t,

PPE_{it} = firm i's gross value of property, plant, and equipment in year t,

NCFO_{it} = net cash flow from operating activities for firm i in period t;

EARN_{it} = earnings for firm i, period t.

The study employed panel regression, and the model used for the study is presented in equation below:

$$DCA_{it} = \alpha_0 + \beta_1 AFS_{it} + \beta_5 FSIZE_i + \epsilon_{it} \dots\dots\dots(3)$$

Where:

DCA_{it} = Discretionary Accruals for firm i in year t

AFS_{it} = Audit firm size for firm i in year t

FSIZE_{it} = Size of consumer goods for firm i in year t

α₀ = constant or intercept

β₁-β₅ = regression coefficients.

ε_{it} = error term

Variable measurement and definition

The study analyzed the effects of audit firm size on the earnings management of listed consumer goods firms on the NSE. Therefore, Audit firm size was dichotomized with 1 for big four audit firm and 0 for non-big four audit firm while earnings management was proxy using Discretionary Accruals. In addition to the key explanatory variables, firm size was included as a control variable that may affect earnings management. The definitions and computation of these variables as listed in Table1 were adapted from literature reviewed to allow for meaningful comparison of the empirical results with those of prior empirical studies.

Table1: Definition of Variables

Variable	Definition
DependentVariables	
Discretionary Accruals	(DCA) Total accruals less non- discretionary accruals

Explanatory Variables

Audit firm size (AFS) 1 if the company audited by Big 4 audit firm, otherwise, 0.

Control Variable

Firm Size (FSIZE) NaturalLogarithm of Assets

Source: *Researchers Compilation from literature reviewed (2020)*

RESULTS AND DISCUSSION

Descriptive Statistics

The descriptive statistics of the dataset from the sampled consumer goods companies are presented in Table 2 where the mean, standard deviation, minimum and maximum values of the data for the variables used in the study are described.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Discretionary Accruals	207	6.9338	10.7353	-44.16	42.85
Audit firm size	207	0.7632	0.4261	0	1
Firm size	207	7.39189	0.7730	5.25	8.68

Source: *Stata 13 Output Results based on study data (2020)*

Table 2 presented the descriptive statistics for the dependent and independent variables (DAC = Discretionary accruals, AFS = Audit Firm Size, FSIZE = Firm Size). The standard deviation of the variables ranges from 0.4261 to 10.7353. Audit firm size has the lowest standard deviation of 0.4261 followed by firm size with a standard deviation of 0.7730. The Table also showed an average value of 6.9338 for discretionary accruals. Since earnings management is measured by absolute value of discretionary accruals in this study, the value of 6.9338 is an indication that sampled companies were involved in earnings manipulations during the study period. The minimum and maximum values of discretionary accruals during the study period are -44.16 and 42.85 respectively. These values imply that some sampled companies were actually not involved in earnings manipulations during the study period while the highest manipulation of earnings by the sampled companies during the study period stood at 42.85. This further corroborates the inference of manipulation of earnings earlier revealed by the mean of DAC.

The Table further revealed an average value of 0.7632 for audit firm size. The value implies that seventy-six (76) percent of the sampled consumer goods companies was audited by the big 4 audit firms in Nigeria (KPMG, PWC, Ernst and Young, Akintola Williams Deloitte) during the study period. The mean value of seventy six percent further suggests that only twenty four percent of the consumer goods companies were audited by non-big 4 audit firms in Nigeria during the period of investigation. This shows that the audit market in the sector is dominated by the big 4 audit firms in Nigeria and just a few non- big 4 audit firms audited listed consumer goods companies in Nigeria. The minimum and maximum values of audit firm size during the study period were zero (0) and (1) respectively. The minimum and maximum values of audit firm size indicate that auditor size is measured by a dummy variable which takes the value of one if the company is audited by a big 4 audit firm and zero if otherwise.

Correlation Analysis

Table 3 presents correlation values between dependent and independent variables and the correlation among the independent variables themselves. These values are generated from Pearson Correlation

Effects of Audit Firm Size on Earning Management of Listed Consumer Goods Companies in Nigeria

output. The Table contains correlation matrix showing the Pearson correlation coefficients between the dependent and independent variables and among the independent variables of the study.

Table 3: Result of Correlation Matrix of Dependent and Independent Variables

Variable	DCA	AFS	FIRMSIZE
Discretionary Accruals	1.0000		
Audit firm size	0.2950	1.0000	
Firm size	0.2656	0.4998	1.0000

Source: Stata 13 Output Results based on study data (2020)

The correlation results in table 3 showed that correlation coefficients between the predictor variables were generally low. The highest coefficients of correlation of 0.4998 representing relationships between variables were between firm size and audit firm size followed by 0.2950, audit firm size and discretionary. The Table revealed a positive correlation coefficient between audit firm size and discretionary accruals 0.2950 of listed consumer goods companies in Nigeria during the period of investigation. The weak coefficient between audit firm size and discretionary accruals of the sampled companies is an indication that audit firm size is associated with increase in earnings management of listed consumer goods companies during the study period. This relationship is surprising and against expectation because big 4 audit firms have the resources and capacity to perform high quality audit that is capable of mitigating earnings management of firms. In addition, big 4 audit firms have a reputation to protect more than small audit firms which serves as incentive to provide high quality audit services to their clients. Also, the high risk of litigation costs associated with big 4 audit firms upon discovery of fraudulent financial reporting is an incentive for big 4 audit firms to detect and report manipulation of earnings.

Collinearity Test

Variance inflation factor (VIF) is employed to detect the presence or otherwise of collinearity among the explanatory variables. The existence of high correlation among the independent variables may be termed as multi-collinearity. The presence of multi-collinearity in a model has the potential of biasing the regression results. The VIFs for AFS and FSIZE are 1.33 respectively. As pointed out by Myers (1990), VIF of less than 10, is an indication of absence of multi-collinearity. This implied that there is no multi-collinearity problem in our model since the VIFs is less than 10.

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Variable	VIF	1/VIF
afs	1.33	0.750165
fszise	1.33	0.750165
Mean VIF	1.33	

Source: Reseacher's Computation from STATA 13 Output (2020)

Table 4: Selection of model to examine effect of audit firm size on earnings management

Fixed Effect Model		Random Effect Model		Hausman test	
F-test	P-value	F-test	P-value	F-test	P-value
5.35	0.0055*	11.84	0.0027*	1.13	0.5585

Source: Stata 13 Output Results based on study data (2020)

The Hausman test statistic of 1.13 with a corresponding p value of 0.5585 used to compare FE and RE models was not significant ($\chi^2 < 0.05$), indicating that the random effect estimation results were more reliable.

Table 5: Pooled OLS, Fixed effect and Random effect Regression Results

Variable	POOLED OLS				FIXED EFFECT				RANDOM EFFECT			
	Coef	Std error	t-value	Prob. >t	Coef	Std error	t-value	Prob. >t	Coef	Std. error	t-value	Prob.
AFS	5.45	1.93	2.83	0.005	8.78	3.59	2.44	0.016	6.82	2.93	2.33	0.020
FSIZE	2.19	1.06	2.05	0.041	3.75	1.81	2.07	0.040	2.97	1.53	1.95	0.052
CONS	-13.39	7.26	-1.84	0.067	-27.47	13.56	-2.03	0.044	20.38	11.12	1.83	0.067
R ²	0.1056											
ADJ R ²	0.0959											
F-value	12.05											
Prob.>F	0.000											

Random effects (RE) regressions were employed to analyze the effect of audit firm size (AFS) on earnings management measured by (DCA) while controlling for firm size (FSIZE). OLS has been critiqued for being simplistic and failing to adjust for unobserved time- invariant confounders that are largely industry/firm-specific (Woodridge, 2016). In this study, the FE and RE estimation techniques are used to control for all time-invariant differences between the industries such that the estimated coefficients of the FE and RE models cannot be biased due to such omitted time-invariant and industry/firm specific variables (Baltagi, 2005). Thus, the effects of audit firm size on earnings management measure were also through FE and RE modelling.

Hypothesis Testing

H₀: Audit firm size has no significant effect on discretionary accruals of listed consumer goods firms in Nigeria

Contrary to priori expectations, table 4 reported a positive relationship between audit firm size and earnings management that is significant at 5% based on coefficient and t- values of 6.82 and 2.33 respectively and p- value of 0.0020. The result implied that audit firm size is not able to constrain earnings management practices of listed consumer companies in Nigeria. According to a priori expectations, audit firm size is negatively associated with earnings management because large audit firms have more resources to conduct high quality audits than small audit firms. Also, big audit firms have a large client base which makes them less dependent on any one client that could make them compromise their audit quality. Big audit firms also have more investment in reputation capital which is at stake if they are found to have compromise audit quality than small audit firms. Based on the result, the null hypothesis of the study which states that audit firm size has no significant effect on earnings management of listed consumer goods companies in Nigeria is rejected and the alternative hypothesis is accepted that audit firm size has significant effect on earnings management of listed consumer goods in Nigeria.

Discussion of Findings

From the aforementioned findings that big audit firms have greater monitoring ability and invest more in audit technology than smaller audit firms this gives big audit firms edge over the smaller audit firms in terms of providing high audit quality this finding tends to follow the assertion by DeAngelo (1981) that large audit firms have less incentive to behave opportunistically and because they have more wealth and more valuable reputation which they are assumed to guard, hence ensuring audit quality. Stakeholders believe that big audit firms perform better and therefore assuring higher audit quality. The present finding is consistent with those of Wijaya, A.L. (2020), AP Lopes (2018), Tyokoso, Sabari, Dogarawa and Ibrahim (2016), Afeez and Smill (2016) who found a positive association between audit firm size and earnings management of firms. The result however, contradicts the findings of Tyokoso and Tsegba

(2015), Aliyu, Musa and Zachariah (2015) who documented a negative relationship between audit firm size and earnings management of firms.

CONCLUSION AND RECOMMENDATION

Based on the result of data analysis and discussion, the following conclusions were reached. The study provided empirical evidence on the association between audit firm size and earnings management (proxy by discretionary accruals) of listed consumer goods companies in Nigeria. Specifically, the study concluded that audit firm size has a positive and significant effect on discretionary accruals of listed consumer goods companies in Nigeria indicating that an increase in audit firm size does not constrain but increases earnings management of the sampled firms. Consequently, given the foregoing the study recommends that consumer goods companies who are interested in the services of external audit firms in Nigeria should judge audit firms on the basis of effectiveness efficiency and output and not just the size of the audit firm as to whether they are among the big 4 or not. This is because audit firm size is not associated with less earnings management of consumer goods companies in Nigerian. Those who hire audit services in Nigeria should consider competence and experience of the audit firms rather than size that are likely to be associated with less earnings management of firms.

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Effects of Audit Firm Size on Earning Management of Listed Consumer Goods Companies in Nigeria

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Impact of Working Capital Management on the Performance of Manufacturing Firms in Nigeria

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Abstract

This study examines the impact of working capital management on the performance of manufacturing firms (Beta Glass Nig. Plc). The primary objective was to examine the extent to which cash conversion cycle management affect return on asset (ROA) of manufacturing firms in Nigeria. The study runs from the period, 2010-2019. Ex-post facto research design method was used for data collection from annual financial report of Beta Glass Nigeria Plc. Data was collected from annual financial reports of Beta Glass Nigeria Plc. Multiple regression technique was used in analyzing the models with the help of E-view statistical package for testing the hypothesis. Return on Assets as a measure of performance was used as the dependent variable, cash conversion cycle was used as a measure of the independent variable, while size and growth were incorporated as control variables. The results showed that cash conversion cycle had a significant negative relationship with performance [ROA]. Based on the findings, the study recommends that firms should shorten the period between purchase of goods to pay for their purchases as to enhance profitability. They can also reduce the period between converting of raw materials into finished goods as to sell them.

Keywords: Working Capital Management, Manufacturing Firm, Return on Asset (ROA) and Cash Conversion Cycle

INTRODUCTION

The term working capital implies a company investment in short term assets, cash, short term securities, account receivables and inventories. Precisely, these assets are financed by short term liabilities, thus net working capital is current assets less current liabilities. Working capital management is the decision relating to working capital and short-term financing, and this includes managing the relationship between the company short term assets and its short-term liabilities. This enables the company to continue operations and to have enough cash flow at its disposal to satisfy both maturing short-term debts and upcoming operational expenses, which is the major objective of working capital management (DeLoof, 2003). Management of working capital is important to the financial health of business of all sizes (Padachi, 2006). This importance is hinged on many reasons, first, the amount invested in working capital are often high in proportion to the total assets employed and so it is vital that these amounts are used in an efficient way. Secondly, the management of working capital directly affects the liquidity and the performance of the corporate firm and consequently it's net worth (Yazdanfar, 2014). Working capital management therefore is aimed at maintaining a balance between liquidity and performance while conducting the day-to-day operations of a business concern.

Increased performance is one of the primary goals of financial managers. Without an acceptable level of performance, businesses will find it very difficult, if not impossible, to survive in the long run. Managers are therefore continuously adopting and adapting strategies to improve performance. And one of such strategies is through working capital management. Working capital is a financial metric which indicates the operating liquidity of organizations (Eljelly, 2004). Working capital is seen as a part of an organization operating capital, referring to current assets such as cash at hand, cash in bank, raw materials, work in progress, finished goods and accounts receivable. Management of working capital which aims at maintaining an optimal balance between each of the working capital components, that is, cash, receivables, inventory and payables is a fundamental part of the overall corporate strategy to create value and is an important source of competitive advantage in businesses (Deloof, 2003). In practice, it has become one of the most important issues in organizations with many financial executives struggling to identify the basic working capital drivers and the appropriate level of working capital to hold so as to minimize risk, effectively prepare for uncertainty and improve the overall performance of their businesses (Lamberson, 1995).

The major purpose of working capital management is to keep sufficient liquidity to sustain operations and to meet obligations (Eljelly, 2004). Hence, traditionally, efficiency of working capital management is based on the principle of speeding up collections as quickly as possible and slowing down disbursements as slowly as possible (Nobanee & AlHajjar, 2009) in order to minimize the risk of having insufficient funds to pay for the short-term liabilities. However, holding too much liquidity will work to reduce the risk at the cost of decreased performance. This trade-off between performance and risk is the key to working capital management (Dash and Hanuman, 2009) which aims at maintaining a balance between liquidity and performance while conducting the day-to-day operations of a business (Falope & Ajilore, 2009). Thus, efficient working capital management, as argued by Eljelly, (2004), involves the planning and the controlling of the current assets and the current liabilities in such a manner that eliminates the risk of inability to meet due short-term obligations while avoiding excessive investment in these assets. The existence of efficient working capital management practices can make a substantial difference between the success and failure of a company. Usually, working capital efficiency is measured using net working capital which is defined as the difference between current assets and current liabilities. When the current assets are higher than the current liabilities, the company is said to have working capital efficiency which shows the company's ability to remain a going concern and to have sufficient funds to satisfy both maturing short debt and upcoming operational expenses. Efficient management of working capital is vital for the success and survival of companies to enhance performance and contribution to economic growth.

To observe how working capital management can affect performance, one needs to take a look at a company's statement of financial position. In analyzing the financial statement, one has to take a look at company's cash flow, the accounts receivable and account payment periods. The lower the accounts receivable period ratio the more liquid is the firm. Accounts payment period compare creditors with the total credit purchases. It signifies the credit period enjoyed by the firm in paying creditors. Accounts payable include both sundry creditors and bills payable. The longer the period the more advantageous for the firm as such fund can be put to other uses. However, longer accounts holding period can erode a firm's credit worthiness. It is expected that accounts payable days should relate positively with firm performance. This is because, as accounts payable days increase, the firm tends to have more time to reinvest, acquire other short-term assets, and turn them over, before repaying their creditors. Based on the foregoing relationship between working capital management and firm's performance, a study as this is necessary. It is against this background that the study seeks to examine the effect of working capital management on the performance of Beta Glass Nigeria Plc. in Nigeria. The indicators are analyzed on a time series basis to give insight to the level of performance in the Beta Glass Nigeria Plc. in Nigeria.

The chief finance officers of most industries spend most of their time and effort on day-to-day working capital management. Still, due to the inability of financial managers to properly plan and control the current assets and current liabilities of their companies, the failure of a large number of businesses can be

attributed to the inefficient working capital management (Yazdanfar, 2014). Inadequate working capital leads the company to bankruptcy. On the other hand, too much working capital results in wasting cash and ultimately the decrease in performance (Chakraborty, 2008). The effectiveness of working capital management may impact on both the liquidity and performance of any corporation (Owolabi and Obida, 2012). Management strategy aimed at maintaining a balance between liquidity and performance has far reaching consequences on the growth and survival of the firm. Thus, the manager of a business entity is in a dilemma of achieving desired trade-off between liquidity and performance in order to maximize the value of a firm. Despite the emphasis placed on working capital management in ensuring performance of Beta Glass Nigeria Plc. in Nigeria, the management is yet to come on the path of sound performance growth. They are faced with two major issues. First, given the level of sales and the relevant cost considerations the management of Beta Glass Nigeria Plc. in Nigeria are faced with issues in determining the optimal amounts of account receivable, account payable and inventory that they will choose to maintain in order to enhance performance. Secondly, given these optimal amounts, what is the most economical way to finance these working capital investments in order to produce the best possible results? Perhaps, the inability of management to use working capital management indicators as part of key measures of performance may be responsible for the fluctuations in their financial performance.

LITERATURE REVIEW

Conceptual Frame Work

Concepts of Working Capital Management

Working capital management (WCM) refers to all management decisions and actions that ordinarily influence the size and effectiveness of the working capital (Kaur, 2010). It is a managerial accounting strategy which focuses on maintaining efficiency levels of current assets and current liabilities to ensure that a firm has sufficient cash flow in order to meet its short-term obligations. WCM is an essential part of financial part of financial management and contributes significantly to a firm's wealth creation as it directly influences organizational profitability and liquidity (Raheman and Nasr, 2007; Naser, 2013). The most important issue in WCM is the maintaining of liquidity in the day to day operations of the firm. Working capital management is important for creating value for shareholders. The working capital management meets the short-term financial requirement of a business enterprise. It is the investment required for running day to day business. In working capital management, the more descriptive term is networking capital which refers to the current assets less current liabilities which are typically accounts payable and other obligation due within one year. It also explained as follows: current assets, commonly called working capital represent the portion of investment that circulates from one form to another in ordinary conduct of business (Gitman, 2003). Working capital is the life blood of the firms. Decision concerning a firm's current assets and current liabilities are important because they influence the expected return and risk characteristic of the firm. The latter affect investment perception and result in a change in the market values of the firm's ordinary shares. The concept of working capital generally, there are two concepts of working capital that is gross concept and net concept. Gross concept of working capital is refers to all the current assets and represent the amount of fund invested in current asset. Thus, gross working capital is the capital invested in current assets. Current assets are those assets which can be converted into cash within the short time period. Gross working capital = Total current assets.

In this way, gross working capital refer to the firm's investment in current asst. gross working capital represents total of current asset to which includes cash in hand, cash at bank, inventory, prepaid expenses, bills receivables. Net concept of working capital is the excess of current assets over current liabilities. In other words, the different between current assets and current liabilities is called net working capital. Net working capital = current asset - current liabilities. In this way, net working capital is the difference of current asset and current liability (Axel, 2012). The working capital policy of the firm deals with the decision concerning investments in current assets and also concerning how these investments will be financed. Since the management of current assets and current liabilities is closely related, the term

working capital management is usually used in reference to the management of current assets, the management of current liabilities, and the management of all relationship between current assets and current liabilities. The objective of working capital is to maintain level of net working capital that maximizes the wealth of the firm's ordinary share holder. In general, working capital management is simple and a straight forward concept of ensuring the ability of the organization to fund the difference between the short-term assets and short term liabilities (Afza& Nazir 2007). In practice working capital management has become one of the most importance issues in the organization where many financial executive are struggling to identify the basic are working capital drivers and the appropriate level of working capital (Lamberson, 1995). The working capital requirement decides the liquidity and profitability of a firm and hence affects the financing and investing decision. Lesser requirement of working capital leads to less need for financing and less cost for capital and hence availability of more cash for shareholder.

Concepts of Cash Conversion Cycle

The level of accounts receivables, payables and inventories affects the liquidity position of the firm significantly, while current and liquidity ratios have been recognized traditionally. However, both of these ratios are static and their appropriateness for liquidity analysis is questionable. Therefore, a dynamic liquidity measure for the cash conversion approach had been introduced by Hager (1976). The cash conversion cycle (CCC) is the length of time that funds are tied up in working capital or the length of time between paying for working capital and collecting cash from the sale of working capital (Brigham & Houston, 2007). Brealey, Myers &Mracus (2001), defined cash conversion cycle as "the longer the production process, the more cash the firm must keep tied up in inventories". Similarly, the longer it takes customers to pay their bills, the higher value of accounts receivable. On the other hand, if certain firm can delay paying for its own materials, it may decrease the amount of cash it needs as there is no any cash outflow at the moment. In other words account payables reduced net working capital.

Management of Working Capital

Working capital management has lately become a better-known concept as more and more managers are starting to realize the benefits that a well- managed working capital can bring. In literature, authors generally refer to the concept of working capital as, working capital or net working capital. These two expressions are sometimes distinguished but in this thesis we will describe them with the same definition. We believe an assimilation of the two expressions is acceptable as the expressions are so closely related with each other in their meaning. Arnold defines working capital as, "the difference between current assets and current liabilities" (Arnold, 2008). After reviewing different sources about working capital, it has become clear that the definitions taken from Arnold is a very general definition that is frequent used to define both working capital and net working capital. This is also the definition that we will apply when we refer to working capital and net working capital in this thesis. Continuing with the concept of working capital management, Jeng-Ren, describes this as "companies' management of their short-term capital" (Jeng-Ren, 2006). The short-term capital is here referred to as the current assets and current liabilities. Accordingly, we intend to follow Jeng-Ren, definition about working capital management in our thesis. The management of working capital is impotent to the financial health of business of all sizes.

The amounts invested in working capital are often high in proportion to the total assets employed and so it is vital that these amounts are used in an efficient and effective way. However, there is evidence that business firms are not very good at managing their working capital. Given that many business firms suffer from under capitalization, the importance of exerting tight control over working capital investment is difficult to overstate. A firm can be very profitable, but if this is not translated into cash from operations within the same operating cycle, the firm would need to borrow to support its continued working capital needs. Thus, the twin objectives of profitability and liquidity must be synchronized and one should not impinge on the other for long. Investments in current assets are inevitable to ensure delivery of goods or services to the ultimate customers and a proper management of same should give the desired impact on either profitability or liquidity. If resources are blocked at the different stage of the supply chain, this will

prolong the cash operating cycle. Another component of working capital is account payable, but it is different in the sense that it does not consume resources; instead it is often used as a short term source of finance. Thus, it helps firms to reduce its cash operating cycle, but it has an implicit cost where discount is offered for early settlement of invoices.

Working capital management essentially concern itself with companies' management of their short-term capital. The short-term capital refers to the capital that companies use in their daily operations and it consists of companies' current assets and current liabilities. A well- managed working capital promotes a company's well- being on the market in terms of liquidity and it also acts in favor for the growth of shareholders value (Jeng-Ren, 2006). Current assets consist of capital tied up in cash, short-term financial investments, inventories, account receivables and other current assets (Brealey, Myers & Allen, 2006,). Current assets can be defined as assets used in companies' daily operations with the expectation to provide companies cash in return within a period no longer than approximately a year. The short-term investments can be seen as a safety net for companies due to the fast cash conversion ability (Raheman& Nasr, 2007). The current liabilities include short-term loans, the debts to suppliers as account payables, accrued income taxes, and interest payments on long-term debts, dividend and other current liabilities (Pass & Pike, 2007). Current liabilities provide external financing for companies and they are especially important for smaller companies that can experience difficulties to get long-term loans (Teruel& Mart, 2007). Working capital management aims to create an effective flow of the capital passing through the activities of current assets and liabilities. Figure 1 demonstrates a more detailed view of the working capital cycle and the arrows in the figure illustrate the cash flow movements within a company (Pass & Hike, 2007). When purchased material has undergone a manufacturing process and become finished goods, it is time to get the products sold to earn money. The money derived from sales are used to pay debtors, finance new investments and give money back to shareholders in dividends. From here the cycle starts over again (Pass & Hike, 2007).

Empirical Review

Musa (2018), examines the effect of working capital management on profitability of quoted bottling companies in Nigeria for the period, 2001-2014. The quoted bottling companies in the consumer goods sector are seven (7) as at 31st December, 2014. All the companies were studied using census approach. Specifically, the study seeks to assess the impact of inventory turnover days, account receivable days, account payable days and cash conversion cycle on profitability of the companies. The study adopted Correlational Research Design and data were analysed with the aid of OLS multiple regression technique, using 98 firm-year observations. Data were extracted from the audited annual reports and accounts of the quoted companies. The study found that inventory turnover days have positive and strong impact on profitability of quoted bottling companies in Nigeria at 1% level of significance. Also, account receivable days have a negative and significant effect on profitability of the quoted bottling companies at 5% levels of significance. However, account payable days found to have positive but insignificant influence on profitability of companies, while the cash conversion cycle has a positive and significant influence on profitability of the companies. This implies that, increase in the cash conversion cycle will generate more profits. While increase in inventory turnover days and decrease in account receivable days will generate more profits. The study concludes that, efficient management of working capital affects the performance of quoted companies in Nigeria. The study therefore recommends that, the management of the companies should give due importance to working capital management, and emphasize an optimal working capital levels in their respective companies, because of the positive impact of cash conversion circle and account payables on the profitability. This may attract more customers and consequently higher profit.

Uguru, Chukwu, and Elom (2018), determine the effect of working capital management on the profitability of brewery firms in Nigeria. This study adopts the ex-post-facto research design and employed the Ordinary Least Square (OLS) regression technique in analyzing the data. To ascertain the effect of working capital management (number of days account receivables are outstanding, number of days inventory are held, and cash conversion cycle) on the profitability (return on assets) of brewery firms

in Nigeria, the study used the sample of Nigerian Breweries Plc and Guinness Nigeria Plc for the period of 2006 to 2014. And the findings suggest that the management of the number of days account receivables are outstanding, numbers of days inventory are held, and cash conversion cycle are significant factors in the accomplishment of the profitability objective of brewery firms in Nigeria. It was recommended that brewery firms should reduce heavy investments in current assets to avoid high inventory costs, and excess cash holdings and account receivables. Nwachukwu and Odo (2017), investigated the effect of working capital management on the profitability of Flour Mills of Nigeria Plc. Specifically the study sought to determine the extent to which Number of Days of Accounts Receivable; Number of Days of Inventory; and Number of Days of Accounts Payable affect Gross Profit Margin (GPM) of Flour Mills of Nigeria Plc. The study was anchored on Trade-off theory of capital structure. The study adopted a relational descriptive non-experimental research design approach based on data derived from the past annual reports of Flour Mills of Nigeria Plc. Data collected was analyzed using Pearson correlation technique via the Statistical Package for Social Science (SPSS) version 20. The study reports a positive and significant influence of Number of Days of Accounts Receivable; Number of Days of Inventory; and Number of Days of Account Payable on gross profit margin (GPM) of Flour Mills of Nigeria Plc. The implication of the result which showed a positive impact of working capital management variables on gross profit margin of FMN indicates that the longer the number of days it takes a firm to be paid for sales made and inventory held, the less profit it is expected to make. The study recommended that Flour Mills of Nigeria Plc should be very apt in reducing the number of days of account receivables and inventories to a reasonable minimum in order to boost profitability.

Aregbeyen (2013), the efficiency of working capital management (WCM) has implications for firms' profitability. This paper empirically investigates the effects of WCM on the profitability of a sample of 48 large manufacturing firms quoted on the Nigerian Stock Exchange (NSE) for the period 1993 to 2005. It is aimed at filling the gaps in a previous study and contribute to expanding and enriching the literature particularly on Nigeria and at large. The analysis examined the responses of the firms' profitability to WCM and a number of augmenting factors. Profitability was alternatively measured by gross operating profit (GOI), net operating income (NOI) and return on assets (ROA). Likewise, WCM was measured by the average collection period (ACP), average pay period (APP), inventory turnover days (ITID) and comprehensively by the cash conversion cycle (CCC). The results indicate that the firms' have been inefficient with WCM and caused significant reductions in profitability. The paper concludes that improving the efficiency of WCM is essential and recommends that manufacturing firms in Nigeria should shorten the ACP, APP, ITID and reduce their CCCs. Boisjoly (2009), conducted the study to examine the impact of working capital management and corporate reinvestment policies and practices on financial ratios and distributions of 50 non-bank companies over time for the period from 1990 to 2004. Financial ratios related to working capital management and capital investment process include accounts receivable turnover, inventory turnover, accounts payable turnover, working capital per share, cash flow per share, and investment ratio. The results show the increasing of the average of five financial ratios: accounts receivable turnover, inventory turnover, accounts payable turnover, working capital per share and cash flow per share. Also, the results from ratio distribution tests show that the cash flow per share and the investment ratio have significantly changed over time which indicates that aggressive management of working capital and significant increase in productivity have resulted in significant improvement in cash flow per share and reduced the level of corporate reinvestment. Samiloglu and Demirgunes (2008), conducted a study to examine the effect of working capital management on company profitability of listed manufacturing companies in Istanbul Stock Exchange for the period from 1998 to 2007. Cash conversion cycle, accounts receivable period and inventory period are used to measure the effects of working capital management; return on assets is used as a profitability measure. Results from regression analysis show that profitability has a significant positive relation with firm growth and significant negative relations with accounts receivable period, inventory period and leverage.

Theoretical Framework

Monetarist Theory of Cash Management

This theory was propounded by (Friedman, 1956). He asserts that “the quantity theory is in the first instance a theory of the demand for money. It is not a theory of output, or of money income, or of the price level.” The demand for money on the part of ultimate wealth holders is formally identical with that of the demand for a consumption service. He regards the amount of real cash balances (M/P) as a commodity which is demanded because it yields services to the person who holds it. Thus money is an asset or capital good. Hence the demand for money forms part of capital or wealth theory. For ultimate wealth holders, the demand for money, in real terms, may be expected to be a function primarily of the following variables:

- i. **Total Wealth:** The total wealth is the analogue of the budget constraint. It is the total that must be divided among various forms of assets. In practice, estimates of total wealth are seldom available. Instead, income may serve as an index of wealth. Thus, according to Friedman, income is a surrogate of wealth.
- ii. **The Division of Wealth between Human and Non-Human Forms:** The major source of wealth is the productive capacity of human beings which is human wealth. But the conversion of human wealth into non-human wealth or the reverse is subject to institutional constraints. This can be done by using current earnings to purchase non-human wealth or by using non-human wealth to finance the acquisition of skills. Thus the fraction of total wealth in the form of non-human wealth is an additional important variable.
- iii. **The Expected Rates of Return on Money and Other Assets:** These rates of return are the counterparts of the prices of a commodity and its substitutes and complements in the theory of consumer demand. The nominal rate of return may be zero as it generally is on currency, or negative as it sometimes is on demand deposits, subject to net service charges, or positive as it is on demand deposits on which interest is paid, and generally on time deposits. The nominal rate of return on other assets consists of two parts: first, any currently paid yield or cost, such as interest on bonds, dividends on equities, and costs of storage on physical assets, and second, changes in the prices of these assets which become especially important under conditions of inflation or deflation.

Miller-Orr Cash Management Model

Pandey (2010) stressed that Miller Orr model overcame the shorting comings of Baumol model as it allows for daily cash flow fluctuation and assumes that net cash flow are normally distributed. Unlike the Baumol Model, this model allows for uncertainty cash flows and safety stocks (precautionary balance). According to Marsh (2009), “The Miller-Orr model imposes upper and lower limits which trigger buy/sell actions in order to bring cash balances back to an optimal ‘return point’. In doing this, it constrains the upward and downward movements of cash to within ‘acceptable limits. The model allows the company to set the lower control limit while the model determines the higher control limit and the average cash balance. Marsh further explained that an organization will either buy or sell securities for cash to return its cash balance to a normal return point. When the cash balance reaches the upper limit, an organization will buy securities in order to lower the cash balance to the return point. Likewise also, when the cash balance reaches the lower limit, an organization will sell securities to have the cash balance back at the return point. Jarrad (2000) also explained that the approach of Miller and Orr in 1966 was to assume that the underlying problem facing the manager is to keep enough cash on hand to meet daily transactions demand, while minimizing the opportunity cost of not holding a return yielding asset. He further explained that Miller and Orr focused their model on maintaining two boundaries; the upper and lower boundaries. If the upper boundary is crossed, it will trigger a transfer out of cash into an interest-bearing asset and if the lower boundary is crossed, it will trigger a transfer into the cash account. This study pitch its tents on this theory

METHODOLOGY

The purpose of this research is to contribute towards a very important aspect of financial management

with reference to Nigeria manufacturing firms. The study investigated if Cash Conversion Cycle has impact on Return on Assets (ROA) of Beta Glass Nigeria Plc. The study fully relied on historic accounting data sourced from the financial statements and accounts of Beta Glass Nig. Plc listed on the Nigerian Stock Exchange (NSE) for the period of ten years (2010-2019). Ex – post facto research design was adopted. Data was obtained from published annual reports and statement of accounts of quoted companies on NSE. This constitutes the most authoritative and accessible documents for assessing the performance of the affected firms. Section 335[2] of Nigerian Companies and Allied Matters Act of 1990 (CAMA) specifies that the balance sheet of a company shall give a true and fair view of state of affairs of the company at year-end. The data generated is being employed to run both cross sectional and time-series regression. The multiple regression technique was used with the aid of E-view statistical package in analyzing the models stated. The ideas behind regression analysis are the statistical dependence of one variable, the dependent variable, in this case, return on assets (ROA), on one or more variables, the independent variable or explanatory variable. Two control variables were also included in the model. These are Growth and Size (Nazir & Afza, 2009).

The general form for the model for a multiple regression analysis is given in the form below:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + \dots + b_nX_n + e \dots\dots\dots (1)$$

Where:

Y = Dependent variable
a = Constant of the equation
 $b_1 - b_n$ = Coefficient of independent variables
 $X_1 - X_n$ = Independent variables
e = Error Term.

In the above equation, the constants $b_1, b_2, b_3 \dots b_n$ determine the slope or gradient of the line and the constant term {a} determines the point at which the line crosses the Y-axis, otherwise known as the Y-intercept (Gujaranti, 1995). In order to test the hypothesis of this study which states as thus:

H₀: Cash Conversion Cycle does not have a significant impact on Return on Assets of Nigerian manufacturing firms, the model could be written as follows:

$$ROA = a + b \text{ CCC} + \text{Log Size} + \text{Log Growth} + e \dots\dots\dots (2)$$

Where:

ROA = Return on Assets
a = Constant of the equation
CCC = Cash Conversion Cycle
Log Size = Size (in logarithm)
Log Growth = Growth (in logarithm)
b = Coefficient of the independent variables
e = Error Term.

The dependent variable for this study is the Return on Assets (ROA) while the independent variable is the Cash Conversion Cycle. The control variables are the Size and Growth of the firms respectively. Return on Assets [ROA] is used as a measure of performance in firms (Nazir & Afza, 2009). In order words, ROA is a measure of the overall effectiveness of the firm in generating profit with available assets (Horne & Wachowicz, 2005). It is equivalent to Return on Investment (ROI), but more appropriate measure of the operating efficiency of a firm (Pandey, 2005). Though there exist various measures of the variable in empirical profitability studies, the most often used in the literature is Return on Assets being defined as:

$$\text{Net Income after Taxes} \dots\dots\dots (3)$$

Average Book Value of Assets

This variable has been used by Samilogu & Demirgumes (2008),Falope&Ajilore(2009); Nazir &Afza (2009) and others. Cash Conversion Cycle (CCC) is a proxy for working capital management efficiency. It is the flow of funds from the suppliers to inventory, to accounts receivables and back into cash. It is calculated as follows:

$$CCC = AR + INV - AP \dots\dots\dots (4)$$

Where AR is Accounts Receivable, INV is Inventory period and AP is Accounts Payable(Alipour,2011; Padachi, 2006; Richards and Laughlin,1980;and Raheman,et.al. 2010)

$$(AR) = \frac{\text{Accounts Receivable} \times 365}{\text{Sales}} \dots\dots\dots (5)$$

$$\text{Inventory (INV)} = \frac{\text{Inventories} \times 365}{\text{Cost of Sales}} \dots\dots\dots (6)$$

$$\text{Accounts Payable [AP]} = \frac{\text{Accounts Payable} \times 365}{\text{Sales}} \dots\dots\dots (7)$$

The control variables are Size of the firm and Growth in sales. Size captures economies of scale and it is believed that as a company becomes larger, it is better placed to reap economies of scale. The study measured size as the logarithm of total assets as follows:

$$\text{Size} = \log \text{ total assets} \dots\dots\dots (8)$$

This variable has been used by Gill(2010); Padachi(2006); Alipour(2011).

Growth of a firm is measured by variation in its annual sales value with references to previous year's sales. This ratio is fairly straightforward as follows:

$$\text{Growth} = \frac{\text{Sales}_1 - \text{Sales}_0}{\text{Sales}_0} \dots\dots\dots (9)$$

Where Sales₁ = this year's sales and sales₀ = previous year's sales.[Falope and Ajilore,2009; Garcia-Teruel and Solano,2007].

RESULT AND DISCUSSION

Table 1: Summary of Variables and their % Changes for Period 2010 - 2019

Year	ROA	%	CCC	%	AR	%	AP	%	Growth	%	Size	%
2010	.11	-	5.78	-	87.15	-	143.23	-	.52	-	7.28	-
2011	.13	18.18	5.85	1.21	125.52	44.03	177.74	24.09	.21	-59.62	7.36	1.10
2012	.09	-30.77	6.43	9.91	127.69	1.73	139.08	-21.76	.04	19.05	7.39	4.08
2013	.12	33.33	6.63	3.11	127.89	1.57	139.68	4.31	.04	0.0	7.89	6.77
2014	.14	16.67	7.56	14.03	107.09	-16.26	90.16	-35.45	.91	127.5	8.18	3.68
2015	.10	28.57	7.63	9.26	90.52	-15.47	106.35	17.96	1.10	20.0	8.23	6.11
2016	.24	33.33	7.64	1.32	65.73	-37.32	234.85	120.83	1.01	-18.19	8.52	3.52
2017	.34	41.67	7.57	-9.16	58.73	3.53	140.41	.40.21	.08	-21.72	8.83	3.64
2018	.49	44.12	7.87	3.96	58.23	-8.51	140.81	2.84	1.30	62.5	9.33	5.66
2019	.73	48.98	7.90	3.81	52.71	-9.48	125.98	-10.53	2.19	68.46	9.83	5.36
Average		26.0		4.16		-4.02		6.90		22.0		4.44

Source: Beta Glass Nigeria Plc Annual Financial Report (2010 – 2019)

According to Table 1, Cash Conversion Cycle (CCC) stood at 5.78 in 2010 and had a slight yearly increase to 7.90 in 2019. The percentage changes for years 2011 to 2019 stood at 1.21, 9.91, 3.11, 14.03, 9.26, 1.32, -9.16, 3.96, and 3.81 with the highest change of 14.03% in 2014, followed by 9.91% in 2012 respectively. Furthermore, there was an average growth of 26% for Return on Assets (ROA) while cash conversion cycle has an average growth of 4.16% respectively. The fluctuations could be as a result of instability on the part of the firm paying for inventories purchased from their creditors, and the debtors paying for sales made to them on time. Size had a steady and impressive increase from 7.28 in 2010 to 9.83 in 2019. Growth which stood at 52% in 2010 sharply dropped to 4% in 2013 with a drastic increase to 91% in 2014 and 219% in 2019 respectively.

TABLE 2: Descriptive Statistics

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Standard Deviation</i>
<i>ROA</i>	10	.01	.29	.0895	.08351
<i>AR</i>	10	52.71	127.69	89.2665	31.34848
<i>AP</i>	10	90.16	234.85	143.7306	39.58959
<i>CCC</i>	10	5.78	7.63	6.9131	.78572
<i>GROWTH</i>	10	-.04	9.19	1.5448	3.07741
<i>SIZE</i>	10	7.28	8.53	7.9238	.50014

Sources: Researchers Computation (2020)

Table 2 presents a descriptive statistic of the study for Beta Glass Nig. Plc. (2010-2019) with a total observation of 10years. The main variables for this study are the ROA (independent variable), cash conversion cycle (independent variable), Size and Growth (the control variables). All variables were calculated using the financial position values. The measurement of performance could only be based on income values, and not on so-called market values. When market values are considered in studies, there is always rather a legitimate question of the date for which the market value refers. Hence the study relied on book values as at the date of the financial report.

From the table, Beta Glass Nig. Plc observed have a mean cash conversion cycle (CCC) of 6.91 days with a minimum and maximum of 6 and 8 days and SD of .78572. The mean of ROA (0.0895) shows that Beta Glass Nig. Plc, by considering inflation rate, have poor performance over the study period of 2010-2019. Growth has a mean of 1.54 with minimum and maximum of -0.04 and 9.19 with SD of 3.08, while Return on Assets has an average of 8% with a minimum and maximum of 1% and 29% and SD. of 0.08 respectively. Size has an average of 7.92 with minimum and maximum of 7.28 and 8.53 and SD of 0.50 equally.

Test of Hypothesis

H₀: Cash conversion cycle management has no significant effect on return on asset (ROA) of manufacturing firms in Nigeria.

Table 3: OLS REGRESSION RESULT

Dependent Variable: LOG (ROA)

Method: Least Squares

Date: 06/22/20 Time: 20:38

Sample: 2010 2019

Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.551914	4.257050	0.364552	0.7396

Log (CCC)	-0.424941	0.245994	-3.507905	0.0315
Log (SIZE)	-0.228267	0.958428	-0.238168	0.8271
Log (GROWTH)	0.468105	0.128256	3.649765	0.0355
<hr/>				
R-squared	0.819789	Mean dependent var	2.519129	
Adjusted R-squared	0.639578	S.D. dependent var	0.864742	
S.E. of regression	0.519149	Akaike info criterion	1.822308	
Sum squared resid	0.808548	Schwarz criterion	1.791400	
Log likelihood	-2.378079	Hannan-Quinn criter.	2.09845	
F-statistic	4.549058	Durbin-Watson stat	1.572085	
Prob(F-statistic)	0.122609			

Source: E-view 10.0

Discussion of Findings

The linear regression result shows the value of the coefficient of the determination, $R^2 = 0.819$ indicating that 82% of almost all the variations in the dependent variable was explained by the regressors. The significant value of the F-Statistic is greater than 0.05, which means that the variation explained by the model is due to chance ($f = 4.55$, $P > 0.05$). This also tests for overall significance of the independent variables. The independent variable, which is the cash conversion cycle (CCC), has a negative impact on Return on Assets [ROA], [Coefficient of CCC = -0.42, $t = -3.51$, $P = 0.03$; $P < 0.05$]. This implies that a percentage decrease in CCC will result into a 2.5% increase in ROA. The moderator variables, size, have no significant impact on ROA, (Coefficient of Size = -0.23, $t = -0.24$, $p = 0.83$; $P > 0.05$); while Growth have a significant positive impact, (Coefficient of Growth = 0.47, $t = 3.64$, $p = 0.04$; $P < 0.05$). The Durbin-Watson (D.W) is 1.57 showing an acceptable level of autocorrelation. The D-W statistics is usually between 0 and 4. A value of 2 shows complete absence of autocorrelation. Since the coefficient of cash conversion cycle has a negative sign (-0.424941) and p-value is 0.0315 ($p < 0.05$), we accept the alternative hypothesis and reject the null hypothesis. The multiple regression model becomes: $ROA = 1.55 - 0.42CCC - 0.23Size + 0.47Growth$. We can then say that Cash Conversion Cycle has a negative significant impact on Return on Assets of Nigerian firms. Based on the result which states that Cash Conversion Cycle (CCC) has a negative effect on ROA, the null hypothesis is rejected while the alternative hypothesis is accepted. From the above result, it could be explained by the fact that when the cash conversion cycle is relatively shorter, the firm may not need external financing. This leads to incurring less borrowing cost, thereby increasing profitability. This agrees with the findings of Deloof (2003), Uyar (2009), (Padachi, 2006), Shin & Soenen (1998); Jose (1996), Rehman and Nasir (2007), etc. It showed that cash conversion cycle decrease is one of the key and most important factors for profitability increases and consequently company value increase.

Furthermore, Shin and Soenen (1998) argued that the negative relationship could be explained by the market power or the market share due to a shorter CCC, and because of bargaining power by the suppliers and/or the customers as well as higher profitability due to market dominance. Another implication for the negative relationship can also be explained by the fact that minimizing the investments in current assets can help in boosting profits. This ensures that liquid assets are not maintained in the business for too long and that it is used to generate profits for the firm (Mathuva, 2009). In other studies, Lyrondi & Lazardis (2000) found a positive significant relationship between CCC and profitability. Their view was that resources are blocked at different stage of supply chain, thus prolonging operating cycle, thereby leading to profit increase due to sales increase. This occurs mostly where cost of tied up capital is lower than the benefits of holding more inventories and granting more trade credit to customers. Also, small manufacturing firms may be able to obtain trade credit from suppliers and this is supported by the higher proportion current liabilities to total assets.

CONCLUSION AND RECOMMENDATIONS

Working capital management necessitates short-term decision on working capital and financing of all aspects of both firm's short-term assets and liabilities. The aim of efficient and effective working capital management is to ensure growth in firms, increase in size, enhance the liquidity profile of firms as well as optimal leverage. This study empirically analyzed the impact of working capital management on performance of Beta Glass Nigeria Plc. performance was measured by Return on Assets. The results showed that cash conversion cycle had a significant negative impact on return on assets, implying that decrease in CCC leads to increase in profitability of Nigerian firms. From the above result, it could be concluded by the fact that when the cash conversion cycle is relatively shorter, the firm may not need external financing. This leads to incurring less borrowing cost, thereby increasing profitability.

Based on the conclusion of these findings the study recommends that;

- i. Firms should shorten the period between purchase of goods to pay for their purchases as to enhance profitability. They can also reduce the period between converting of raw materials into finished goods as to sell them.
- ii. The firm should engage in long term borrowing so as to introduce cash to improve its liquidity or position slightly. This is because the selected firm has a good reputation with its banks and lenders. This is in line with Merchant (2005), that the firm can also use its assets to secure loan from financial institution.
- iii. The firms minimize their inventory and keep it for a short period of days as possible. The firm operation and stock holder depends on the inventory management. It recommends that the company should make efforts to maintain inventory management policies, since the findings reveals that the Beta Glass Plc have a substantial part of working capital tied down on the inventory. It is believed that by adopting the above recommendation selected firms will solve working capital management problems.

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Impact of Contributory Pension Scheme on the Growth of Nigerian Economy

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Abstract

The study examined the impact of contributory pension scheme on the growth of Nigeria economy. The primary aim of this study is to determine how Retirement Savings Account contributes to Nigeria economic growth. The study runs from 2006 through 2018. Data for this study were obtained from the 2018 edition of the Central Bank of Nigeria (CBN) statistical bulletin, National Pension Commission (PenCom) Annual Reports and National Bureau of Statistics (NBS). Descriptive research design was adopted for the purpose of this study. The tools of data analysis is ordinary least square regression methods which were carried out with the aid of E-view statistical packages. Findings from the study revealed that Retirement savings Account (RSA) which was used as a proxy for contributory pension scheme has a positive and significant effect on the economic growth of Nigeria. The study recommends that employees should be made to understand that even within the new pension scheme they can still access up to 25 per cent of their retirement savings as a single bulk payment to enable them start a new business or deal with the issues of transition from active employment to retirement.

Keywords: PENCOM, PFAs, PFCs, Economic Growth, Pension, AES. GDP

INTRODUCTION

Nigeria like most other countries in the world adopted the Contributory Pension Scheme (CPS) in 2004, as a panacea to the worsening conditions of the Defined Benefit (DB). The conditions associated with the old pension system in Nigeria necessitated the systematic pension reform, which changed the Defined Benefit Scheme to the Contributory Pension Scheme (Koripamo-Agari, Yunusa, 2009). The pension system prior to 2004 were characterized by massive accumulation of debt estimated at over two trillion naira, large-scale arrears of unfunded entitlement of retirees, inadequate budgetary provisions coupled with rising life expectancy, increasing number of employees, higher wages and pensions and inadequate supervision and regulation of pension system. The new Pension Reform Act, predicated upon a Contributory Pension Scheme, was established in 2004 to address the inadequacies of the Defined Benefit Scheme. The Act creates more stringent measures in regulating and supervising the pension industry. This is with the ultimate goal of promoting the growth and deepening of the pension system. Indeed, this development assigned a greater role to the pension sector in the allocation of pension assets particularly in areas of more efficient and productive use as launch pad for the overall growth of the economy. Though all the three central labour organizations (the Nigeria Labour Congress [NLC], the Trade Union Congress [TUC] and the Conference of Free Trade Unions [CFTU] were opposed to the fundamentals of the pension reform, radical changes were made in the new legislation on pension without reflecting the inputs

of labour. Similarly the organized private sector resisted the lumping together of pension schemes in both the public and private sectors. However, the new law disregarded private sector's inputs to the new scheme, in spite of existing constitutional provisions, which support their position. Despite the inability of the unions to prevent the enactment of the Pension Reform Act, 2004, they seem to have delayed its full implementation.

Given the foregoing, Nigeria embarked on pension reforms through a Pension Reform Bill submitted to National Assembly September 2003. The Bill was signed into law as Pension Reform Act 2004 (PRA 2004) and its implementation began 1st July 2004. Consequently, the Act brought about fundamental changes to the structure of leaving service benefits and the way they are provided for. The Act in section 1 establishes a Contributory Pension Scheme (CPS) for any employment in the Federal Republic of Nigeria. The scheme ensure that every worker (public or private) receives his retirement benefit as and when due, assist improvident individuals save for their old age and establish a uniform set of rules for administration and payment of retirement benefits. It is useful to note that all pension schemes existing before the commencement of this Act ceased to operate. The Act applies to persons in the permanent employment of the public sector as well as private sector employees who are in the permanent employment of organizations in which there are five or more employees subject to the provision of section eight. However, a firm having less than five employees is eligible to participate in the scheme. Every employee is required to choose a Pension Fund Administrator (PFA), maintain a Retirement Savings Account (RSA) and each employee shall neither have access to the account nor have any dealings with the custodian with respect to the Retirement Saving Account except through the Pension Fund Administrator. The employers shall deduct at source the monthly contribution of the employees and remit an amount comprising the employees' contribution and the employers' contribution to the Pension Fund Custodian. The Custodians are as specified by the Pension Fund Administrator of the employee, and the remittance has to be done not later than 7 working days from the day the employee is paid. The custodian shall notify the Pension Fund Administrator who shall cause the Retirement Saving Account of such employee to be credited.

The rates of contribution to the Retirement Saving Account by the employee and the employer are specified in section 9 (1) of the Act. However, these rates of contribution may upon agreement of the employer and the employee be revised from time to time and notice of such revision shall be given to National Pension Commission (PenCom). As at 2018 December, there were 22 Pension Fund Administrators (PFAs), 7 Closed Pension Fund Administrators (CPFAs) and 4 Pension Fund Custodians, and they are expected to capture a potential 50million contributors. Commission's 2018 report indicates that pension fund assets have grown up to ₦8.64 trillion in 2018. The report also shows that pension savings contributions from the public and private sectors have grown up to ₦5.09 trillion. These pension funds are expected to be invested in about 12 specified asset classes which include: Local Ordinary Shares, Federal Government Securities, State Government Securities, Corporate Bonds, Financial Institution Deposits, Open and Closed End Funds, Foreign Money Market Securities, Supra-National Bonds, Infrastructural Funds, Real Estate Properties, Unquoted Securities and Cash /Other Assets.

In view of the foregoing, conscious attempts have been made to examine the effects of Contributory Pensions Asset on the various aspects of the Nigerian economy. Ameh, Ajie, & Duhu, (2017) examined the impact of contributory pension scheme on economic growth in Nigeria. In a similar study, Nwanne (2015) carried out a research on the impact of contributory pension on economic growth in Nigeria covering 2004-2012. In a separate study, Edogbanya (2013), by correlation analysis using t-test examined the impact of contributory pension scheme on Nigeria economic development. Oladapo (2016) examined funded pension scheme and economic growth in Nigeria, covering 2004-2014. Although, the study examined the time series properties of the variables employed as well as carried out co-integration, this research work extends Oladapo (2016) in terms of the period covered. In addition, the Error Correction Model (ECM) employed in Oladapo (2016) does not show causality as to whether Contributory Pension Scheme is driving economic growth. The individual effect of each fund under the CPS is also examined in this present study as opposed to the aggregate pension asset employed by Oladapo (2016). The

researcher also employed data from 2004, there is no congruency between the scopes which dated from 2004 to 2014 due to unavailability of data on Contributory Pension Scheme between 2004 to 2005. Previous research works have indicated that the contributory pension scheme is yet to have a significant impact on the Nigerian economic growth and this is traced to the inefficient management of the pension asset. The wellbeing and interest of Nigeria retirees, for the past ten years, had not received proper attention as expected from the contributory pension scheme. The Contributory Pension Fund (CPF) is expected to support economic growth by providing extra funds for investment as well as expand the capital market, thereby leading to increased capital allocation which translates to improved and general efficient allocation of resource. Thus the Research Hypothesis underlying this study is stated thus:

H_{0i}: Retirement Savings Account does not impact significantly on the growth of Nigeria economy.

LITERATURE REVIEW

Conceptual Framework

Concept of Contributory Pension Scheme (CPS)

The Pension Reform Act 2014, as amended, is the most recent legislation of the Federal Government aimed at addressing the problems associated with the old pension system. It established the Contributory Pension Scheme (CPS), which is a uniform pension system for both the private and public sector. Similarly, for the first time in the history of Nigeria as a country, a single authority, the National Pension Commission (PenCom) was established to regulate and supervise all pension matters in the country. The scheme is being managed by authorized Pension Fund Administrators (PFAs) while the custody of the pension fund assets are provided by licensed Pension Fund Custodians (PFCs), Adeleke (2005).

Onuoha (2006) reported that the move from Defined Benefit to Contributory Pension Scheme is now a global phenomenon following the success stories of the Chilean pension reform of 1981. The paradigm shift from the DB scheme to contributory schemes in developed and developing countries was ascribed to such factors as increasing pressure on the central budget to cover deficits- the accrued benefits of the old scheme were not always fully provided for by the Federal/State Governments in their annual budget, and this has been a recording decimal till date for those employees/pensioners. In addition, lack of long-term sustainability due to internal demographic shifts- the liability keeps increasing as more workers are being employed yearly due to increase in numbers of employable youths. Also, annual promotions occur regularly, while some employee exits and there were failure to provide promised benefits – this occur when retirees wait for long years and some even die without getting their benefits. Thus, developed countries like USA, UK and emerging market economics of Chile, Mexico, Nigeria etc. adopted the contributory pension scheme because it enhances long term national savings and capital accumulation, which if well invested can provide resources for both domestic and foreign investment (Mohammed, 2013).

The 2014 Pension Reform Act is a paradigm shift from the 1979 Pension Act. Under the new scheme, employers and employees alike are to contribute 10 and 8 percent of employees' monthly emolument respectively, which include basic salary, housing and transport allowances. However, military and secret security personnel had pooled out of the CPS since April 2011. The scheme covers the private sector with five or more employees. The only exceptions are public employees who have three years or less to retire with effect from the date of enactment of the Pension Reform Act being 30th June 2004 (National Pension Commission, 2004). The employer may elect under the PRA 2014 to bear the full burden of the pension by contributing not less than 18 percent of the employee's monthly emolument. The contributory pension scheme was established to address the huge unsustainable pension deficit estimated at about two trillion naira which characterized the former Pay-As-You-Go (PAYG) Pension Scheme. According to Aminu (2004) the contributory pension scheme would address the pension deficit (estimated at ₦2 trillion as at June 2004) of the past in Nigeria. The scheme's asset as of December 2018 according to PenCom's monthly report, stood at ₦8.63 trillion (about \$30 billion). The contributory pension scheme is expected

to have multiplier effect on workers commitment and attitudes towards retirement in the Nigeria Public Service, as well as attitude towards corruption especially in the civil or public service. This is because the uncertainty of receiving pension and gratuity after retirement was largely responsible for high labour turnover in the public service. WHO (2007), posits that, poor remuneration, delay in payment of fringe benefits and poor condition of service among others are jointly responsible for the exodus of medical personnel from Nigeria to the United States of America and the United Kingdom, and of recent the United Arab Emirate. There are certain features and safeguards that position the scheme with success chances, these include among others:

a. Retirement Savings Account (RSA)

Section 8(1) of the Act provides that every employee shall open and maintain an account in his or her name with any pension fund administrator of his or her choice. This account belongs to the employee throughout his or her life whether he/she changes job or otherwise.

The account is meant to receive monthly contributions from the employee and his employer. This fund is to be invested in such prescribed investment outlets. For security reasons, PFAs are allowed to invest the greater percentage of the fund, as much as 70% in federal government securities (FGN Bond) while the balance may be invested in other prescribed outlets like the publicly quoted companies.

b. Pension Fund Administrators (PFAs)

The Act provides for the licensing of Pension Fund Administrators (PFAs) as a requirement for the Contributory Pension Scheme. The pension funds are to be privately managed exclusively by licensed PFAs. The main functions of the PFAs are to open Retirement Savings Account (RSA) for employees; invest and manage pension fund assets; payment of retirement benefits and accounting for all transactions relating to the pension funds under their management. The Commission considers applications for license to operate as a PFA from entities that fulfil the requirements as enshrined in Section 60 of the PRA 2014. Prior to the issuance of an operating license, the PFA must be a limited liability company whose sole object is the management of pension fund assets. The PFA must also satisfy the Commission that it has the professional capacity to manage pension funds and administer retirement benefits.

c. Closed Pension Fund Administrators (CPFAs)

Pension schemes in the private sector existing prior to the introduction of the Contributory Pension Scheme (CPS) in June, 2004 were allowed to continue as CPFAs, subject to guidelines issued by PenCom. The companies are required to have operated a fully funded existing pension scheme with assets of at least ₦500 million. A condition precedent on the issuance of a CPFA license is that the company must possess the requisite capacity for the management of pension fund assets and show that it had managed its pension scheme effectively for at least five (5) years prior to the commencement of the CPS.

The CPFAs operate mostly as Defined Benefits Schemes with a guarantee from the sponsor companies over any funding deficit. The Pension Reform Act, 2014 has foreclosed new entrants into the CPFAs. Commencing 1st July, 2014, all new employees of the sponsor companies are required to join the CPS and open Retirement Savings Accounts (RSAs) with a PFA of their choice. Furthermore, an existing employee still reserves the right/option of pulling out of the CPFA to join the CPS.

d. Approved Existing Schemes (AESs)

Section 50 (1) of the Act provides that notwithstanding any other provisions of this Act, any pension scheme in the private sector existing before the commencement of this Act may continue to exist provided that the pension scheme shall be fully funded and in case of any contributory scheme, contributions in favour of each employee including the attributable income shall be computed and credited to a retirement savings account opened for the employee.

The pension funds and assets shall be fully segregated from the funds and assets of the company. Also, the pension funds and assets shall be held by a PFC. Every employee in the existing scheme shall be free to exercise the option of coming under the Scheme established under section 3 of this Act and his

employer shall compute and credit to his account, his contributions and distributable income earned as at the date the employee exercises such an option subject to the regulations, rules and standards established by the Commission. Any amount computed under paragraph (d) of this subsection shall be transferred to the retirement savings account of the employee maintained with a PFA of his choice. All investments in assets other than those specified as permissible investment for pension funds and assets under section 86 of the Act may be maintained and from the commencement of the Act all investments shall be subject to the regulation, rules and standards established by the Commission. The employer shall undertake to the Commission that the pension fund shall be fully funded at all times and any shortfall to be made up within 90 days or as may be prescribed by the Commission. The existing scheme shall be closed to new employees and such new employees shall be required to open a retirement savings account.

e. Pension Fund Custodians (PFC)

The law also provides for the licensing of PFCs to keep all pension fund assets in a safe custody. That is, all monthly contributions on behalf of each employee are sent to a Pension Fund Custodian who, upon receipt of such contributions, duly informs the PFA, and credit the account of the employee(s) concerned with the total contributions thus remitted. The PFA then instructs the PFC to invest the funds in such and such instruments. Evidently, the person who keeps the assets (PFC) is different from the person who carries out the investment (PFA). The custodian will execute transactions and undertake activities relating to the administration of pension fund investments upon instructions by the PFA. In view of the large amount of assets to be handled, the licensed Pension Fund Custodian, being a limited liability company, and a licensed financial institution, must have a minimum capital base of five billion naira (₦5bn) unimpaired by losses.

National Pension Commission (PenCom)

To ensure effective administration of pension matters in Nigeria, the Act established a regulatory agency National Pension Commission, otherwise referred to as 'The Commission', to regulate and supervise the scheme. The Commission is to make certain that payment and remittance of contributions are made and retirees are paid as and when due. Furthermore, the agency will ensure safety of funds by issuing guidelines for licensing, approving, regulating and keeping a tab on the investment behaviour of PFAs. It is the watch dog of the scheme who must act in the interest of all stakeholders.

i. Licensing requirements for PFAs/CPFAs

The Act stipulates that any person applying to be licensed as a PFA in Nigeria must inter alia, meet the following requirements stipulated in section 60 (1) of the PRA 2014:

- i. Shall be a limited liability company incorporated under the Companies and Allied Matters Act whose object is to manage pension funds.
- ii. Shall have a minimum paid up share capital of such sum as may be prescribed by the Commission;
- iii. Shall satisfy the Commission that it has the professional capacity to manage pension funds and administer retirement benefits;
- iv. Has never been liable for mismanagement of pension fund, of a PFA or any of its subscribers, directors or officers;
- v. Shall undertake to the satisfaction of the Commission, that it shall not be engaged in any business other than the management of pension funds; and
- vi. Shall satisfy any additional requirement or condition as may be prescribed, from time to time, by the Commission.

Section 60 (2) of the PRA 2014 stipulates that all companies and institutions managing pension funds prior to the enactment of the PRA 2004 that are not licensed by the Commission shall transfer such funds and assets to licensed Pension Fund Administrators. Accordingly, this section requires such institutions

and companies to compute and credit all contributions to the Retirement Savings Account opened for each contributor, including distributable income. In this regard, all companies and institutions referred to in subsection (2) of this section are required to transfer all pension funds and assets held by them to a licenced PFA, to be kept under custody of a PFC as may be determined by the Commission.

ii Licensing requirements for PFCs

Pursuant to the provisions of section 116 of the Companies and Allied Matters Act, the voting rights of every shareholder in a PFA or PFC shall be proportionate to his contribution to the paid-up share capital of the Pension Fund Administrator or Pension Fund Custodian. Section 61 (1) of the PRA 2014 requires a corporate entity that intends to become a Custodian of Pensions to make an application to the Commission for a licence in a required, form with payment as may be prescribed by the Commission. Pursuant to the above provision, Section 61(2) of the PRA 2014 provides that where the Commission is satisfied that the applicant meets the requirements set out in Section 62 of the Act, it may issue a licence to the applicant to carry out the business of a Pension Fund Custodian (PFC). It is pertinent to note that the format for application to undertake business as a PFC and the fee payable by an applicant are not fixed. Such matters are prescribed by the Commission, from time to time. To switch from the pay-as-you-go to the CPS creates a financing gap for workers who have earned pension rights under the old scheme. The retirement benefit bonds are to be issued to workers concerned, the value of which will be equal to the accrued pension benefits up till the commencement of the funded scheme. The bonds are redeemable at the retirement date for each worker as appropriate. The law provides that a fund known as the 'Retirement Benefits Bond Redemption Fund' be established and maintained by the Central Bank of Nigeria (CBN). FGN pays 5% of its total monthly wage bill in the public service of the Federation and Federal Capital Territory into the fund to retire any retirement benefit bond issued. The fund shall cease to exist after all affiliates in the old scheme have had their bonds redeemed.

Concept of Economic Growth

According to Gordon (1984) and Todaro (2000), Economic growth is generally defined in terms of increase in the GDP to distinguish growth from development. Even though, these concepts are sometimes used interchangeably, one can still attempt to distinguish them. Economic growth according to Todaro (2000) refers to an increase in a country's national output of goods and services or increase in the volume of output of goods and services within a specific period. Growth is usually taken to mean economic progress, which is the rate at which the annual output of goods and services grow in real terms but economic development on the other hand is a less precise and more complex term, which cannot be easily, reduced to quantitative measurement in monetary terms alone. It involves many variables that deal with man's existence.

Jhingan (2006), economic growth is related to quantitative sustained increase in a country's per capita output or income accompanied by expansion in its labour force, consumption, capital and volume of trade, while economic development is a wider concept than economic growth. It relates to qualitative change in economic wants, goods, incentives, institutions, productivity and knowledge. It is the upward movement of the entire social system. This implies that an economy can grow but may not develop because poverty, unemployment and inequalities may continue to persist. Thus, while economic growth is the increase in the total output of an economy over a certain period of time, economic development means growth plus change. In the end however, economic development would be said to have taken place if the totality of changes in these variables end up in improving the living conditions of the people. This explains why many economists believed that while economic growth is about things economic development is about persons. In the context of this work therefore, economic growth refers to increase in the GDP value or increase in the GDP rate of growth.

Empirical Literature

The effect of CPS on economic growth has often been addressed from cross-country studies with little emphasis on country case studies. In addition, such cross-country studies have focused on advanced and Organisation for Economic Cooperation and Development (OECD) countries Davis and Hu Wei (2008); Zandberg and Spierdijk (2013). The concern here is that most of these cross-country studies suffer from endogeneity and causality problems. Apart from the fact that the numbers of observations (i.e. countries) is often relatively small compared to the many diverse factors that may affect pension and growth, some of these studies do not reflect the peculiarities of different countries being studied Bell and Rousseau (2001). Babatunde (2012) studied the impact of contributory pension scheme on workers savings in Nigeria using analytical method on raw data generated from Oyo state public workers in 2010 using the Ordinary Least Square (OLS) regression method. He discovered that there is significant relationship existing between contributory pension scheme and savings. He also reiterated that Nigeria must avoid minor pension reforms that are repeated periodically because of political problem associated with such adjustment. His recommendation is that both Government and pension fund administrators should educate the public on the operations of the Contributory Pension Scheme.

Oladapo (2016) examined the effect of the operation of the funded pension scheme since its inception in 2004 on economic growth in Nigeria using error correction mechanism (ECM) and Ordinary Least Square (OLS) methodologies. Findings revealed that the pension fund contributions from both private and public sectors in Nigeria increased greatly and constituted a huge investment fund in the capital and money markets. This increased liquidity in the economy and created employment opportunities as well as improvement in the investment climate. The study concluded that with good risk and portfolio management by pension fund administrators and custodians, the contributory pension has the capacity to boost the Gross Domestic Product (GDP) in Nigeria and very convenient to retirees compared to the previous defined benefit scheme. The study however recommended the removal of delay payment, administrative bottlenecks and corruption in the management of the pension fund in order to boost economic growth in Nigeria. Similarly, Tijani and Adekunle (2018) studied the impact of the contributory pension fund scheme on Nigeria economic growth analysing data from 2006-2016, using ex-post facto research. The study employed secondary source of data collection. The data were sourced from the central bank of Nigeria statistical bulletin. The data was analysed using ordinary least square method of statistical analysis. The study revealed that a contributory pension funds asset has significant impact on Nigeria economic growth while population of pensioners has no significant impact on the growth of Nigeria economy. The study recommended that pension fund assets should be invested productively in diversified investment portfolios so as to generate increased returns and at same time minimize risks to both pension funds administrators and the contributors to the funds in Nigeria.

Nwanne (2015) undertook a study on the impact of contributory pension scheme on economic growth in Nigeria for the period 2004-2012. The objectives of the study were to determine the impact of pension funds on economic growth and as well as to ascertain the impact of pension savings mobilized on economic growth. The study used Ex-post-facto research design. Ordinary Least Square Regression method was used in data analysis. The study finds that pension funds have negative and significant impact on economic growth while pension savings had positive and significant impact on economic growth. The implication of the finding is that the contributory pension scheme has achieved the objective of using pension funds to provide long term capital that will promote economic growth. It also implies that pension savings contribution is low an indication of low coverage of the scheme. It was recommended that investment outlets of pension funds should be increased and efforts should be intensified to ensure greater compliance and mobilization of savings from contributors. The result of this study should however be handled with care due to the sample size selected which covered a period of nine years. Hence, there is serious analytical problem in terms of sufficiency of the degree of freedom for useful analysis. This is because despite the fact that Pension Reforms Act was promulgated in 2004, contributions did not commence until 2006. Moreover, this study will not pass multicollinearity test when subjected to such a test. This is due to the fact that one of the explanatory variables – pension fund

savings contributed by private and public sectors in Nigeria is a component of the second explanatory variable – pension funds invested in specified investment outlets.

Ojiya (2017) examined the impact of contributory pension scheme on economic growth in Nigeria. Data for the study were sourced from various issues of PenCom Annual Reports and World Bank Development Indicators (database) covering 2005-2016. The data were computed with the use of Statistical Package for Social Sciences (SPSS). It was found that pension fund assets and pension contribution /savings mobilized over the years have positive but insignificant impact on economic growth. The implication of this finding is that the authorities concerned have not been able to use the pension fund asset and savings mobilized to boost economic growth in Nigeria. It was therefore recommended that, there should be more emphasis on the management of pension assets in the capital market as well as government bond, real estate and investment trust to boost Gross Domestic Product (GDP) of the country (Nigeria). Secondly, there should be prompt reconciliation between Pension Fund Administrators (PFAs) and Pension Fund Custodians. This will bring transparency and accountability to the system. Finally, PenCom should ensure effective monitoring, supervision and enforcement of the provision of the PRA 2004, which are the inevitable ingredients in the Contributory Pension Scheme towards Gross Domestic Product (GDP).

However, like Nwanne, there was no available data on pension in 2005 which was used by the researcher. This means that there is no congruency in the scope adopted analysing the data.

Theoretical framework

Economists in their quest to examine the contribution of pension scheme to economic growth in different countries have come up with three alternative hypotheses to explain this phenomenon. These hypotheses include the intermediation theory, life-cycle theory and deferred wage theory, however, for the purpose of this study the endogenous growth theory of economic growth are adopted.

Life-Cycle Theory

In the early 1950s, Franco Modigliani and his student, Richard Brumberg, developed a theory based on the observation that people make consumption decisions based both on resources available to them over their lifetime, and on their current life stage. Modigliani and Brumberg observed that individuals build up assets at the initial stages of their working lives. Later on during retirement, they make use of their stock of assets. The working people save up for their post-retirement lives and alter their consumption patterns according to their needs at different stages of their lives. In adopting the life cycle theory, it was discovered that the development of pension fund can be seen in three stages namely, start-up, growth and maturity stages. The life cycle theory explains the three stages of development of pension fund administrators and their respective financing needs. The theory also posits that the sources of pension fund administrator's financing are linked to their respective stages of development and thus, economic growth Lapenu & Zeller (2001) and Farington & Abrahams (2002).

Endogenous growth theory

The theoretical framework for the study is the Endogenous "AK" Growth Theory. According to Endogenous "AK" growth theory, an economy's long-run growth rate depends on its saving rate. The endogenous "AK" growth theory offered by Pagano (1993) assumes that financial intermediation could affect economic growth through three channels namely: changing productivity of capital, savings funneled to investment and savings rate. In other words, financial development reduces the loss of resources needed to allocate resources, encourage greater savings ratio, and increase capital productivity. The theory assumes that only one type of goods is produced with capital as the only input factor.

$$Y_t = AK_t \dots (1)$$

Where Y_t = Output, t = Time, K = Capital, and A = Capital Productivity.

This implies that capital stock in time $t + 1$ is given as:

$$K_t = I_t + (1-d) K_{t-1} \dots (2)$$

Where, d = rate of depreciation and I = investment.

The implication is that if a fixed fraction (s) of output (y) is saved and there is a fixed rate of depreciation (d), the rate of aggregate net investment is given as:

$$\frac{dk}{dt} = sy - sk \dots\dots\dots(3)$$

This implies that the growth rate (g) is driven by:

$$g = \frac{1}{Y} \frac{dy}{dt} = \frac{1}{k} \frac{dk}{dt} = SA - \delta \dots\dots\dots(4)$$

The supporting theory guiding this study is therefore the endogenous 'AK' growth theory because it explains the growth of an economy on the long run depends largely on its long-term savings.

METHODOLOGY

Descriptive research design is adopted for the purposes of this study. Descriptive design method helps in gathering information about the existing status of the phenomena in order to describe what exists in respect to variables. According to Coopers and Schindler (2008), descriptive studies are formalized and typically structured with clearly stated hypothesis or investigative questions. This method is used because it addresses the objective of the study in investigating the relationship between the variables of the study. The study employs secondary sources of data based on quarterly frequency from various issues of Annual Report and Statement of Accounts of the National Pension Commission; Central Bank of Nigeria Publications like various issues of the Annual Report and Statement of Accounts and Statistical Bulletin; Nigerian Stock Exchange and Nigeria Bureau of Statistics publications and Nigeria Stock Exchange (NSE) Database for the same period. In this regard, Data on real gross domestic product (RGDP) were sourced from National Bureau of Statistics publications, while data on total retirement saving account (RSA) were sourced from Annual reports of National Pension Commission.

Procedure for Data Analysis and Model Specification

Using yearly data from 2006 to 2018, this study examines the linkage between contributory pension scheme and economic growth in Nigeria. In this regard, the proxy for economic growth is the real GDP growth. The study uses pension assets as proxy for contributory pension scheme. Hence, a vector of pension assets indicators was adopted, including Active Retirement Savings Account Assets (RSA Fund), these is one of the pension assets in the CPS and represent the explanatory variables for the modelling. Following the theoretical framework and based on the practice in the literature Oladapo (2016), the study specifies the growth function for Nigeria in the form of equation:

$$EG = f(RSA) \dots\dots\dots(1)$$

The log-linear formulation of the model is:

$$Lneg = \alpha + \beta_1 lnRSA + \epsilon_t \dots\dots\dots(2)$$

where:

LnEG	= Log of real GDP
RSA	= Real retirement savings account assets
B	= Beta factor
ϵ_t	= Random Error
α	= Constant Term

Given that the study employs time series data, the stationarity of the data is examined using the Augmented Dickey-Fuller (ADF) statistic to investigate the presence of unit root under the alternative

hypothesis that the series is stationary around a fixed term trend. The ADF tests are performed using the ordinary least-square technique to estimate the following equation:

$$DX_t = c_0 + c_1 X_{t-1} + \sum_{i=1}^n \gamma_i D X_{t-i} + \varepsilon_t \quad (3)$$

Where t is a time trend.

It can be seen from equation 3 that the null hypothesis of non-stationarity is rejected if D_i is less than zero and statistically significant. However, equation 3 can be reformulated with the error correction representation as:

$$DY_t = c_0 + c_1 Y_{t-1} + c_2 D X_{t-1} - \rho Z_{t-1} + \varepsilon_t \quad (4)$$

Where Z is the residual term from the static regression of Y_t on X_t . The analysis is carried out from a general model to the specific model with the optimal lag length for each variable being determined using Akaike Information criterion.

RESULT AND DISCUSSION

In examining the econometric analysis of the impact of Contributory Pension scheme on the Nigerian economic growth, Contributory Pension scheme is proxied by Retirement Saving Account (RSA), and Economic Growth is proxied by Gross Domestic Product (GDP), for the period 2006 to 2018. Data were obtained from Central Bank of Nigeria (CBN) statistical bulletin, National Pension Commission (PenCom) Annual Reports and National Bureau of Statistics (NBS). The data as discussed earlier were analysed in two folds, namely: the descriptive analysis, which describes the data and gives the graphs showing the trends of the independent variable on the dependent variables; and empirical analysis, where the Unit Root result and regression analysis estimates are shown.

The descriptive statistics in this study is used to provide simple summaries about the samples selected for the study. The mean, minimum, maximum, skewness and the standard deviation of the independent variables under study provide answers to whether they comply with established standards or not. The variable series include the active and retiree retirement savings scheme assets (RSA) and the real gross domestic product (RGDP). The summary of these statistics are presented in the Tables below:

Table 1: Raw Data Presented for Analysis

YEAR	RGDP	RSA
₦Billion	₦Billion	₦Billion
2006	31,240.50	64.99
2007	42,922.41	213.31
2008	46,012.51	193.48
2009	49,856.10	275.26
2010	54,621.26	360.55
2011	57,511.04	361.04
2012	59,929.89	600.70
2013	63,218.72	722.54
2014	67,152.79	501.77
2015	69,023.93	582.59
2016	67,931.24	722.88
2017	68,490.98	1,079.23
2018	69,799.94	903.99

Source: CBN Statistical Bulletin and PenCom Annual Report (2018)

Table 2: Selected Descriptive Statistical Values on the Variables

	RGDP	C	RSA
Mean	57516.25	1.000000	506.3331
Median	59929.89	1.000000	501.7700
Maximum	69799.94	1.000000	1079.230
Minimum	31240.50	1.000000	64.99000
Std. Dev.	12063.13	0.000000	298.4686
Skewness	-0.806486	NA	0.366036
Kurtosis	2.640454	NA	2.228159
Jarque-Bera	1.479267	NA	0.612987
Probability	0.477289	NA	0.736023
Sum	747711.3	13.00000	6582.330
Sum Sq. Dev.	1.75E+09	0.000000	1069002.
Observations	13	13	13

Source: E-View Result (2020)

Shown above are the mean, standard deviation, minimum, skewness, kurtosis, jarque-Bera, probability and maximum values of retirement savings account assets (RSA) employed in this study. The above statistics is obtained using Augmented Dickey-Fuller (ADF) statistical package. The mean values of rgdp, and rsa are 57,516 and 506.333 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. The retirement savings account assets (rsa) ranges from minimum of 64 to maximum of 1,079 and deviated by 298, and real gross domestic product (rgdp) from minimum of 31,240 to maximum of 69,799 and deviated by 12,063. This revealed that the RSA assets have positive impact on the gross domestic product which is the proxy for the Nigerian economy. It can be observed that while the mean value of RSA is ₦506.33 billion, The picture of the effect of the RSA to economic growth can be clearer when we interpret the bar chart below;

It can be observed from the graph that there is a steady growth in the retirement savings scheme assets (RSA) from 2006 to 2018 and therefore impact greatly on the real gross domestic product (RGDP).

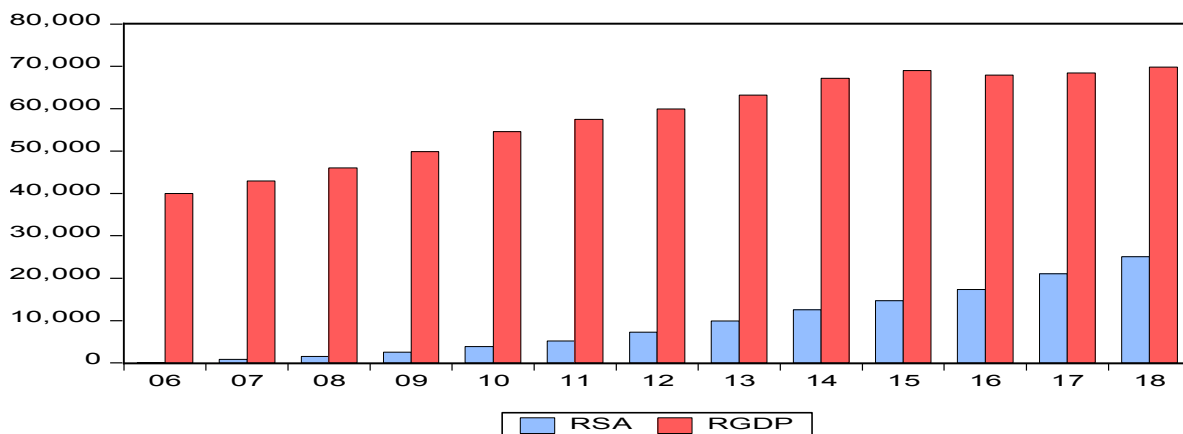


Figure 1 showing the RSA and the RGDP

Unit Root Test

The unit root test is conducted to ascertain the stationarity of the panel data. Regression investigation

conducted without subjecting the data to unit root test may be hazardous or spurious because the estimated parameters would be bias and inconsistent. To avoid this, a test was conducted using the Augmented Dickey-Fuller (ADF) statistic to investigate the presence of unit root. The unit root test was conducted on the assumption of determining the trend and the intercept. All the variables are first differenced or transformed to order 1. The specified variables are gdp and rsa.

The Unit Root hypothesis is stated as follows;

H₀: Panel data contains unit roots

H_a: Panel data are stationary (Does not contain unit roots)

The decision rule is to reject the null if the p-value is less than the critical value at 5% and to accept the alternative hypothesis. This means that the panel data is stationary and therefore does not contain unit roots. If however the p-value is greater than the critical value at 5% then we have no reason to reject the null hypothesis and reject the alternative signifying the existence of unit roots. The results of the Augmented Dickey-Fuller test conducted on the variables is shown below:

Table 4: ADF UNIT ROOT TEST

Table 5: Summary of Augmented Dickey-Fuller (ADF) Test Results

Variables	t-Statistic	P-value
GDP	-4.908751	0.0006
RSA	-1.067964	0.3106

The ellipses are gdp = gross domestic product, rsa = retired savings account.

SOURCE: ADF RESULT

The results of the Augmented Dickey-Fuller (ADF) test conducted on the series of GDP, and RSA are depicted in table 4. A quick view of the table reveals that all the p-values are less than the critical value at 10%. This suggests that the null hypothesis of panels unit root is rejected with 90 percent confidence level. Thus, the panels do not contain unit roots and all the variables are stationary at first and second difference. This means the data series have been purged of unit root or white noise by taking their first and second difference and they can now be fitted into models stated in chapter three for onward estimation.

Test of Hypothesis

H₀₁: Retirement Savings Account (RSA) does not impact significantly on the growth of Nigeria economy.

From the null hypothesis above, we postulate that Retirement Savings Account (RSA) has no significant effect on the growth of the Nigerian economy. The model earlier defined in the previous chapter is restated as;

$$RGDP = \beta_0 + \beta_1 rsa_{it} + ei \dots \dots \dots (i)$$

$$RGDP = 40252.56 + 35.11522 (rsa)$$

Table 5: OLS REGRESSION RESULT

Dependent Variable: RGDP

Method: Least Squares

Date: 05/11/20 Time: 20:38

Sample: 2006 2018

Included observations: 13

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	40252.56	4440.369	9.065138	0.0000
CPF	-17.54431	54.91467	0.319483	0.7567

AES	26.19179	26.82644	-0.976343	0.3544
RSA	35.11522	6.632191	5.294664	0.0005
<hr/>				
R-squared	0.778577	Mean dependent var	57516.25	
Adjusted R-squared	0.704769	S.D. dependent var	12063.13	
S.E. of regression	6554.520	Akaike info criterion	20.66136	
Sum squared resid	3.87E+08	Schwarz criterion	20.83519	
Log likelihood	-130.2988	Hannan-Quinn criter.	20.62563	
F-statistic	10.54872	Durbin-Watson stat	1.397050	
Prob(F-statistic)	0.002647			

The simple linear regression estimate of model 1 shows that Retirement Savings Account (RSA) has a positive effect on the real gross domestic product which is the proxy for growth in the economy. This is indicated by the sign of the coefficients, that is $\beta_1 = 35.11522 > 0$. This result is consistent with the *a priori* expectations.

Discussion of Findings

From Table 5 the size of the coefficient of the independent variable (β_1) shows that a 1% increase in Retirement Savings Account (RSA) will cause a 35% growth in the Nigerian economy. Also, the R-squared showed that about 78% variations in gross domestic product (GDP) can be attributed to Retirement Savings Account (RSA), while the remaining 22% variations in GDP are caused by other factors not included in this model. This shows a strong explanatory power of the model. This is further emphasized by the p-value of 0.0005 which shows that the regression result is statistically significant because this is less than 5%, the level of significance adopted for this study.

Therefore, the model is adequate and the null hypothesis one which states that Retirement Savings Account (RSA) has no significant impact on the growth of the economy of Nigeria is rejected. Hence, Retirement Savings Account (RSA) has a positive and significant relationship and impact on economic growth of Nigeria. This research work agrees with other studies in the literature. For instance, the findings of Oladapo(2016) revealed that increases in pension fund contributions from both private and public sectors in Nigeria positively affects economic growth. This implies that increases in pension contribution increases the pool of investible fund, which ensure capital adequacy for industrial take-off and increase in national output.

CONCLUSION AND RECOMMENDATIONS

In conclusion, the impact of contributory pension scheme on economic growth in Nigeria using ordinary least square. It is clear from the analysis that increases in pension fund assets in Nigeria positively affected economic growth. In the light of the foregoing, the study recommends that:

- i. The institutions of governance need to be strengthened to walk the path of maximum benefit for the Nigerian workers.
- ii. Second, employees should be made to understand that even within the new system they can still access up to 25 per cent of their retirement savings as a single bulk payment to enable them start a new business or deal with the issues of transition from active employment to retirement.
- iii. Third, transparency should be built into every stage of pension administration.
- iv. Fourth, management principles should be formulated with emphasis on creativity, innovativeness, openness, transparency, persuasiveness for a win – win situation for the employers / employees and the national economy.
- v. Fifth, there should be consultations with major stakeholders to ensure the successful

implementation of the pension reform policy. This would require gleanng ideas and lessons from successful stories in other parts of the world.

- vi. Sixth, PenCom needs to develop the capacity for treating pensioners as obtained in other parts of the world, where they enjoy some free facilities such as health care and transportation.

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

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Abstract

The study examined the effect of Liquidity Risk on Financial Performance of Selected deposit money banks in Nigeria. The researchers sought to primarily evaluate effect of liquidity risk on financial performance of selected deposit money banks in Nigeria. The ex-post facto research design was used for this study. This work employed three (3) variables; Net operating profit margin (NOPM) for dependent variables and Non-performing loans (NPLs) and Leverage ratio (LEV) for independent variables. The period for this study was ten (10) years from 2010 – 2019. The model estimation was executed using ordinary least squares technique. The results suggest that non-performing loans have positive relationship with net operating profit margin (NOPM), while leverage ratio have negative relationship with net operating profit margin (NOPM) of selected deposit money banks. Generally, 94.24% of the variation in dependent variable were caused by change on the independent variables used for this study. The research concluded that non-performing loans have significant effect on net operating profit margin (NOPM); leverage ratio have no significant effect on net operating profit margin (NOPM). The work recommended that banks should establish the required cash in each product segment and maintain the optional level which will help in reducing the cash balance level and increase their customer deposit base through making the product accessible to more customers especially the low-income earners. At the same time, banks should consider targeting the corporate clients who will be willing to retain a large cash base in the banks for a longer duration.

Keywords: Liquidity Risk, Financial Management, Financial Performance, Deposit Money Banks

INTRODUCTION

In the present day's volatile economic atmosphere, all financial institutions are in front of hefty risks including credit risk, operational risk, liquidity risk, market risk, foreign exchange risk, and interest rate risk, along with other business risks (Khizer, Muhammad & Shama, 2011). It is not always likely to completely do away with these risks, but the possibility of loss can be minimised by adjusting some of the situations associated with loss (Thomas & Raphael, 2014). Deposit money banks (DMBs) activities include provision of services, engaging in financial intermediation, provision of loan to customers, and overall management of risk. This calls for financial systems to be analysed from a functional perspective other than institutional perspective as the functions are more stable for a long period of time than the institution (Rudra & Jayadev, 2009). Financial risk management enables financial institution to put in place safeguards to reduce the potential losses that emanate from uncertainties in the financial markets (Aleksandra, Dalia & Julija, 2014). The secret to the effectual management of risks is not to eliminate the

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

intrinsic risks. For instance, credit operations of a financial institution have the intrinsic risk of potential credit losses, but by risking, financial institutions can transform a reward for the risky undertakings and earn revenues. Risks can, therefore, be a source of income to the financial institutions. Nevertheless, risk management in the Nigerian banking industry has not generated many outcomes as expected due to hindrances that include internal loans, ineffective policies and so on. It is common in Nigeria for financial institutions to prolong credit advances for directors, pals and other close relations without adhering to the set policies (Thomas & Raphael, 2014).

Banks are germane to economic development through the financial services they provide. Their intermediation role can be said to be a catalyst for economic growth. The efficient and effective performance of the banking industry over time is an index of financial stability in any nation. The extent to which a bank extends their operation to the public for productive activities accelerates the pace of a nation's economic growth and its long-term sustainability (Kolapo, Ayeni & Oke, 2012). The Nigerian banking industry has been strained by the deteriorating quality of its risk related assets as a result of the significant dip in equity market indices, global oil prices and sudden depreciation of the naira against global currencies. The most important aspect of banking sector in respect of the financial allocation in the world due to its intermediation functions of transferring funds from surplus units to deficit units (Ongore, 2013; Mohammad, Nur, Suhal & Zuhura, 2014). Growe (2009) states that risk is a natural element of business and community life in a condition that raises the chance of losses, gains and the uncertain potential events which could manipulate the success of financial institutions. As a result, well establish risk management practices (RMPs) can assist banks to reduce their exposure to risk. The development of international financial markets and rising variety of financial instruments has increased the possibility of banks' achievement to financial resources at an extensive level. Under such conditions, the financial market are rapidly developed and some opportunities are provided to design new products and present more services. Although, it seems that the speed of such changes is different from one country to another, but the banks generally compete with each other to develop and expand the new financial instruments and services (Naser, Mohammad & Ma' Someh, 2013).

Liquidity is considered as critical success factor of a bank. Therefore, ineffectiveness in its management constitutes a huge problem to a bank. The initial bank failures recorded in 2010 were principally due to inefficiencies in the management of the liquidity of such bank which in one way or the other had something to do with either liquidity inadequacy or the relative inefficiency in their management. The marginal loans in the banking system call to mind the important factor that government at all time preoccupy themselves with banks. This shows the degree of importance attached to liquidity and its management by these governments and deviation from its ratio in inadequacy of its management always spells trouble for the bank concerned. The far-reaching consequences of inadequacy and liquidity risk can also be examined apart from profit declines. Many deposit money banks in Nigeria had been either merged or completely shut down. Some Nigerian deposit money banks workers had also been forcefully thrown into unemployment market, example, Access Bank Plc, Eco bank and Union Bank of Nigeria Plc reduced their staff strength in 2015 and 2020. Some of these deposit money banks have not paid dividend to their shareholders for many years now due to decrease in their profit generation. It is in the light of the above crisis and more that it becomes necessary to investigate the effect of liquidity risk on financial performance of selected deposit money banks in Nigeria. This research is intended to fill the gap of inadequate information and understanding that exists in relation to Liquidity risk and financial performance of deposit money banks in Nigeria. The major hypothesis underling this study is stated thus:

Ho₁: Non-performing loans (NPLs) has no significant effect on Net operating profit margin (NOPM) of selected deposit money banks in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Concept of Risk Management

Risk can be defined as the future impact of hazardous actions that has not been eliminated in an organization. It can also be seen as future uncertainties more often as a result of uncontrolled hazards. If the risks involve skill sets by management, the same situation may result to a different kind of risk. Further to this, risk has been defined as the mix of the probability of an occasion and its results (Naimy, 2011). The loss can be considered in several ways such as direct financial loss to the business, or can be a misfortune regarding to the business and loss of assets to the business or life. Risk management consists of a series of well elaborated steps whose main objectives are to identify the risks, address, and eliminate risk items before they become either lethal to successful business organization or a major source of expensive rework of an organization processes. Studies have shown that risk management in banking industry is a cornerstone to fair and acceptable banking practice. In such manner all banks in the present-day unstable and flimsy money related environment are confronting various risks to be specific: credit hazard, liquidity risks, remote trade risks, showcase risks and financing cost risks and so on. These mentioned risks among others may in one way or the other lead to closure of deposit money banks as a result of inability to meet its financial obligations (Carey, 2001).

In light to this, risk management is very common and even more important in monetary environments than in any other sectors of the economy. The undoubted motivation behind money related organizations is to expand income in terms of profits and offer the value addition to shareholders investments by offering different financial services, and particularly by overseeing risks adequately. A dramatic loss coupled with mismanagement of deposit money banks has taken place in the banking industry in the last decade. Several Commercial banks that had been doing admirably well all of a sudden stunned by huge misfortunes which led to closure of the operation because of imbalanced credit exposures and failure to mitigate risks in general. In this way, the study has exposed the gap between risk identification, measurement and management practices in the deposit money banks and its influence in financial performance (Ismi, 2004).

Concept of Liquidity Risk

Liquidity is generally defined as the ability of a financial firm to meet its debt obligations without incurring unacceptably large losses. Thus, liquidity risk is the risk that a firm will not be able to meet its current and future cash flow and collateral needs, both expected and unexpected, without materially affecting its daily operations or overall financial condition. Tian (2009) states that there are two types of liquidity: market liquidity and funding liquidity. Market liquidity is the ability of a market participant to execute a trade or liquidate, a position with little or no cost, risk or inconvenience. Funding liquidity is the ability of a bank to fund increases in assets and meet obligations as they come due, without incurring unacceptable losses. The researcher adds that market liquidity risk is the loss incurred when a market participant wants to execute a trade or to liquidate a position immediately while not hitting the best price while funding liquidity risk is the risk that a bank is not able to meet the cash flow and collateral need obligations. Nwaezeaku (2008) defines liquidity as the degree of convertibility to cash or the ease with which any asset can be converted to cash (sold at a fair market price). Liquidity management therefore involves the strategic supply or withdrawal from the market or circulation the amount of liquidity consistent with a desired level of short-term reserve money without distorting the profit-making ability and operations of the bank. It relies on the daily assessment of the liquidity conditions in the banking system, so as to determine its liquidity needs and thus the volume of liquidity to allot or withdraw from the market. The liquidity needs of the banking system are usually defined by the sum of reserve requirements imposed on banks by a monetary authority (CBN, 2012).

Acharya and Naqvi (2012) see liquidity as the speed and certainty with which an asset can be converted back into cash whenever the asset holder desires. A liquid bank stores enough liquid assets and cash together with the ability to raise funds quickly from other sources to enable it meet its payment obligations and financial commitment in a timely manner. Ngwu (2006) views liquidity management as the act of storing enough funds and raising funds quickly from the market to satisfy depositors, loan customers and other parties with a view to maintaining public confidence. Bank liquidity means the ability to meet financial obligations as they come due. Liquidity in commercial bank means the bank's ability to finance all its contractual obligations when due, and these obligations can include lending, investment and withdrawal of deposits and maturity of liabilities, which happen in the normal course of the bank actions (Ali, 2015). Erika and Raimonda (2014) state that liquidity in simplified terms is companies' ability to cover its obligations towards creditors calling funds at inconvenient time, expressed in measured number. In other words, if the liquidity is not managed in proper way, firm can face situation of illiquidity and will technically be bankrupt or face losses. No manager wants to lead a company to this situation. This is the main reason why companies have to be aware of liquidity risk management. Managers have to be ready to adapt to unfavorable economic conditions and possible changes in order to stay in the market and not to damage company's image and relationships with stakeholders.

Risk Management and Bank Performance

Increasing shareholders' return epitomising bank performance is one major objective of bank management. The objective often comes at the cost of increasing risk. Bank faces various risks such as interest risk, market risk, credit risk, off balance risk, technology and operational risk, foreign exchange risk, country risk, liquidity risk, and insolvency risk (Tandelilin, Kaaro, Mahadwartha, & Supriyatna, 2007). The bank's motivation for risk management comes from those risks which can lead to bank underperformance. Issues of risk management in banking sector have greater impact not only on the bank but also on the economic growth (Tandelilin, Kaaro, Mahadwartha & Supriyatna 2007).

Tai (2004) concludes that some empirical evidence indicates that the past return shocks emanating from banking sector have significant impact not only on the volatilities of foreign exchange and aggregate stock markets, but also on their prices, suggesting that bank can be a major source of contagion during the crisis. Banks which better implement the risk management may have some advantages: (i) It is in line with obedience function toward the rule; (ii) It increases their reputation and opportunity to attract more wide customers in building their portfolio of fund resources; (iii) It increases their efficiency and profitability. Cebenoyan & Strahan (2004) find evidence that banks which have advanced in risk management have greater credit availability, rather than reduced risk in the banking system. The greater credit availability leads to the opportunity to increase the productive assets and bank's profit.

Empirical Review

Enekwe, Eziedo & Agu (2017) examined the effect of Liquidity Risk on Financial Performance of Selected Quoted Commercial Banks in Nigeria. The researchers sought to primarily evaluate effect of liquidity risk on financial performance of selected deposit money banks in Nigeria. The ex-post facto research design was used for this study. This work employed six (6) variables; Net operating profit margin (NOPM) for dependent variables and Deposits, Cash, Liquidity-Gap, Non-performing loans (NPLs) and Leverage ratio (LEV) for independent variables. The period for this study was six (6) years from 2009 – 2014. The model estimation was executed using ordinary least squares technique. Descriptive statistics, Spearman rank-order correlation and regression analysis were applied for the analyses. The results suggest that deposits, cash and non-performing loans have positive relationship with net operating profit margin (NOPM), while liquidity-gap and leverage ratio have negative relationship with net operating profit margin (NOPM) of selected deposit money banks. Generally, 94.24% of the variations in dependent variable were caused by change on the independent variables used for this study. It further revealed that deposits, cash and non-performing loans have significant effect on net operating profit margin (NOPM); while liquidity-gap and leverage ratio have no significant effect on net operating profit margin (NOPM).

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

The work recommends that banks should establish the required cash in each product segment and maintain the optimal level which will help in reducing the cash balance level and increase their customer deposit base through making the product accessible to more customers especially the low-income earners. At the same time, banks should consider targeting the corporate clients who will be willing to retain a large cash base in the banks for a longer duration.

Nwangi (2014) investigated on the effect of liquidity risk management on financial performance of commercial banks in Kenya. The results of the study show that a unit increase in liquid assets to total assets ratio decreases return on assets by 1%. A unit increase in liquid assets to total deposits ratio decreases return on assets by 2.2%. A unit increase in borrowings from banks decreases return on assets by 14.2%. Finally, the control variable which was asset quality shows that a unit increase in non-performing loans as a proportion of total loans would lead to a 12.4% decrease in return on assets. The study concludes that liquidity risk management has a significant negative relationship with financial performance of commercial banks. Borrowings from banks by commercial banks to meet shorter liquidity needs do have the greatest impact on liquidity at 14.2% and were significant at 5%. The study recommended that Management should establish the required cash in each product segment and maintain the optimal level which will help in reducing the cash balance level. At the same time, banks should consider targeting the corporate clients who will be willing to return a large cash base in the banks for a longer duration. Ejoh, Okpa and Egba (2014) investigated the impact of credit and liquidity risk management on the profitability of deposit money banks in Nigeria. The researchers found that there is a significant relationship between bank liquidity and profitability. The researchers added that for effective and efficient performance of banks, there is a need for strategic credit risk and liquidity risk policy formulation and implementation in full. Credit and liquidity risk management are one of the key factors for bank survival. The result also investigated their relationship in Nigeria money deposit bank using First Bank of Nigeria Plc as a case study. It was revealed that each category of risk has a significant impact on bank profitability. It was also documented that the interaction of both risk categories significantly determines banks' probability of default.

Ibe (2013) studied the impact of liquidity management on the profitability of banks in Nigeria. The results of this study have shown that liquidity management is indeed a crucial problem in the Nigerian banking industry. The variables selected have not performed well in terms of their contribution towards the performance of the selected banks as represented by profit after tax. Mentioned is the fact that the management of cash and short-term fund in the three selected banks contributed negatively in Afribank and United Bank for Africa and minimally in Diamond Bank. The rest of the independent variables did not contribute much to the performance of the banks. Cash and short-term fund have not been properly managed in UBA which means that the amount held may have been in excess of the requirement for greater performance since cash is sterile. The results also have shown that banks should hold more treasury bills and certificates (TBC) as their impact on bank performance has been consistently commendable in the three selected banks. The study recommended that stakeholders should increase their customers deposit base through making the product accessible to more customers especially the low-income earners who have been neglected for a long time by the mainstream banks. Oluwafemi & Obawale, (2010) examined effect of Risk Management on Financial Performance of commercial Banks in Nigeria. Data for the study was derived from annual observations of ten Nigeria banks between the period of 2006-2009. Profitability of the institutions was in by ratios of ROA and ROE. The independent variables in the study were liquidity, credit and capital risks. The study inferred that there is a critical relationship between bank performance and risks administration. The study also concluded that better risk management in such as management of funds, reducing unnecessary costs such as doubtful advances and obligation value proportion examination brings about higher financial performance. In this way, the analyst held the view that it is of high significance that commercial banks have sufficient risk administration practices. The study recommended that Management should apply more of a quick snapshot of a firm's risk, rather than a figure that can be worked over for a long period of time.

Theoretical Review

The theories discussed are Modern Portfolio theory and Moral Hazard Theory for the purpose of this research.

Modern Portfolio Theory (MPT)

The hypothesis of Modern Portfolio Theory (MPT) is a speculation set forth by Harry Markowitz in his paper. The hypothesis was distributed in 1952 by the Journal of Finance. The venture hypothesis depended on the possibility that risks disinclined financial specialists in the business can build portfolios to expand expected stock returns based on the level of market risks in a speculation, understanding that risks is an inborn and huge piece of higher reward in venture. The hypothesis came to be among the most critical and noteworthy financial speculations in the realm of fund and venture. The hypothesis is additionally alluded to as portfolio hypothesis and proposes that it is workable for financial specialists to build a proficient bleeding edge of ideal portfolios, which offers the most extreme and conceivable expected returns for a particular given level of risk. It encourages and recommends that, for speculators it is not sufficiently just to center at the normal risks and stock return of one particular stock. By putting resources into numerous stocks, a financial specialist can win in case of broadening, by diminishing the risks in the portfolio given. This hypothesis consequently tries to measure the advantages of enhancement.

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

Moral Hazard Theory

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

Methodology

The ex-post facto research design was used because it involves events that have already taken place in the past and cannot be manipulated. These are data obtained from published sources and used for a purpose that could be different from that of the agency that initially collected and published the data. In this case, the data were obtained from official documents of selected deposit money banks in Nigeria, relevant journals, annual reports or financial statement (statement of comprehensive income and statement of financial position), existing research materials on liquidity risk from learned scholars and available textbooks on the research topic. Also, the researcher gathered data from selected deposit money banks annual report or financial statement and used them to analyze Non-performing loans (NPLs), Leverage ratio (LEV) and Net Operating Profit Margin (NOPM) for a period of six (10) years from 2010 – 2019. This is because it deals in answering our research question and to empirically test our research hypotheses.

The population of the study composed of all deposit money banks in Nigeria between the years 2010 – 2019. First bank and Guarantee Trust bank (GTB) Plc were randomly selected using the convenient sampling technique from the 14 quoted deposit money banks in Nigeria. The choice of ordinary least squares (OLS) and descriptive statistics for the research work is divided by the fact that its computational procedures is simple and the estimates obtained from this procedure have optional properties which include linearity, unbiasedness, mini-variance and mean square error estimation. In carrying out this research work on effect of liquidity risk on financial performance the researcher developed a compact form of our model as follow:

$$Y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_nx_n \dots e_i \dots \dots \dots (i)$$

Where:

Y = Dependent Variable of banks

x = Independent Variable of banks

b₀ = Intercept for x variable of banks

b₁–b₃ = Coefficient for the independent variables x of banks, denoting the nature of relationship or effect with dependent variable y (or parameters).

e_i = Error term

n = Coefficient for each of the independent variables

The regression model is adapted from the one used by Arif and Anees (2012) when they did a similar research on Nigeria banks. This work models that:

Performance = f (Non- Performance loans and leverage ratio)

The model specifically took the form;

$$NOPM = B_0 + B_1 (NPL) + B_2 (LEV) + e_i \dots \dots \dots (ii)$$

Where:

NOPM = Net operating profit margin (NOPM) is Net operating income divided by revenue.

NPLs = Non-performing loans: The provisioning for NPLs is taken from profit and loss statement of banks for the analysis in this study.

Leverage Ratio (LEV) = This was obtained short-term debt + long-term debt)/fixed Assets.

The F-test was used to determine the significance of the regression while the coefficient of determination, R² was used to determine how much variation in y is explained by x. Ordinary Least Square Regression analysis was applied to investigate the relationship of independent variables with dependent variable and to know the effect of liquidity risk on financial performance. By using this method, the researchers were able to identify the significance of each explanatory variable to the model and also the significance of the overall model.

RESULT AND DISCUSSION

Table 1: Descriptive Statistics

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Standard Deviation</i>
<i>NPLs</i>	10	344.0000	93151712	16397472	24900999
<i>NOPM</i>	10	0.033100	1.251300	0.387737	0.326777
<i>LEV</i>	10	0.325000	31.33940	5.514420	5.626218

Sources: Researchers Computation (2020)

The descriptive statistics table 1 shows that standard deviation column indicates that the values were widely dispersed from the mean values. This means that as mean value increases, the value of standard deviation will also increase and vice versa. Also, the low standard deviation of Net Operating Profit Margin (NOPM) implies that it does not deviate so much from the mean while the standard deviation of non-performing loans and leverage ratio were 5.234257 and 16.04187. The implication of the result was that the observed distributions of Non-Performing Loans and Leverage ratio were normally distributed. Model specification involves the non-performing loans and determination of dependent and leverage ratio substitution are relatively high implying much deviation from their respective means which is also reflected in the squared deviation figures.

Table 2: Regression Analysis

Dependent Variable NOPM

Method: Panel Least Squares

Date: 06/25/20 Time: 11:52

Sample: 2010 2019

Included observations: 10

Source: E-view 10.0 (2020)

Discussion of Findings

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.016853	0.098201	0.171620	0.8660
NPLs	4.14E-09	2.02E-09	2.054229	0.0578
LEV	-0.001574	0.004446	-0.354014	0.7283
Cross-section fixed (dummy variables)				
Period fixed (dummy variables)				
R-squared	0.942408	Mean dependent var	0.387737	
Adjusted R-squared	0.888656	S.D. dependent var	0.326777	
S.E. of regression	0.109040	Akaike info criterion	-1.287356	
Sum squared resid	0.178345	Schwarz criterion	-0.586758	
Log likelihood	34.31034	Hannan-Quinn criter.	1.063229	
F-statistic	17.53242	Durbin-Watson stat	2.324185	
Prob(F-statistic)	0.000001			

The regression analysis Table 2 shows that R-Squared is 94.24% of the variation in Net Operating Profit Margin (NOPM) of selected deposit money banks in Nigeria were caused by the level of Non-Performing Loans (NPLs) and Leverage ratio (LEV) while 5.76% of the variations in Net Operating Profit Margin (NOPM) were affected by other factors outside our model. The adjusted R-Squared which indicates a figure more than 50% implies that; Non-Performing Loans (NPLs) and Leverage ratio (LEV)

were the major determining factors of Net Operating Profit Margin (NOPM) of selected deposit money banks in Nigeria. The Durbin-watson statistic is 2.324185 while F-Statistic is 17.53242 at P-value of 0.000001.

The regression analysis further indicates that t-calculated of Non-Performing loans (NPLs) used for this study have significant effect on Net Operating Profit Margin (NOPM) while the remaining the independent variables (leverage ratio) have no significant effect on Net Operating Profit Margin (NOPM) of selected deposit money banks in Nigeria. Arif and Ahmed (2012), Maaka (2013) and Mwangi (2014) agree with our findings that deposits; cash and non-performing loans have significant effect on

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

profitability of their study while Ari and Ahmed (2012) and Maaka (2013) were inconsonance with liquidity-gap and Leverage ratio which indicates no significant effect on profitability. So, the test output described to the results and the emerging multiple regression equation is as: $(NOPM)_{yt} = 0.016853 + 4.14E-09(NPLs)_{yt} - 0.001574(LEV)_{yt} + e_i$. This confirms that the higher the ability of banks to withstand liquidity risk in the short term and the risk from the presence of large non-liquid assets, the higher the performance of banks. At the end, the researcher concludes that deposit money banks in Nigeria can raise the level of performance by improving their ability to face risk from liquidity shocks, risk from high demand for short-term liquidity and the risk from the presence of the large non-liquid assets.

Conclusion and Recommendations

Based on the results of the analyses for this study, the researcher therefore concluded that; Non-performing Loans (NPLs) have significant effect on net operating profit margin of selected deposit money banks in Nigeria and Leverage ratio (LEV) has no significant effect on net operating profit margin (NOPM) of selected deposit money banks in Nigeria. It is time to work with non-performing loan as the funds that are given to the borrowers as loans must be safe and are recovered and when due. Banks do business with depositor's money, if banks can't get depositors fund when they want, there might be a vulnerable situation in the industry. Public may lose confidence from the bank, which may create run on the bank. As a result, performance of the bank can be negatively affected. Effective risk management is accepted as a major cornerstone of bank management by academics, practitioners and regulators and acknowledging this reality and the need for a comprehensive approach to deal with bank risk management, the Basel committee on Banking Supervision adopted by the Basel I Accords, followed by the Basel II Accords and recently by the Basel III, to deal with the matter (Zaphaniah, 2013). Moreover, risk management is found to be one of the determinants of returns of banks' stocks. In line with the findings, the researcher recommended as follows:

- i. The work recommends that banks should establish the required cash in each product segment and maintain the optional level which will help in reducing the cash balance level and increase their customer deposit base through making the product accessible to more customers especially the low-income earners. At the same time, banks should consider targeting the corporate clients who will be willing to retain a large cash base in the banks for a longer duration.
- ii. Bank managers should apply more of a quick snapshot of a firm's risk, rather than a figure that can be worked over for a long period of time.
- iii. The banks board of directors should check and monitor all the non-performing loans in order to reduce the occurrence of doubtful debt or unpaid debt at the appropriate time.

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Effect of Market Capitalization on Nigerian Economic Growth

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Abstract

The recent financial crisis has shown that there is a severe economic impact of the financial system. The financial market in any country remains one of the most important pillars for long-term economic growth and development. This study investigates the effect of stock market capitalization on Nigerian economic growth. Gross Domestic Product was used as proxy for economic growth and was expressed as a function of Stock Market Capitalization (SMcap). This study employed Quantitative research design through the use of time series data. This includes a descriptive analysis and econometric analysis of secondary data covering the period of 22 years from 1998 to 2019 obtained from Central Bank of Nigeria Annual Statistical Bulletin, Central Bank of Nigeria Annual Report and Statement of Accounts (various issues), NSE books, and SEC Market Bulletins. Augmented Dickey Fuller (ADF) unit root test, Co-integration test and Vector Error Correction Model (VECM) were employed in the analysis. From the ADF unit root test conducted, it was revealed that Gross Domestic Product and SMcap were non-stationary in levels but at first differencing; both variables became stationary at 5% level of significance. The results of the VECM model indicated that SMcap has a positive and significant effect on Gross Domestic Product and it is estimated on the average that 1% increase in stock market capitalization will lead Gross Domestic Product to increase by 84%. It was thus concluded that stock market capitalization has a significant effect on Nigerian economic growth measured by Gross Domestic Product. The study recommends that the Nigeria government should place priority on the development of the stock market through formulated effective monetary and fiscal policy management and in fact a stable macroeconomic environment.

Keywords: Stock Market Capitalization, Economic growth, Gross Domestic Product, Central Bank of Nigeria

INTRODUCTION

Accounting for economic growth and development is a major goal for all countries, especially since Smith (1776) published his famous book 'Wealth of Nations' (Aali-Bujari, Venegas-Martínez & Pérez-Lechuga 2017). There have been many lessons on factors affecting economic growth. Economists tend to focus on factors like capital, labor and technology as the only thing that matters in economic growth. As a result of recent developments in economic growth, new forms of economic growth have emerged such as social capital, intellectual events, macroeconomic societies, political stability, economic development rather than cultural factors, capital, labor and technology (Chizea, 2012; Mhadhbi 2014). The recent financial crisis has shown that there is a severe economic impact of the financial system. The financial market in any country remains one of the most important pillars for long-term economic growth and development (Oluwatoyin&Gbadebo 2009;Uwakaeme, 2015). The financial market caters for a wide

range of customers, including different levels of government, corporate bodies and individuals inside and outside the country. The stock market is a financial market, including enterprises that operate cheaply with securities for more than a year. The Nigerian Stock Exchange has an important role to play in the long-term equity market of the Nigerian Stock Market. The main purpose of any financial system is a vision of a conducive environment for transferring funds from the economy to additional security (Maxwell, Happiness, Alice & Chinedu 2018).

Capital is really necessary to stimulate the engine of growth and, consequently to ensure maximum productivity and real economic growth in the economy. An assessment of the entire economic system shows that capital due to nations is not used properly in developing countries due to the presence of weak capital markets and inefficient infrastructure to mobilize affordable capital for economic and productive activities (Nzotta, 2004; Taiwo, Alaka&Afieroho 2016). The stock market has for some time become one of the means by which foreign funds are injected into most economies, and therefore the tendency of the global economy is more feasible / visible there than anywhere else (Nwaolisa, Kasie&Egbunike 2013). Stock markets are not only essential for raising funds for infrastructure and business expansion, they also foster good corporate governance and accountability, promote transparency, enable wealth creation and distribution, foster inclusion, democratize access to prosperity and champion meritocracy (SEC 2016).

Market capitalization (also known as market value) is the market price index of the number of shares (including their particular classes) of listed domestic companies. Investment, unit trusts, and companies whose sole purpose for the business is to hold shares of other listed companies is excluded (Taiwo, Alaka&Afieroho 2016). From an economic point of view, market capitalization is the most used indicator for determining the size of a capital market. In a bear market, market capitalization falls, and in a bullish market, vice versa. Market capitalization reached its highest value in 2007 at ₦13.2294 trillion. But this fell to ₦ 959 trillion in 2008 due to the global financial meltdown. Over the past four years, total market capitalization was ₦17,003 trillion, down 5% to ₦16,185 trillion in 2016. This fell further by 37% to ₦10.17 trillion. A 15% increase was observed from 2017 to 2018 and the total market capitalization was ₦11.73 trillion (Ologunwa & Sadibo 2016).

For sustainable economic growth, funds must be effectively mobilized and allocated to enable businesses and the economies harness their human, material, and management resources for optimal output (Oluwatoyin&Gbadebo 2009). Hence, the capital market is an economic institution, which promotes efficiency in capital formation and allocation. It can be stated that Economic growth occurs when there is a steady increase in the economic activities of a nation and it can be measured by Gross Domestic Product (GDP) of the nation (Ologunwa&Sadibo 2016). A growing economy is said to experience development when factors that causes economic growth are recognized. Provision of funds for long-term investment is one of such economic factors that determine the development of a nation (Yadirichukwu&Chigbu 2014).

The stock market is prone to weaknesses, including market failures and unpredictable changes, as well as a small percentage of market participants and the general public. These forces and market values affect the markets. For this reason, traditional schools of thought development say that there is no connection between investment and financial development due to the existence of level effect (Omoke, 2010). However, according to efficient markets hypothesis (Fama, 1970), stock markets work well, so that securities prices reflect all the information available at any given time, and thus the best level of capitalization in the market. This means efficiency if the supply of assets occurs throughout an economy; from surplus unit to deficit but productive units, this has a good explanation for the economic growth (Yadirichukwu&Chigbu (2014).

The market in Nigeria is described as shallow; this is because it floats to a smaller market and is measured by the proportion of storage in the market to total inventory volume. The next challenge is to be able to increase and retain as many of our investors and companies as possible and simultaneously attract foreign investors to the Nigerian Stock Market (Maxwell et al., 2018). The stock marketplace is also characterized by the unmistakable nature of the market, one of which is asymmetric, in which one party goes into business with less information than the other party (Otieno, 2017). The expansion of the

phenomenon greatly shortens the effectiveness of financial markets as a process for allocating money. Since geography and traditional eyebrows confiscate information, asymmetric information is universal. Although changes in asymmetric information are minimized but not eliminated, so they capture sharp reactions, unsatisfactory marketing and problem solving can occur when accurate information in the financial markets behaves unsteadily (Sylvester & Enabulu 2011). As a result, in the absence of sufficient information investors tend to enter and exit the markets listening to rumors.

Numerous have been conducted in the past to determine the impact of market capitalization on economic growth. Levine and Zervos (1996) and Dabo (2015) stated that stock market has positive effect on economic growth in Nigeria. Boopen, Shalini and Sawkut (2009) find that financial development plays a major role in economic growth. Dorko (2012) finds that there is a link between the level of development and market development. Olowe, Mathew and Fasina (2011) employed OLS method to analyse the efficiency of capital market on the economy between 1979 and 2008. The findings revealed negative relationship between gross domestic product and market capitalization. Sylvester and Enabulu (2011) reported a weak negative correlation between gross domestic product growth and interest rate and stock market returns. Owolabi and Ajayi (2013) explored the relationship between stock market and economic growth between 1971 and 2010 utilizing Ordinary Least Square method and the outcomes showed that there is a positive relationship between economic growth and all the measures of stock market and economic growth. Okonkwo, Ananwude and Echeboba (2015) stated the existence of a unidirectional relationship between stock market development and economic growth which means that the state of development of the economy will determine the development and operations of the stock market. This indicates that the relationship between market capitalization and economic growth remains unsettled, especially for an emerging economy like Nigeria, thus the need to investigate the effect of Stock Market Capitalization on economic growth in Nigeria. The basic hypothesis underlying this study is stated thus:

H₀₁: Market capitalization has no significant effect on Nigerian economic growth.

LITERATURE REVIEW

Conceptual Framework

StockMarket capitalization

Market capitalization refers to the market value of trading shares or quantities in the traded item. It also means the value of all the securities secured in relation to their market prices (Nzotta, 2004). Market capitalisation refers to the overall value of a company's shares. It can be determined by multiplying the price of a stock by its total number of outstanding shares. For instance, if it sells \$50 per share, the market cap for a 20 million share company is \$1 billion. It makes it possible for investors to understand the relative dimensions of one company versus another. Market cap measures what an open market company is worth and the market perception of its future prospects because it reflects what investors are prepared to pay for their stocks. It can be used as a social media platform to consider company value and is a choice in other ways of looking at sales. Pavone (2019) citing Dias (2013) stated that market capitalization is an important market indicator of the value of shares and the value of companies in general.

Concept of Capital Market

Capital market is defined as the market where medium and long term finance are bought and sold (Akingbounge, 2006). A capital market is a market for securities (debtor equity), where business enterprises (companies) and government can raise long-term funds (Sullivan & Sheffrin, 2003). It is defined as a market in which money is provided for periods longer than a year, as the raising of short-term funds takes place at other market, which in this case is the money market. Capital market offers varieties of financial instrument that enable economic agents to pool, price and exchange risk. Through assets with attractive yields, liquidity and risk characteristics, it encourages savings in financial form. This is very essential for government and other institutions in need of long term funds (Nwankwo, 2011).

Ekezie (2002) noted that capital market is the market for dealings (i.e. lending and borrowing) in longer-term loanable funds. Mbat (2001) described it as a forum through which long-term funds are made available by the surplus to the deficit economic units. Nyong (1997) viewed the stock market as a complex institution imbued with inherent mechanism through which long-term funds of the major sectors of the economy comprising households, firms, and government are mobilized, harnessed and made available to various sectors of the economy. According to Al-Faki (2009), the capital market is a network of specialized financial institutions, series of mechanisms, processes and infrastructure that, in various ways, facilitate the bringing together of suppliers and users of medium to long term capital for investment in socio-economic developmental projects. Emekekwe (2016) stated that capital market provides facilities for transfer of medium and long term funds to various economic units.

The capital market began operations in Nigeria on June 5, 1961 in accordance with the provisions of the Lagos Stock Exchange Act of 1961, which was transformed into the Nigerian Stock Exchange into December 1977 as a result of a review of the financial system of Nigeria (CBN, 2007). The Securities and Exchange Commission (SEC) was established in 1979 in accordance with the 1979 SEC Law, which was to regulate the capital market, but it began its operations in 1980. It assumed the oversight role of the Finance Committee established in 1973. Since then, a variety of financial instruments have been invested in capital markets by new and existing businesses to support innovation, new projects or industries (Nwaolisa, Kasie&Egbunike 2013).

Economic Growth Conceptualized

Economic growth means an increase in the capacity of an economy to produce goods and services, compared from one period of time to another. Economic growth is a process by which a nation wealth increases over time (Duke & Nkamare 2015). Economic growth can also be referred to as the increase of per capita gross domestic product (GDP) or other measures of aggregate income, typically reported as the annual rate of change in the real GDP (Agu 2018); this definition is thus adopted for use. Uwakaeme (2015) stated that economic growth is a central policy goal of any government. Experts and economic planners have had to choose between or combine some of the macroeconomic variables when addressing relevant issues in economic management. Economic growth measured by Gross Domestic Product (GDP) confer many benefits, including raising the general standard of living of the population as measured by national income per capita, facilitating the distribution of income, enhancing the timeframe for achieving the basic needs of man to a significant majority of the population.

Empirical Literature

Araoye, Ajayi and Aruwaji (2018) examined the impact of the Nigerian Stock market development on the nation's economic growth from 1985 to 2014. The economic growth was proxy by the GDP while the stock market variables considered included; market capitalization and market turnover ratio as proxy for stock market development in terms of size and liquidity. The study utilizes the Johansson's co integration test in establishing if a long run relationship does exist between stock market development and economic growth in Nigeria. The empirical results suggest that the stock market is significant in determining economic growth in Nigeria using the error correlation model and it was concluded that the stock market has impacted insignificantly on the economic growth. The study recommended that Small and medium entrepreneurs should be encouraged to access the market for investible funds given their close affinity with the grass root funds mobilization ability. Adigwe, Nwanna and Ananwude (2015), examined the effect of stock market development on Nigeria's economic growth. The objective of the study was to determine if stock market development significantly impact on the country's economic growth. Secondary data were employed for the study covering 1985 to 2014. Ordinary Least Square (OLS) econometric technique was used for the time series analysis in which variations in economic growth was regressed on market capitalisation ratio to GDP, value of stock traded ratio to GDP, trade openness and inflation rate. The analysis revealed that stock market has the potentials of growth inducing and concluded that stock market has not contributed meaningfully to Nigerian economic growth, since only 26.5% of variations in economic growth were explained by the stock market development variables. Based on this, the study suggests for an encouragement of more investors in the market, improvement in the settlement system and ensuring investors' confidence in the market.

Dabo (2015) examined the impact of capitalization of the Nigerian capital market on the growth of the Nigerian economy. The study utilized the annual time series from 2001 to 2012 collected from the Annual Report and the Statement of the Nigerian Stock Exchange and the Central Bank of Nigeria Statistics Bulletin Annual Report in a statement of the Nigerian Stock Exchange. A qualitative study on the calculation of the relationship between Nigerian capital and economic development in Nigeria was adopted and the results show that, there is a reason for disagreement between the market capitalization and economic growth, ranging from GDP growth (MCAP) at 5 percent significant level. The author concludes that the Nigerian capital market should generate more trust in investors and recommended that more should be done in terms of transparency and accountability which are necessary for key support and growth in economic development in the country. Ogunleye and Adeyemi (2015) examined the impact of stock market development on economic growth between 1970 and 2008. Cointegration Analysis and Error Correlation Mechanism were adopted as the estimating techniques to verify the existence of long-run relationship between stock market development and economic growth. Questionnaires were administered to access the investor's confidence in the Nigerian stock exchange and to authenticate the impact of stock market development on economic growth in the period under review. The empirical results revealed that there is existence of long-run relationship between stock market development and economic growth in Nigeria. The findings concluded that there is positive relationship between market capitalization and money supply with economic growth while total value traded, turnover ratio and gross capital formation have inverse relationship with the growth. Also, market capitalization is highly significant and appears to be the major stock market indicator. Based on these findings government should address the shortage of investment assets through effective policy measures that enhance the performance of stock market in Nigeria and to restore confidence of the investors.

Ali, Rehman and Nasir (2015) investigated the relationship between stock market share and economic growth in Saudi Arabia. The study included encompasses capital formation in a trivariate system for the period 1985 to 2012. The study employed partial root trials and used the Johansen correlation coefficient to investigate the association between variables under study. The Granger causality test was employed to identify defects of causality among the adaptive variables. Vector Autoregressive Model reveals the relationship between economic growth and capital markets. The results of the Granger causality test showed that capital markets and capital are causing economic growth in Saudi Arabia. Moreover, the tightening of the stock market also creates capital in the economy. Based on these results, the study concluded that development costs of the Saudi stock market will go a long way toward demonstrating the rate of growth of the economy. Churchill, Arhenful and Agbodohuhu (2013) in their own research effort, studied the relationship between capital market and economic growth in Ghana using a four-month periodic time series from 1991 to 2006. The study used Johansen multivariate integration strategies with error correction method to monitor the length of the operation and the relationship with the short-term variability of the variants. However, the Granger-causality standard was used to determine the association between variables. The study found that economic growth, real estate prices, real estate investment has a positive effect on the development of Ghanaian businesses. Economic growth is one of the most important indicators of development of the Ghana Stock Exchange. In contrast, the results show that regional bank developments are negatively correlated with business development and appear to be a substitute for corporate investment in Ghana. The results of the Granger-causality test indicate that economic growth leads to a commodity capitalization (commodity market development) without any response supporting the "following demand" hypothesis. The study concludes that despite Ghana's financial reforms it is new, neglected and with considerable attention, it has the potential to mobilize both domestic stocks and foreign capital for future investment. As a result, it is important for the government to adopt measures to promote economic growth, high commodity prices and domestic investment in order to grow Ghanaian products.

Global marketing opportunities have opened new doors to explore the relationship between financial reform and economic development, with a focus on product marketing results (Arestis, Demetriades&Luintel, 2001; Mhadhbi, 2014). The relationship between financial and economic

development is widely discussed in the literature. Some argue that a successful stock market can have a positive effect on economic growth by contributing to overall economic growth as a result of stock growth; thus, promoting the provision of economic resources thus leading to other sectors of the economy in the process of their growth (Enisan&Olufisayo, 2009; Mhadhbi, 2014; Rashti, Araghi&Shayeste, 2014). In contrast, others view the development of the stock market as ineffective in boosting the economy (Aali-Bujari, Venegas-Martínez& Pérez-Lechuga 2017; Maxwell, Happiness, Alice &Chinedu 2018).

Theoretical Discussion

Efficient Market Hypothesis

The efficient markets theory (Malkiel&Fama, 1970) establishes that securities prices in the stock market fully reflect all available information. It is based on the assumptions that information is freely available to all market participants at negligible costs and this information trickles in randomly, thus prices are rightly priced always (where mispricing exists, arbitrage activities quickly adjust the price to the right level). The market players are also assumed to be rational and seek to maximize their returns; thus, the stock markets allocate funds from surplus units to deficit units in an efficient and effective manner. The efficient stock markets theory provides a good explanation on the role stock markets, especially market capitalization, play on promoting economic growth in a country. Since resources are efficiently allocated, wasteful use is minimized in the economy; where such efficient allocation and use of the scarce resources occur, economic growth is positively affected.

Endogenous Growth Theory

The theory of endogenous development was propounded by Romer, (1986) and it suggests that the development of money is caused by factors that enter the economy, not external forces. Factors of production, such as the labor factor, can be managed internally and the economy can be improved to ensure economic growth. The theory is thus based on a closed market economy. According to the endogenous theory of growth, the development of the stock market, and hence capitalization, leads to a high level of economic growth by affecting the level of investment and productivity. According to the theory, stock market helps to mobilize savings and stimulate investment and thus improve economic growth (Dorco, 2012). The stock market, being part of the overall financial system, helps to mobilize and increase financial resources from surplus units in the economy, and then such funds are efficiently and effectively directed to the supply units of the deficit. Thus, resources are efficiently allocated to many areas of production, and over time, such efficiency has a positive impact on economic growth.

METHODOLOGY

The research paper is predicated on an effort to investigate the assessment of capital market on the Nigerian economic growth. Quantitative research design was adopted through the use of time series data. This includes a descriptive analysis and econometric analysis of secondary data which was used in order to establish the findings of the study. This approach was adopted because it enables the study to obtain data-driven and evidence-based findings which enabled the research objectives to be achieved. The study used stock market capitalization (SMcap) as the independent variable while GDP was used to measure the economic growth. The study adopts the use of secondary data collected on each of the stated variables, covering the period of 22 years from 1998 to 2019. The choice of this period is to make room for a broad coverage of the stock market indicators, as well as the investigation of both the short run and long run relationship between stock market development and economic growth in Nigeria. These annual data series were collected majorly from CBN Statistical Bulletin, CBN Annual Report and Statement of Accounts (various issues), NSE books, and SEC Market Bulletins.

The Data set on Gross Democratic Products and Market Capitalization is presented thus:

year	GDP	MCAP
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1998	3,884,681.00	262,600.00
1999	4,679,212.00	300,000.00
2000	6,713,574.00	472,300.00
2001	6,895,198.00	662,500.00
2002	7,795,758.00	764,900.00
2003	9,913,518.00	1,359,300.00
2004	11,411,066.00	2,112,500.00
2005	14,610,881.00	2,900,100.00
2006	18,564,594.00	5,120,900.00
2007	20,657,317.00	13,181,700.00
2008	24,296,329.00	9,563,000.00
2009	24,794,238.00	7,030,800.00
2010	54,612,264.00	9,918,200.00
2011	62,980,397.00	10,275,300.00
2012	71,713,935.00	14,800,900.00
2013	80,092,563.00	19,077,400.00
2014	89,043,615.00	16,875,100.00
2015	94,144,960.00	17,003,400.00
2016	101,489,492.00	16,185,700.00
2017	113,711,634.00	21,128,900.00
2018	127,736,827.00	31,520,550.00
2019*	104,633,152.00	12,900,000.00

** Note: GDP for 2019 is at the end of 3rd Quarter; Source: Researcher's Compilation (2020)*

The data obtained was analysed using descriptive and inferential analysis. Descriptive analysis is the presentation of summary of the important statistics in a data set. Opara, Emenike and Ani (2015) conclude that researchers that are studying financial markets should start by describing their variables before delving into the inferential analysis. The regression analysis, on the other hand, was conducted using ordinary least square (OLS) method which is based on the modification of the empirical models of Abu (2009), Adenuga (2010) and Aigbovo and Izekor, (2015). The OLS enables the measure of the impact of independent variable(s) (X) on the dependent variable (Y). It is specified as follows:

$$\text{GDP} = f(\text{SMcap})$$

and can be express in its econometric form as follows:

$$\text{GDP} = \alpha + \beta_1 \text{SMcap} + \mu$$

Where:

GDP = Gross domestic product

SMcap = Stock Market capitalization

α = the constant of the equation

β_1 = the coefficient associated with the independent variable

μ = The Error Term

The methods of estimating this empirical study are based on co-integration analysis and the Error Correction Model. In order to decide on this technique, the time series characteristics of the variables used in this study must be determined. The first step is the determination and testing of the data's stationarity using Augmented Dickey Fuller (ADF) unit root test. The second step is to establish a long time relationship between the variables after stationary testing. After the integration order of the variables is determined, the long-lasting relationship between the variables can be established. Co-integration and Error Correction Model (ECM) would therefore be defined and estimated.

RESULTS AND DISCUSSION

Descriptive Statistics

Here the descriptive statistics and graphical representation of the variables employed in this study is presented. It shows the number of observation, minimum, maximum, mean, standard deviations, skewness, kurtosis and Jarque-Bera statistics of the variables used and it is as presented in table 1 below.

Table 1: Descriptive Statistics for the variables

	GDP	SMcap
Mean	47,926.146	9,700,729
Median	24,545,283,	9,740,600
Maximum	113,711.634	31,520.550
Minimum	3,884,681	262,600
Std. Dev.	41 489 681	8 300 911
Skewness	0.487536	0.682522
Kurtosis	1.676711	2.934173
Jarque-Bera	2.476704	1.712038
Probability	0.289862	0.424850
Sum	1.05E+15	2.13E+14
Sum Sq. Dev.	3.79E+28	1.52E+27
Observations	22	22

EViews Result, 2020

From table 1, GDP has a minimum value of ₦3,884.681 billion and maximum value of ₦113,711.634, billion with a mean and standard deviation of ₦47,926.146 billion and ₦41,489.681 billion respectively. SMcap has a minimum value of ₦262.600 billion and maximum value of ₦31,520.550 billion with a mean and standard deviation of ₦9,700.729 billion and ₦8,300.911 billion respectively. The skewness shows that the series for both variables are positively skewed while the kurtosis shows that GDP and SMcap is leptokurtic. The Jarque-Berra statistics further validates that the variables are normally distributed.

Figure 1 shows the relationship between market capitalization (SMcap) and Gross Domestic Product (GDP) for the period under study (1998 – 2019).

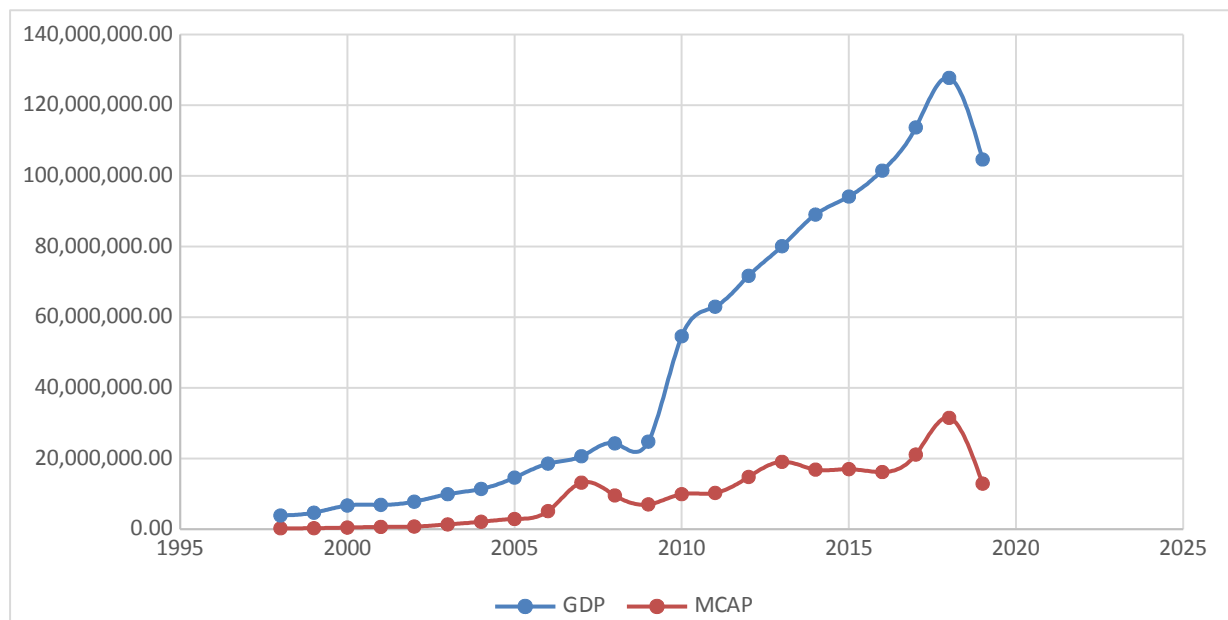


Figure 1: The relationship between Stock market capitalization (SMcap) and Gross Domestic Product (GDP) from 1998 – 2019

* Note: GDP for 2019 is at the end of 3rd Quarter; Source: Researcher's Computation (2020)

As shown, there was a steady increase in SMcap and a corresponding increase in GDP until 2007 when SMcap began to decline. This could be associated with the global recession that was reported to commence in 2007 and lasted till 2009 which affected the economy of so many countries including Nigeria (Shomali & Giblin 2010; Abina & Maria 2019). However, the decrease in SMcap at this time did not affect the GDP of the country as shown in the figure above. The SMcap gained momentum in 2009 and began to increase leading to a sharp increase in the GDP of the country between 2009 and 2010. This could be attributed to a lot of measures put in place to combat the recession at that time resulting in increased SMcap.

The results of the correlation analysis between variables are provided to determine whether there are bivariate links between each of them. Table 2 presents the results of the correlation analysis of the considered variables.

Table 2: Correlation analysis

Covariance Analysis: Ordinary			
Date: 07/14/20 Time: 10:43			
Sample: 1998 2019			
Included observations: 22			
<hr/>			
Correlation			
t-Statistic			
Probability			
GDP	1.000000		

MCAP	0.916592	1.000000	
	10.25235	-----	
	0.0000	-----	

EViews Result, 2020

The results demonstrated that there exist a positive and highly statistically significant (at 1% significant level) relationship between market capitalization and GDP ($r = 0.916$).

Time Series properties of the Variables

The analysis will start by examining the time-series properties of the variables used in the work of research, so as to avoid the problem of false regression results. In literature, the majority of time series are non-stationary and the use of a non-stationary model variable may lead to falsified regression coefficient estimates. The Augmented Dickey Fuller (ADF) unit root test unit was used to determine whether or not the variables are stationary and also to detect order(s) of integration of the variables.

Table 3: Augmented Dickey Fuller (ADF) unit root test

Variable	ADF Statistics		Order of Integration
	At Level	At 1 st Diff.	
Gross Domestic Product (GDP)	-0.108022 (0.9364)	-3.334892 (0.0268)	I(1)
Stock Market Capitalization (SMcap)	-1.695986 (0.4187)	-4.865949 (0.0010)	I(1)

Author's computation, 2020

The results of the ADF test reported in table 3 indicate that all the series are non-stationary in their respective levels. After first differencing the variables, the null hypothesis of a unit root in the ADF tests was rejected at 5% for GDP and at 1% significance level for SMcap. The economic consequences of non-stationary time series are that of a continuous shock that causes disturbance on a variable. The result shows that the variables can withstand shock in great measure and the unit root test shows that all the series are integrated of order one, i.e. I(1). That is, they become stationary after first differencing. This property exhibited by the series created a necessary condition for co-integration.

The results emanating from the unit root test indicate that none of the variables is stationary at level but only at first differences. This means that depending on parameter estimates using ordinary least square regression estimates may be misleading and not meaningful. This necessitates the use of co-integration analysis in order to determine the long run relationship among the series. In the Johansen co-integration test, the likelihood ratio is compared with the McKinnon critical value in order to determine the number of co-integrating vector(s) in the model. If the test establishes, at least, one co-integrating vector amongst the series under investigation then, it is concluded that there exists a long run equilibrium relationship in the model.

Table 4: Co-integration Test

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.413560	12.36917	12.32090	0.0491
At most 1*	0.081280	1.695477	4.129906	0.0266

Trace test indicates 1 cointegratingeqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None*	0.413560	10.67369	11.22480	0.0424
At most 1*	0.081280	1.695477	4.129906	0.0266

Max-eigenvalue test indicates no cointegration at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

EVIEWS Result, 2020

An examination of the co-integration test results in table 4 reveals that both trace and maximum Eigen value statistics indicate 2 co-integrating equation (s) at 5% significance level. This is because both the Trace statistic and Maximum-Eigen value statistics are at this level greater than the 5% critical value respectively. Thus, the results indicate the existence of co-integration among the variables, and as such, a long run equilibrium relationship exists among them. This implies that stock market capitalization and GDP have long-term relationship. The positive long-run relationship between the stock market development and GDP is consistent with the results reported by El-Wassal (2005), Levine and Zervos (1996), Yartey and Adjasi (2007), Gare, Nyamongo and Misati (2014) and Ogunleye and Adeyemi (2015). The results show that the GDP has the strongest significant linkage with the stock market capitalization.

The fact that the variables are co-integrated suggests that a VECM can be estimated to assess the linkages between the variables. The output of the Error Correction Model (ECM) estimates is presented in table 5 below:

Table 5: Error Correction Model Estimates (ECM):

Dependent Variable: GDP

Method: Least Squares

Date: 07/14/20 Time: 11:05

Sample: 1998 2019

Included observations: 22

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.48E+12	5.71E+12	0.610669	0.5483
SMcap	4.581319	0.446856	10.25235	0.0000
R-squared	0.840141	Mean dependent var		4.79E+13
Adjusted R-squared	0.832149	S.D. dependent var		4.25E+13
S.E. of regression	1.74E+13	Akaike info criterion		63.89916
Sum squared resid	6.05E+27	Schwarz criterion		63.99835
Log likelihood	-700.8908	Hannan-Quinn criter.		63.92253
F-statistic	105.1106	Durbin-Watson stat		1.824125
Prob(F-statistic)	0.000000			

EVIEWS Result, 2020

The error correction mechanism has demonstrated from Table 4.5 above that in the long run SMcap accounts for around 84 percent of the GDP changes, in an attempt to evaluate the speed of adjustment between short and long term estimates. This demonstrates how the model is suitable and provides evidence of the substantial growth in Nigeria's economic output as a result of the stock market capitalisation in Nigeria. The long run coefficients of the explanatory variable is significant at 0.01 level and the probability of the f-statistics (105.1106) is 0.0000, indicating a good fit, while the Durbin-Watson

Statistics value of 1.824125 is close to 2 and suggest the absence of positive serial correlation. All these imply that the model is a good one, well fitted and highly predictive.

To test for the direction of the relationship between the correlates, granger causality test was utilized and presented in table 6 below:

Table 6: Granger Causality Test

Pairwise Granger Causality Tests
Date: 07/14/20 Time: 11:08
Sample: 1998 2019
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
SMcap does not Granger Cause GDP	20	2.20111	0.1451
GDP does not Granger Cause SMcap		2.39693	0.0249

The results of Granger Causality test as shown in table 6 above provide evidence of two significant unidirectional causal relationships. These are between total market capitalization (SMcap) and gross domestic product (GDP). The result showed that there is no significant bi-directional relationship, however GDP does Granger Cause SMcap. This suggest that a rapid growth in the output level of goods and service in the economy could make the economy active, stimulate investments and enlarging the size of the country's capital market through increased stock market capitalization. The stock market capitalization does not granger-cause gross domestic product in Nigeria. This may be as a result of low level of financial development of the capital market evidence by poor participation and inclusion in the market in Nigeria.

Hypotheses Testing

From the ECM output in Table 5, the coefficient of SMcap is 4.581319 which is positive at a probability level of 0.0000 which is less than the 0.05 (5%) significant level. This implies that the null hypothesis cannot be accepted, thus the alternative hypothesis is accepted stating that stock market capitalization has a significant effect on Nigerian economic growth measured by GDP.

Discussion of Findings

The study examined the influence of stock market capitalization on Nigerian economic growth from 1998 to 2019. The study revealed a steady increase in SMcap and a corresponding increase in GDP until 2007 when SMcap began to decline. Global financial crisis in 2007 had contributed greatly to this loss; however, it did not affect the GDP at that time. The recovery strategies taken by the government in 2009 to overcome the recession gave rise to a sharp increase in GDP which was evident in 2010. Co-integration test and Vector Error Correction Model were employed in the analysis. Time series data obtained from the statistical bulletin of the Central Bank of Nigeria (CBN) on gross domestic product and stock market capitalization were analyzed in the research. From the ADF unit root test conducted, it was revealed that GDP and SMcap were non-stationary in levels but at first differencing; both variables became stationary at 5% level of significance. The results of the VECM model indicated that SMcap has a positive and significant effect on GDP and it is estimated on the average that 1% increase in stock market capitalization will lead GDP to increase by 84%.

CONCLUSION AND RECOMMENDATION

From all the analysis above, this study concludes that stock market capitalization has a significant effect on Nigerian economic growth measured by Gross Domestic Product. Thus, the study recommends that government should, as a matter of fact, formulate appropriate economic policies that would ensure the stability share prices which encourage nationals' and foreigners' participation in the capital market in the

country. In so doing, market capitalization will improve leading to improved growth in the domestic economy, as 1% rise in the market capitalization will result to 84% improve in GDP. There is an urgency and rising need to improve investor confidence to break stock market profits by creating conducive environment that will enhance the confidence of investors, operators and all users of stock market. Again, these capital market regulations must be fair, with meaningful rules that are clear and enforceable. Unstable and inconsistent policies can undermine investor confidence. Therefore, the Nigeria government should place priority on the development of the stock market through formulated effective monetary and fiscal policy management and in fact a stable macroeconomic environment. The dissemination of market information is another integral part of stock market development. Since the competition between developing countries to attract foreign capital is quite intensive there is a need to make relentless efforts to disseminate information to potential investors abroad.

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Effect of Foreign Aids on the Nigeria Economic Development

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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 10 manufacturing companies, quoted on the Nigerian Stock Exchange (NSE) for the period of 10 years 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 & Nwadiolor, (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

2.1.1 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 =
$$\frac{\text{Profit after preference divided and Tax}}{\text{Total Equity}}$$

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 4 and 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 its 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:

$$ROE_{it} = \beta_0 + \beta_1 NOE_{it} + e$$

Where: ROE= Return on equity
 β_0 = Intercept (constant term)
 $\beta_1 NOE_{it}$ = 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 $\beta_1 > 0$

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 R^2 is 0.062964 while the R which is the square root of R^2 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 $P(F\text{-statistics})$ 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.

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) 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 Treasury Single Account (TSA) on Public Sector Performance in Nigeria

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Abstract

The study examines the impact of Treasury Single Account (TSA) on the performance of public sector in Nigeria. This study primarily examined the extent to which TSA has improved Federally Collected Revenue (FCR) and Federal Government Capital Expenditure (FGCE) of the public sector. Secondary data was source from Central Bank of Nigeria statistical bulletin and economic reports were utilized for this study. The observations were recorded on yearly basis from 2012 to 2019. The data were divided into two periods: Pre TSA period (2012 to 2015) and Post TSA period (2016 to 2019). A pre-post analysis (difference in means test) was carried out using E-view statistical package version 10. The findings show that implementation of TSA has a negative and significant effect on Federally Collected Revenue (FCR). However, further findings revealed that Federal Government Capital Expenditure (FGCE) significantly increased after the implementation of TSA. The study concludes that implementation of Treasury Single Account (TSA) has not improved revenue generation in Nigeria. The study recommends that periodic appraisal of each revenue generating sector should be made so that some sectors that are not performing as they ought to will not feel covered by those that are doing better.

Keywords: Treasury Single Account (TSA), Public Sector, Federally Collected Revenue (FCR) and Federal Government Capital Expenditure (FGCE)

INTRODUCTION

Public financial management as acknowledged by Diamond (2005), deals with the collection of the sufficient resources from the economy in an appropriate manner along with allocating and use of the resources efficiently and effectively. Resources generation, resource allocation and expenditure management (resource utilization), the authors continued, are the essential components of a public financial management system. Public finance management (PFM) basically deals with all aspects of resource mobilization and expenditure management in government. Managing finances are a critical function of management in any organization of public sector. Public finance management is an essential part of the governance process in local government as in other tiers of government. Davis (1989) reported that public finance management in local government includes resource mobilization, prioritization of programs, the budgetary process, efficient management of resources and exercising control.

The growth and increasing awareness of new public management reforms for over two decades is still ongoing as governments all over the world are constantly seeking reformation and restructuring to enable better delivery of public services. The pressure for sustainable public service as a result of increase in budget for security, infrastructure, coupled with financial difficulties and mismanagement, failures in

government project execution, debt crisis, brought to light like never before the need for financial reporting by government and better management of public sector resources. Another point of pressure is from the citizens who are increasingly demanding to feel the impact of governments' financial management decisions and are pushing more forcefully for public sector organizations to deliver value for money. Nigerian government is currently faced with austerity measures targeted at refocusing the economic situations of the country (Enofe, Afiangbe & Agha; 2017). As a result of these pressures, the public sector must seek for long-lasting need to deliver public services with more efficient use of resources. A strong public sector financial management is essential for improving service delivery, poverty reduction, and achievement of millennium development goals (Pretorius & Pretorius; 2008). Complete and reliable annual accounts prepared based on the best practice can help governments take the right financial and policy decisions for sound government finances. Public financial management reform is the way forward for ensuring that public money is spent with economy, efficiency and effectiveness. It provides public sector managers with information to make decisions and measure efficient use of resources. Financial management reforms which include the introduction of Government Treasury Single Account (TSA), Integrated Payroll and Personnel Information System (IPPIS), adoption of International Public Sector Accounting Standards (IPSAS), and Government Integrated Financial Management Information System (GIFMIS) were launched to further reduce the ability for corrupt officers to amass public fund for their personal or private pockets. According to (Eme, Chukwurah & Iheanacho, 2015), the new Electronic Revenue Collection platform is aimed at improving internally generated revenue in the face of declining oil prices. This was in line with a series of treasury reforms, which began in 2012, aimed at ensuring transparency and accountability in the management of the nation's finances.

The public sector had over the years been weakened by an over expanded public expenditure profile, persistent deficits financed by domestic and external borrowing with resultant high debt service burden, breakdown of the traditional instruments of control leading to corruption and misappropriation of funds, incidence of ghost workers, poor costing of programmes and projects, a large portfolio of abandoned/on-going projects especially in efficient and wasteful parastatal. Not only that the system has accumulated pension arrears but some states and agencies of the Federal Government are beginning to accumulate salary arrears and payments due to contractors and suppliers. The generality of the population has realized that the effectiveness and efficiency of government financial control is not felt in their lives and their economy. The germane issue, here is the fact that Administrative and Financial Restructuring in the public sector has been dominated by the dire state of public finances resulting from the financial crisis of 2008. This was primarily a result of the banking crisis. As the crisis also threatened the existence of many currencies, the state of public finances became of increased relevance at global level and several legislative initiatives strengthened global governance in this context. Public sector restructuring, however, is consequently, scarcities of financial, technical and managerial resources severely constrain the ability of Nigerian government to sustain a comprehensive public sector restructure programme. Even when the wherewithal is there, the challenges of the complexities and sensitivities of some of the public sector restructure processes remains. Unfortunately, the dawn of the new millennium witnessed various manifestations of discontentment in the areas of resource control, salaries and wages, education, deregulation, privatization and so on. These manifestations of discontentment were demonstrated with increasing frequency and intensity bordering on ineffectiveness, inefficiency and wastage of the national resources (Abdullah, 2007). Despite growing interest, the main attention of researchers is mainly focused on the analysis of restructuring determinants and other factors. Consequent upon the above factors, the desire to reform the public sector administration capabilities with a view to the burgeoning challenges became sacrosanct. The rationale for this study therefore, is to examine the impact of treasury single account on the performance of public sectors in Nigeria since it is designed to transform and change the economy positively. Most of the researcher have studied the impact of treasury single account on the economy as a whole using gross domestic product (GDP) as proxy but this study critically considers performance of public sectors in Nigeria. Given that the objectives and research question has been specifically identified there is a need to test the hypothesis of the study which is to know the impact of

treasury single account on the performance of public sector in Nigeria. The hypothesis of the study is stated thus:

H₀₁: TSA adoption does not have significant effect on government capital expenditure in Nigeria

LITERATURE REVIEW

Conceptual Framework

Concept of Treasury Single Account (TSA)

The idea of treasury single account came into being when some agencies refused to declare and remit the 25 percent of their annual revenue they generated to the treasury as demanded by law. (Adeolu, 2015). In 2012 about N120 billion was forcefully collected by government from MDAs being 25 percent of their gross revenue to the treasury with another N34 billion collected in 2013, (Abayelu, 2015). Before then, most of the MDAs were reluctant to remit the requested amounts by law to the treasury, (Daily Trust Editorial, 2015:16). According to the former Auditor General of the Federation prior to TSA, Nigeria had fragmented banking arrangements for revenue and payment transactions. He stated that, there were more than 10,000 bank accounts in multiple banks, which made it impossible to establish government consolidated cash position at any point in time. It led to pockets of idle cash balances held in MDAs' accounts when government was out borrowing money, (Obinna, 2015).

Treasury Single Account is a public accounting system under which all government revenue, receipts and income are collected into one single account, usually maintained by the country's Central Bank and all payments done through this account as well. The purpose is primarily to ensure accountability of government revenue, enhance transparency and avoid misapplication of public funds. The maintenance of a Treasury Single Account will help to ensure proper cash management and also to enhance reconciliation of revenue collection and payment (Adeolu, 2015). The Revenue Mobilization and Fiscal Commission released an audit report which indicted some banks for withholding about N12 billion revenue collected on behalf of the Nigerian Customs Service and Federal Inland Revenue Service (Adeolu, 2015). It is important to note that TSA as a principle of public accounting system and revenue management has been both a constitutional provision and an extant fiscal practice. Section 80 of the 1999 Constitution, which gives legal backing to the TSA reads: "All revenues or other moneys raised or received by the Federation (not being revenues or other moneys payable under this Constitution or any Act of the National Assembly into any other public fund of the Federation established for a specific purpose) shall be paid into and form one Consolidated Revenue Fund of the Federation". Other sub-sections of that provision explain restrictions regarding the withdrawal of money from this Consolidated Revenue Fund, (CBN.2015).

Concept of Public Financial Management

Public financial management (PFM) is an important means to economic growth and development of every sovereign nation. Lawson (2015) defined public financial management as the set of laws, rules, systems and processes used by sovereign nations (and sub-national governments), to mobilise revenue, allocate public funds, undertake public spending, account for funds and audit results. In this view, public financial management is a system that comprises many processes, involve several government institutions, under the auspices of laws and rules that define functions and responsibilities and guide the relationships between or among the various parts of the system. The overall objective of public financial management deduced from this view is to collect revenue for the government and allocate the revenue in form of expenditures for the economic benefits of all through a demonstrated transparent and accountable manner.

Public financial management is a broader function that encompasses many responsibilities which form a set of circle. The circle commonly consists of six stages beginning with policy design and ending with audit and evaluation of performance. Lawson (2015) presented the summary of the common view public

financial management phases in form of a circle. The public financial management system as a circle is an essential framework for effective management of institutions and resources without compromising the accountability and transparency requirement of government business activities. The framework operates as an integrated body of other systems that are independently instituted by laws to function in country's economic and political environment. Functions and responsibilities of another part of phase in the circle have a causal relationship with others. It is important that all the parts discharge their responsibility well and according to the prescribed laws and rules. If this is done, the feedback from the system will provide bases for evaluation of performance which will build ground for improvement on the system.

Financial Management Reforms in Nigeria

Sound public financial management is a catalyst for sustainable developmental processes, which is critical to achieve aggregate control of public funds, prioritisation of objectives, accountability and transparency in the management of funds and delivery of social services. In Nigeria and any other developing nation, reformation of public financial management system is paramount in order to address the deteriorating nature of public sector level of transparency and accountability. In the quest to achieve these objectives, Nigerian government has sought for various reforms since the return of democracy in 1999. As at this time, there are seven ongoing reforms that are related to public financial management.

These are budgeting and budget management reforms; cash management and treasury single account (TSA); new classification system and public accountability, adoption of IPSAS, accounting transaction recording and reporting system, modernisation and the internal audit, and human resource development (GIFMIS, 2016). Specifically, IPSAS adoption is believed to be a strong tool of achieving vibrant public financial management through the lens of transparency and accountability. IPSAS is critical to the success of sound public financial management and can enable strong fight against corruption through transparent and accountable reporting of government performance via standardised recording and accounting system. Olomiyete (2014) posited that reforming Nigerian public financial management system from cash basis to accrual accounting system can help in strengthening the quality of government accounting and reporting system. The assertion here is that through IPSAS accrual accounting system, government performance can be better measured and held accountable for, which in turn would improve on understanding corruption perception.

Concept of Capital Expenditure

Capital expenditure on economic service had a fair share (43%) of total capital expenditure between 1970 to 1979, a development which might not be unconnected with the post-civil war reconstruction efforts embarked upon by the government at federal level. A substantial proportion of total government capital expenditure was equally voted for economic service between 2000 and 2004. Between 1990 and 1999, capital expenditure on transfer payment received an unparalleled attention of the military government which preceeded the dawn of democratic rule in Nigeria. The issue of how government capital spending affect economic growth has been tackled differently by economic scholars. While a good number adopted aggregated approach, a few authors employed a disaggregated analysis with mixed results. Upon this background, this study is set to examine the effects of disaggregated functional government capital expenditure on economic growth in Nigeria. Specifically, studies concentrate on effects of total government expenditure on economic growth, while others focused on the causality between capital expenditure and economic growth. Yet others examined the effect of sectoral capital expenditure on growth. A few studies have considered disaggregated functional capital expenditure without paying attention to the effect each of these components places on economic growth.

Federally Collected Revenue in Nigeria

Revenue generation is one of the greatest significant actions any business can involve in. It is defined as a process by which a business strategies how to market and sell its products or services, in order to generate income. Government revenue is money government received. It is the quantity of cash that an

organization really gets during a specific time (Ofurum et al., 2018). The incomes government got are from sources, for example, charges charged on the earnings and flourishing develop of people and organizations and on the properties and offices made, fares and imports, non-assessable sources, for example, government-claimed organizations' benefits, national bank salary and capital receipts as outside credits and obligations from global monetary foundations (Ofurum, et al., 2018). Revenue generation is the processes of raising funds for the government. The chief basis of income generation for any government is via taxation. Samuel & Tyokoso (2014) assert that raising of revenue is traditional function of a tax system is the raising of the revenue necessary to meet government spending. This revenue is necessary to meet the spending which is either the provision of goods and amenities which associates of the community cannot deliver such as defence rule and instruction to the provision of goods and amenities which the central and state governments sense are better offered by itself such as health services and education.

In Nigeria, revenue generated is separated into oil proceeds and non-oil proceeds. While oil proceeds covers all income collected from oil and gas doings in the country, non-oil proceeds stares at any income received from sources other than oil and gas activities. While other states within and outside Africa section their incomes into tax and non-tax income, Nigeria favoured oil and non-oil owing to the fact that oil is the major revenue driver of the economy. Olotu (2012) stated that taxation is now planting seed of transformation in numerous states of the federation of Nigeria. She stated that only previous month, Tell Magazine carried a cover story titled, "*The new cash cow*". In that write up the magazine discloses how "more and more states across the country are now turning to taxation to shore up their revenue to finance serious infrastructural projects". (Tell Magazine, April 30, 2012). Olotu (2012) declared that federations have seen their tax proceeds boosted in recent times and this has allowed the establishment of several life and public transforming ventures and packages leading to progressively more content populace.

Empirical Review

AkujuruandEnyioko (2018) examined the effects of treasury single account policy on corruption in Nigeria: analysis from 2011 to 2017. The study adopted a cross sectional survey design and used questionnaire to generate its data. The population of the study consisted of 6393 staff from the federal ministries, departments and agencies (MDAs) in Rivers State. The sample size of the study was determined at 377 staff through the use of Prof. Taro Yameme sample size method. The data were analyzed through the use of descriptive statistics. The study found that the treasury single account (TSA) policy was introduced to block financial leakages, reduce corruption, promote transparency and prevent mismanagement of government's revenue in public sector organisations. The study revealed that the major challenges hampering the effective and efficient implementation of the treasury single account (TSA) policy include: Inability of federal government to remit appropriately to the various MDAs, uncertainties underlying federal government inactions and actions, bottlenecks/ bureaucracy, internet platform delays, inefficient human capital development and time wasting in the banks and payment points. It is evident from the study that the policy will pave the way for the timely payment and capturing of all revenues going into the government treasury, without the intermediation of multiple banking arrangements. The policy will also enable the government at the centre to know its cash position at any given time without any hindrance.

The study concludes that introduction of treasury single account will block financial leakages, reduce corruption, promote transparency and prevent mismanagement of government's revenue in public sector. The study therefore, recommends that government should secure as soon as possible the appropriate legislative support to facilitate the relevant regulatory environment which will drive the effective implementation of the treasury single account. Oguntodu, Alalade, Adekunle and Adegbie (2016), in their study "Treasury Single Account and Nigeria's Economy Between 1999 and 2015: An Assessment" employed a longitudinal research design to examine the relationship between Treasury Single Account and economic performance in Nigeria. Their study made use of secondary data from CBN statistical bulletin from 1999 to 2015. The study used GDP which represents Nigeria economic performance as the dependent variable while TSA which was represented by Money Supply (MS), Credit with CBN (CR)

and Deposit to CBN (DP) as the independent variables. OLS regression technique was employed to show the extent or degree of relationship between the independent and the dependent variables. The result shows that the Treasury Single Account has a positive significant impact on the country's economic growth. The study concludes that if policy on treasury single account can be strictly adhere to it would boost revenue generation in Nigeria. Based on the findings, the study recommend that the federal government of Nigeria should initiate policies and various means to make sure that there are proper accountings of the funds entering into the Treasury Single Account, and that such fund should follows due process. Also, that any subsequent foul play by any agencies, or even the CBN is duly prosecuted and sanctioned.

Ndubuaku, Ohaegbuand Nina (2017) examined how the introduction of Treasury Single Account has affected banks Credit to private sector, Deposit Mobilization, and Loans and advances in their study impact of Treasury Single Account on the Performance of the Banking Sector in Nigeria. The study employed descriptive and ex post facto research design. The population of the study was made up of the 24 commercial banks in Nigeria. The Time Series data used for the study were obtained from Central Bank of Nigeria Statistical Bulletin for the period 2010 – 2015. OLS Regression and correlation analysis were used to analyse the data. The study found out that Treasury Single Account has significantly impact on Credit to private sector, Deposit Mobilization, and Loans and advances. The study concludes that the introduction of Treasury Single Account significantly reduced Credit to private sector, Deposit Mobilization, and Loans and advances. The study recommends that the banks should avoid over-reliance of government funds and source for funds from other sectors of the economy.

Enofe, Afiangbe, and Agha, (2017) examined financial management reforms and corruption in Nigeria public sector. A survey research design was adopted in the study and a sample of ninety (90) respondents which consist of 40 staff from federal MDAs, 30 from Edo state MDAs and 20 from local government MDAs. The study employed ordinary least square (OLS), using SPSS in analysing the bio-data and Eview8 in analysing the research questions as the statistical technique or tool. The study found that Treasury Single Account (TSA); adoption of International Public Sector Accounting Standards (IPSAS); and Government Integrated Financial Management Information System (GIFMIS) all had a positive relationship with Corruption (COR) but at different level of significance while Integrated Payroll and Personnel Information System (IPPIS) had a negative relationship. The study concludes that IPPIS if effectively implemented can reduce payroll fraud which in the long run will also reduce corruption. Other variables such as TSA, IPSAS and GIFMIS result revealed opposite. The study recommends that the government of the day is advised to implement IPPIS to its fullest maximum to maximize its potential of reducing corruption.

Kanu (2016), in his study “impact of Treasure Single Account on the liquidity of the banks” used a selected sample of 10 banks in Nigeria to investigate the effect of Treasury Single Account on banks liquidity. The study employed a cross-sectional research design and utilized a primary data sourced through questionnaire. The work employs both descriptive and inferential statics for data analysis. The results obtained confirmed that the implementation of Treasury Single Account in the public accounting system impacted negatively on the liquidity base and the performance of banking sector in Nigeria. The study recommended that periodic appraisal of each revenue generating sector should be made so that some sectors that are not performing as they ought to will not feel covered by those that are doing better

It should be noted that most of the studies reviewed were on relationship between Treasury Single Account and it effect on banks Credit to private sector, Treasury Single Account and Nigeria economy, Treasury Single Account and corruption in public sector. But this study tends to fill the gaps in literature by investigating the impact of Treasury Single Account (TSA) on the performance of public sector in Nigeria using pre-post research design analysis.

Theoretical Framework

Institutional Theory

Institutional theory was propounded by Meyer and Rowan in the late 1970s. According to Nagalinagm, Mangala & Kumudine (2015) institutional theory looks at the deeper and more resilient aspects of social structure. This theory focuses on the processes by which structures such as cognitive, normative, regulatory, as well as the norms, rules and routines become established as authoritative guidelines for social behaviours and practice. Recent developments in Nigeria's public accounting framework are the new accepted behaviours, rules, norms that need to be adhered to and the question prevalent in this theory and applied here is whether these recent reforms (financial management reforms) are due to normative or regulatory practices? This theory addresses practices which are the subject of the recent happenings in the public sector. Such happenings include the introduction/adoption of IPSAS, TSA, GIFMIS, and IPPIS etc that can enhance the technical efficiency in the organization or institution adopting these practices. It also results in legitimization of the standard practices, and the absence of these leave the organization to be termed irrational, corrupt and negligent. The net effect of these reforms therefore is to increase homogeneity in organizational structure and with regard to Nigeria, the reference will be the MDAs. It can also go as far as to ensure homogeneity across countries globally and this structure has been thought to promote efficiency, effectiveness, transparency, accountability (Meyer & Rowan, 2010).

Stakeholder Theory

This theory is conceptualized on the assumption that the adoption of Treasury Single Account (TSA) by the FGN was as a result of the pressure mounted on the government by the stakeholder for the eradication of corruption. Stakeholder theory is a theory of organizational management and business ethics proposed by (Freeman, 1984). Freeman (1984) asserts that managers must satisfy a variety of constituents (e.g. investors and shareholders, employees, customers, suppliers, government and local community organizations). Based on this theory, the researcher argued that the emergence of TSA was as a result of government response to the yearnings, demands and aspirations of critical stakeholders by way of developing strategic options towards eliminating corruption. Stakeholder theory is an extension of the agency view, which expects board of directors to take care of the interests of shareholders. However, this narrow focus on shareholders has undergone a change and boards are now expected to take into account the interests of many different stakeholder groups, including interest groups linked to social, environmental and ethical considerations (Freeman, 1984; Donaldson & Preston, 1995; Freeman, Wicks & Parmar 2004). This shift in the role of the boards has led to the development of stakeholder theory. Stakeholder theory views "companies and society as interdependent and therefore the firm serve a broader social purpose than its responsibilities to shareholders" (Kiel & Nicholson, 2003). Likewise, one of the original proponents of stakeholder theory, defines stakeholder as "any group or individual who can affect or is affected by the achievement of the organization's objectives".

There is considerable debate among scholars on whether to take a broad or narrow view of a firm's stakeholder. Freeman's (1984) definition cited above proposes a broad view of stakeholders covering a large number of entities, and includes almost all types of stakeholders. In contrast, Clarkson (1995), offers a narrow view, suggesting "voluntary stakeholders bear some form of risk as a result of having invested some form of capital, financial, or something of value, in a firm. Involuntary stakeholders are placed at risk as a result of a firm's activities. But without the element of risk there is no stake". The use of risk enables stakeholders a legitimate claim on a firm's decision making, regardless of their power to influence the firm. Donaldson and Preston (1995) identify stakeholders as "persons or groups with legitimate interests in procedural and/or substantive aspects of corporate activity." The researchers identified stakeholder as varied as investors, managers, employees, customers, business partners, local communities, civil society, the natural environment, future generations, and non-human species, many of whom are unable to speak for selves. Mitchell, Agle and Wood (1997), argue that stakeholders can be identified by possession of one, two or all three of the attributes of: (1) power to influence the firm, (2) the legitimacy of relationship with the firm, and (3) the urgency of their claim on the firm.

This typology allows managers to pay attention and respond to various stakeholder types. Stakeholder theory recognises that many groups have connections with the firm and are affected by firm's decision making. Freeman, Wrick and parmar (2004), suggest that the idea of value creation and trade is intimately connected to the idea of creating value for shareholders; they observe, "business is about putting together a deal so that suppliers, customers, employees, communities, managers, and shareholders all win continuously over time." Donaldson and Preston (1995), refer to the myriad participants who seek multiple and sometimes diverging goals. Manager's view of the stakeholders' position in the firm influences managerial behaviour.

However, Freeman, Wicks and Parmar (2004), suggest that managers should try to create as much value for stakeholders as possible by resolving existing conflicts among them so that the stakeholders do not exit the deal. Carver and Oliver (2002), examine stakeholder view from non-financial outcomes. For example, while shareholders generally define value in financial terms, other stakeholders may seek benefits "such as the satisfaction of pioneering a particular breakthrough, supporting a particular kind of corporate behaviour, or where the owner is also the operator, working in a particular way". It means stakeholders have 'non-equity stakes' which requires management to develop and maintain all stakeholder relationships, and not of just shareholders. This suggests the need for reassessing performance evaluation based on traditional measures of shareholder wealth and profits by including measures relating to different stakeholder groups who have non-equity stakes. The stakeholder's theory therefore explains the motivating factors that made the government to adopt and implement the TSA. Thus, this study is underpinned based on the stakeholder's theory.

METHODOLOGY

The research design employed in this study was ex-post facto research design. The ex-post facto research design was employed because is used to estimate the relationship between the dependent and independent variables. This method is used in obtaining numerical estimates of the coefficients of the model due to the linear nature of the economic relationship. The variables investigated were Federally Collected Revenue (FCR) and Federal Government Capital Expenditure (FGCE). The data were collected from Central Bank of Nigeria (CBN) on yearly basis from 2012 to 2019 resulting into a total of 8 observations. The data were divided into two periods: a. Period before the implementation of TSA (2012 to 2015) b. Period after the implementation of TSA (2016 to 2019). The table 4.1 below shows the data collected for the purpose of this work. A pre-post analysis (difference in means test) was carried out using E-view statistical package version 10. To examine the effect of the independent variables on performance, the model adopted by Ofurum, Oyibo & Ahuche were adopted and modified as follows:

$$\text{FGCE} = f(\text{FCR}) \dots \dots \dots (i)$$

The transformation of the above model into a regression function is given below:

$$\text{FGCE} = \beta_0 + \beta_1 \text{FCR} + \mu t \dots \dots \dots (ii)$$

Where FGCE =Federal Government Capital Expenditure

FCR = Federally Collected Revenue;

β_0 = the intercept term which gives the average value of FGCE when Federally Collected Revenue are set equal to zero;

β_1 = the coefficient of capital expenditure which measures the mean change in FGCE per naira change in Federally Collected Revenue;

μt = the disturbance term which captures the effect of other variables not included in the model on performance.

"Pre-Post" Decision Rule: If the Prob. Value is greater than 0.05, the null hypothesis of no significant effect will be accepted; if otherwise, reject the null and accept alternative

RESULTAND DISCUSSION

Table 1: Data Presentation

Period	FCR (₦B)	FGCE (₦B)
Observations before the implementation of TSA		
2012	10,654.75	874.83
2013	9,759.79	1,108.39
2014	10,068.85	783.12
2015	6,912.50	818.37
Observations after the implementation of TSA		
2016	5,616.40	653.61
2017	7,445.00	1,242.30
2018	9,551.80	1,682.10
2019	4,689.29	1,956.20

Source: CBN Statistical Bulletin, 2019

Paired Sample Statistics

Table 2: Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	FCR _a	1519.703750	4	266.8118589	94.33
	FCR _b	2313.7425	4	456.86206	161.52
Pair 2	FGCE _a	25677.810475	4	2400.5761268	980.031
	FGCE _b	22315.747060	4	1565.4462376	639.09

Source: E-view 10

From the table above, Federally Collected Revenue after the implementation of TSA has a mean value of N1519.7 billion with a Standard Deviation of N266.82 billion while Federally Collected Revenue before the implementation of TSA has a mean value of N2313.74 billion with a Standard Deviation of N456.86 billion. Statistics also revealed that Federal Government Capital Expenditure before the implementation of TSA was N22315.75 billion with a Standard Deviation of N1565.47 billion while its value after the implementation of TSA was N25677.81 billion with a Standard Deviation of N1565.47 billion.

Test of Difference of Means

Table 3: Paired Samples Test

		Paired Differences			T	df	Sig.
		Mean	Standard Deviation	Std. Error Mean			
Pair 1	FCR _a - FCR _b	-794.04	491.142	173.64	-4.573	3	.003
Pair 2	FGCE _a FGCE _b	3362.06	2995.84	1223.04	2.749	3	.040

Source: E-view 10

Result on Paired Sample Test shows that Federally Collected has a mean difference of (N794.04) billion. From the result, one can conclude that the implementation of Treasury Single Account has a Negative and significant impact on Federally Collected Revenue $t(7) = -4.57$ ($SD=491.14$), $p=.003$. On the impact of TSA on Federal Government Capital Expenditure, Federal Government Capital Expenditure of N3362.06 billion, analysis shows that the implementation of TSA has a positive and significant impact on the country's performance $t(5)=2.75$ ($SD=29995.84$), $p=.04$.

Discussion of Findings

From the table above, Federally Collected Revenue after the implementation of TSA has a mean value of N1519.7 billion with a Standard Deviation of N266.82 billion while Federally Collected Revenue before the implementation of TSA has a mean value of N2313.74 billion with a Standard Deviation of N456.86 billion. Statistics also revealed that Federal Government Capital Expenditure before the implementation of TSA was N22315.75 billion with a Standard Deviation of N1565.47 billion while its value after the implementation of TSA was N25677.81 billion with a Standard Deviation of N1565.47 billion. Result on Paired Sample Test shows that Federally Collected has a mean difference of (N794.04) billion. From the result, one can conclude that the implementation of Treasury Single Account has a Negative and significant impact on Federally Collected Revenue $t(7) = -4.57$ ($SD=491.14$), $p=.003$. On the impact of TSA on Federal Government Capital Expenditure, Federal Government Capital Expenditure of N3362.06 billion, analysis shows that the implementation of TSA has a positive and significant impact on the country's performance $t(5)=2.75$ ($SD=29995.84$), $p=.04$.

From the result above, it can be seen that the implementation of Treasury Single Account has not improved revenue generation in Nigeria. Instead, the analysis disclosed that Federally Collected Revenue significantly decreased during the period of its implementation. While the mean value of FCR before TSA's implementation was N2313.74 billion, FCR after TSA's implementation has a mean value of N1519.7 billion resulting into a decrease of N794.04 billion (see Table 3). This result is contrary to the expectation of the Federal government towards TSA's implementation. In respect to the impact of TSA on economic growth, it could be seen from the result that Federal Government Capital Expenditure improved after the implementation of TSA from yearly average of N22315.75 billion to N25677.81 billion. Further findings revealed that this improvement was statistically significant. This result is in tandem with the findings of Oguntodu, Alalade, Adekunle, & Adegbe (2016), who confirmed that Treasury Single Account has a positive and significant impact on the country's economic growth.

CONCLUSION AND RECOMMENDATIONS

Based on the result of the result of the pre-post analysis carried out, on the impact of TSA on the performance of public sector; the study concludes that the implementation of Treasury Single Account has not improved revenue generation in Nigeria, however the performance measured using Federal Government Capital Expenditure was positively and significantly affected by the new accounting system. Given the foregoing, the following recommendations are being put forward;

- i. Appraisal of each revenue generating sector should be made periodically so that some sectors that are not performing as they ought to will not feel covered by those that are doing better.
- ii. The federal government should initiate policies and various means to make sure that proper accounting of the funds into the Treasury Single Account follows due process and any subsequent foul play by any agencies, or even the CBN is duly prosecuted.

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Effect of Corporate Governance on Corporate Social Responsibility Disclosure (CSRD) of Listed Consumer Goods Firms in Nigeria

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Abstract

This study examines the association between corporate governance and corporate social responsibility Disclosure (CSRD) of listed consumer goods firms in Nigeria. This study adopts an Ex-post Facto research design. The population of the study is all the twenty-one (21) consumer goods companies listed on the floor of the Nigerian Stock exchange. Data utilized for the study are collected from the annual reports of companies from 2014 to 2018. The study employs Binary logistic regression techniques for the analysis and the result show that Board size has a significant negative relationship with CSRD, Board independence has a significant positive relationship with CSRD and Board diversity has a negative insignificant relationship with CSRD. The study concludes that an appropriate board is vital to an organisation CSRD. Based on the findings the study recommends that the board size should be relative small for it to be efficient, an appropriate mix of executive and non-executive directors is needed for strategic decision making and a less diverse board is appropriate for listed consumer goods firms in Nigeria to facilitate easy CSRD.

Keywords: Corporate Governance, Corporate Social Responsibility, Disclosure, Consumer Goods Companies, Nigeria.

INTRODUCTION

Corporate governance has been in the front burner in this century owing to the clandestine activities of organisations that have led to corporate failures, stock market collapse and apathy from the public. This has generated great debate among academics and industry watchers alike. Corporate governance is seen by many as vehicle that helps organisations achieve its corporate objectives. This debate first gained momentum from the 1992 Cadbury report and subsequently the financial scandals such as Enron, WorldCom and Arthur Anderson, the accountancy Firm in 2001. The Northern Rock bank failure in the United Kingdom in 2008, recent investment bank failure of the United State, the intercontinental bank and Oceanic bank scandals and other issues globally, which analysts traced to misconduct and corporate fraud, all but necessitated this scholarship pattern. Corporate governance is mostly viewed as how companies activities and actions are directed, controlled and monitored (Cadbury Report, 1992). The linkage between corporate governance mechanism and corporate social responsibility disclosure has become a subject of great scrutiny. Corporate governance mechanism can be seen as a virile tool in

Effect of Corporate Governance on Corporate Social Responsibility Disclosure (CSR) of Listed Consumer Goods Firms in Nigeria

improving CSR disclosure as it relates to environmental, social and its economic objectives. It is so as a result of the fact it reduces information asymmetry issues and proffers solution to Agency problems.

Therefore, an organization would mainly thrive when it considers the people, planet and financial aspect of its business to achieve its corporate objective. Adequate disclosure of information is essential because without such information, it is not possible to properly judge the opportunities and risks of investment. According to Meek, Roberts and Gray (1995), there is uncertainty about the quality of firms (e.g. in terms of the nature of their assets and riskiness of cash flows) and their securities. Thus, investors demand information to assess the timing and uncertainty of current and future cash flows so that they may value firms and make other investment decisions. Additional disclosure will help investors to reduce the likelihood of making the wrong investment decisions. This is as a result of separation of management from ownership, which has characterized the current business climate globally. De Villiers et al. (2011) identified two reasons for increased environmental sustainability performance in the last decade. First, companies with environmental sustainability are more likely to gain better economic performance. Second, environmental sustainability reporting enhances organizations' internal and external legitimacy by implementing recognized standards, such as Global Reporting Initiative (GRI) and the ISO 26000. Moreover, corporate social reporting has recently gained traction with academics, managers, and government policymakers in three core values economic, environmental, and societal similar to the triple bottom line concept (Elkington 1998). Prior researchers have argued that disclosure practices for social and environmental information enhance not only organizations' reputations and management's decision-making capacity regarding environmental policies and strategies, but also their visibility to diverse stakeholders regarding pollution, energy conversion, human rights, and community development issues (Perrault & Clark 2016; Comyns 2016). Moreover, Dahlsrud (2008) noted that the CSR concept and definition has been used 37 ways to explain economic, social, and environmental dimensions.

The conflict on agreeing how best an organization can be socially responsible while attempting to meet organisations objective and shareholder interest (Margolis & Walsh, 2003). The twin act of trying to balance the multiple stakeholder interest and maximizing profit have not necessarily being an easy task and has prompted the scrutiny as to whether a good CG mechanism can help resolve this and aid the prompt resolution and quick decision as regard this within an organization. The agitation from constituent bodies that contribute to the success of organisations to get commensurate reward for their contribution has led to the need for those charged with governance of companies to take cognizance. Public listed companies in Nigeria are expected by the corporate governance code to disclose its CSR activities. There has been yearning among academics, government and global institutions to ascertain whether CG mechanism influences CSR disclosure. In spite the numerous researches conducted by scholars and academics globally; Khan and Siddiqui (2013), Tamoyo (2013), Deng, Kang and Low (2013), Nwagbara (2014), Habbash (2016) and Umoh and Urhoghide (2018). In spite the efforts of the scholars about the question raised above, there has been no consensus in their findings.

There has also been limited study on this subject matter in developing countries like Nigeria (e.g. Nwagbara (2014), Odoelam and Okafor (2018) and Muktar, Mohammed and Muhammed (2018). This study used the comprehensive index developed by Branco and Rodrigues (2008) and would use only Board characteristic variables of; Board Size, Board Independence and Board Diversity to Proxy Corporate Governance Mechanism. This study will focus consumer goods companies listed in Nigeria. The main objective of this study is to examine the effect of CG mechanism on CSR consumer goods companies listed in Nigeria. While the specific objectives are to examine the effect of:

- i. Board Independence on CSR of consumer goods companies listed in Nigeria.
- ii. Board diversity on CSR of consumer goods companies listed in Nigeria.
- iii. Board size on CSR of consumer goods companies listed in Nigeria.

The remaining part of this study is structured as follows: Section two provides the review of relevant literatures and the theoretical framework. Section three dealt with the methodology adopted for this study.

Effect of Corporate Governance on Corporate Social Responsibility Disclosure (CSRD) of Listed Consumer Goods Firms in Nigeria

While section four is focused on the discussion of result and Section five deals with conclusion and recommendation presentation.

LITERATURE REVIEW

Conceptual Framework

Corporate Governance

Good corporate governance is seen by many to be a veritable tool to preserve the integrity of companies and its performance, which generally snowballs into a healthy economy. The definition of corporate governance can be accepted as a controversial subject, because it seems that there is no consensus on its meaning in literatures. This is because; the system of corporate governance varies from country to country due to different historic, cultural, legal, financial and academic backgrounds. It can be seen that there is a large volume of published studies describing the meaning of corporate governance; however, it has differing definitions in the literature. OECD (1999) corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined. According to the Institute of Chartered Accountants of Nigeria (2014), CG can be applied on agency problems by ensuring board of directors monitor the executive management, attractive remuneration package for agents to mention a few. The guiding principle that drives the entrenchment of CG are; Accountability, Fairness, Integrity, Responsibility and transparency. The accountability principle requires the companies to be responsible to the society (people), responsive to environmental changes (planet) and complying with relevant legal dictates. Owing to the prevalence of myriads of corporate failures, fraud and corrupt practices many academics, scholars and global bodies have paid closer attention to the concept CG. Each of this groups looks at CG from two(2) different approaches- the Narrow approach which looks at CG from the shareholders perspective and Broader approach which looks at CG from the shareholder and stakeholder perspective (that is; customers, community, employees, government and etc), are taking into cognizance when making decisions that impact on the organization.

CG is a veritable tool for incorporating reports that can significantly influence business decisions. Corporate governance is a set of mechanisms through which outside investors protect themselves against expropriation by insiders (LaPorta, Lopezde-Silanes, Shleifer & Vishny, 2000). Oman (2001) defined corporate governance as a term refers to the private and public institutions that include laws, regulations and the business practices which govern the relationship between the corporate managers and the stakeholders. This definition looks at CG in terms of legal and principle based that determine the action of firms to its broader stakeholders. This definition is broad in the sense that it encapsulates the relationship between companies and its general stakeholders. La Porta, Silanes and Shliefer (2000, 2002) view corporate governance as a set of mechanisms through which outside investors (shareholders) protect themselves from inside investors (managers). This definition focused on the relationship between directors and shareholders. Kurawa (2013) maintains that corporate governance is the mechanisms that safeguard the shareholders' interest which is necessitated as a result of separation between the owners of business and managers of business. According to Duztas (2008), Corporate Governance is a mechanism for ensuring the stakeholders of corporation for it wellbeing, fairness, social responsibility, transparency and accountability. This study is motivated by Igalen and Point (2009) and Khan (2010), they opined that CG is moving from the conventional objective of resolving conflicts (Agency) to issues that are critical to it performance by holding a balance between social and economic goal and between individuals and communal goals by focusing on critical CSR disclosure such as accountability, disclosure, ethics and transparency. Therefore, Corporate Governance refers to set of systems, structures, institutions and the approaches which determine how a company is manage to achieve its objectives.

Corporate Social Responsibility

CSR as a concept was introduced by Sheldon in 1924 and has gained global acceptance and momentum since its introduction. The recent spike in the level of globalization demands companies to be more engaged in CSR (Chapple & Moon, 2005). CSR is described as the requirement for information about a specific company that may involve any group with the purpose of stipulating a key solution for enhanced accountability to a broad group of stakeholders on environmental and social issues (Gray et al., 1996). According to the Institute of Chartered Accountants of Nigeria (2014), CSR can be described as a decision-making by a business that is linked to ethical values and respect for individuals, society, and the environment as well as compliance with legal requirement. This can be said to mean a firm's corporate responsibilities to the society.

Corporate social responsibility (CSR) can be defined as the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time (Carroll & Buchholtz 2003). The concept of corporate social responsibility means that organizations have moral, ethical, and philanthropic responsibilities in addition to their responsibilities to earn a fair return for investors and comply with the law. A traditional view of the corporation suggests that its primary, if not sole, responsibility is to its owners, or stockholders. CSRD is defined by Parker (1986) as the reporting by corporations on the social impact of corporate activities and the effectiveness of corporate social programs, as a way corporation discharge its social responsibilities, and the stewardship of its social resources. Akano (2013) posits that CSRD assist in evaluating the congruence between the social value implied by corporate activities and social norms. In addition, CSRD is an extension of the financial disclosure system, which reflects the wider anticipation of society concerning the role of the business community in the economy.

Board Independence and CSR Disclosure

Owing to the increasing importance of CSR, boards' roles and responsibilities have been extended from the traditional shareholder-centric view to encompass various stakeholders. Boards of directors influence CSR in various ways, from establishing stakeholder friendly corporate policies to creating committees that deal with CSR-related matters. They are also expected to monitor company performance financially and socially (Janggu, Darus, Zain & Sawani 2014) and are accountable for any decisions made by management to serve for the best interest of shareholders. Nevertheless, the decision to demonstrate social and environmental responsibility to relevant stakeholders through CSR reporting often depends on management's personal wealth considerations (Watts & Zimmerman, 1990). In the context of the company, a major issue is the information asymmetry between managers and shareholders. This phenomenon can cause the public to question the integrity and effectiveness of monitoring mechanisms in organizations. An alleged lack of independence is considered the root cause of a board's failure to effectively monitor the actions of management. Therefore, it is claimed that greater emphasis should be made on the internal context, which includes boards, particularly to increase shareholder insight and influence corporate behaviour in organizations (Buniamin, Alrazi, Johari & Rahman, 2011).

Odoemelam and Okafor (2018) examined the influence of CG on Environmental Disclosure on listed Non-financial firms in Nigeria. The study uses 86 non-financial firms. Data was collected from the annual report for the period spanning. Cross-sectional design and content analysis were adopted. Regression analysis is used for the analysis of data and finds out that Environmental Disclosure is positively related to Board independence of selected non-financial firms in Nigeria. Similarly, a significant positive effect of Board independence is found. Although the study was conducted in Nigeria, credence was only given to Environmental Disclosure, this is too narrow a scope to make conclusion. This is also in line with the studies of Bello and Kamaral (2017), Haslinda, Alia and Fazial (2016), Meca, Bohorquez and Ballesteros (2018). While Habbash (2016) assessed the possible association between corporate governance (CG) and disclosure of corporate social responsibility (CSR) by listed companies in six Gulf Cooperation Council (GCC) countries for the year 2016. The data were collected from the websites and annual reports of the selected companies and was empirically analysed using multiple

Effect of Corporate Governance on Corporate Social Responsibility Disclosure (CSRD) of Listed Consumer Goods Firms in Nigeria

regression mode of analysis. It found that board diversity (female board membership) has a negative effect on corporate social responsibility disclosure

Board Size and CSRD

The earliest literature on board size is by (Lipton & Lorch, 1992; Jensen, 1993). Jensen (1993) argued that the preference for smaller board size stems from technological and organizational change which ultimately leads to cost cutting and downsizing. Hermalin and Weisbach (2003) argued the possibility that larger boards can be less effective than small boards. When boards consist of too many members agency problems may increase, as some directors may tag along as free-riders. Chaganti, Mahajan and Sharma (1985) also claimed that smaller boards are manageable and more often play a role as a controlling function whereas larger boards may not be able to function effectively as the board leaves the management.

Bello and Kamaral (2017) examined the topic Board Governance Mechanism and Sustainability Disclosure: A moderating role of intellectual capital in selected companies listed in Nigeria. The study uses eighty (80) selected banks in Nigeria as content analysis is adopted. Data are collected from annual reports for the period spanning 2010 through to 2015. Regression analysis is used for the analysis of data and finds out that Board size is positively related sustainability disclosure in selected Nigeria companies. Although, the study was conducted in Nigeria, the study uses only one principle that relates to CSRD. The study was also limited to 2015 and given the lapse of time reasonable conclusion cannot be inferred to accommodate the prevailing circumstances. This was further buttressed by the studies of; Harun (2016), Majeed, Aziz and Saleem (2016), Furtado, Araujo and Moreira (2015) and Muktar, Mohammed and Muhammed (2018) found positive relationship, while Odoemelam and Okafor (2018) examined the influence of CG on Environmental Disclosure on listed Non- financial firms in Nigeria. The study uses 86 non-financial firms. Data was collected from the annual report for the period spanning. Cross-sectional design and content analysis were adopted. Regression analysis is used for the analysis of data and finds out that Environmental Disclosure is negatively related to Board size of selected non-financial firms in Nigeria.

Board Diversity and CSRD

A growing body of contemporary research on boards and board roles suggested that diversity in the boardroom has the potential to increase board effectiveness and firm performance (Carter, Simkins & Simpson, 2003). Board diversity in this context refers to the presence of women directors on corporate boards. Board diversity facilitates in-depth discussions and alternative perspectives and is more likely to be beneficial in the course of uncertainties and complex decisions. There is a growing understanding that a demographically diverse board is capable of addressing the concerns of diverse stakeholders (Buchholtz & Carroll, 2012). Gender diversity in board composition, for instance, inevitably creates a breadth of perspective among directors, which improves the effectiveness of the board by increasing the likelihood of reaching a holistic solution, and thereby assisting in improving company performance. Gender diversity from an international perspective, current empirical research recognizes these diversity variable and only secondarily other dimensions (e.g., foreign diversity). In line with other output factors of gender diversity research (e.g., CSR performance), the results are mixed.

Meca, Bohorquez and Ballesteros (2018) examined culture, board composition and corporate social responsibility in the banking sector in some selected developed countries. A sample of 159 Banks from Canada, France, Germany, Italy, the Netherlands, Spain, Sweden, the UK and the US were selected for the study. The data were collected from the selected banks website and Spencer and Stuart consulting firms spanning the period of 2004 – 2010. Regression analysis was used in analyzing the data and found out that Board Diversity is negatively related CSRD. This study was carried out in developed climes for only banks. Furthermore, the study was limited to 2014 and time lapse, has made conclusion based on this

Effect of Corporate Governance on Corporate Social Responsibility Disclosure (CSRD) of Listed Consumer Goods Firms in Nigeria

study not readily useful in the current reality. This was further corroborated by the study of Majeed, Aziz & Saleem (2016) which also found it to have a positive relationship.

Stakeholder Theory

The main theory underpinning this study is the stakeholder's theory. This theory was proposed by Edward Freeman in 1984. Stakeholder theory states that a company owes responsibility to a wider group of stakeholders, other than just the shareholders. It can also be said to be any person/group who is affected by the action of the business. It includes employees, customers, suppliers, creditors and even the wider community and competitors. Stakeholder theory emphasizes that the organization is a part of the broader social system wherein the organization impacts on and is impacted by other groups in the society (Deegan, 2002).

Stakeholder theory is one of the key theoretical perspectives found to be relevant in understanding companies' CSR-related disclosure behaviour towards fulfilling the interest and demands for information by various stakeholders (Roberts, 1992; Hooghiemstra, 2000; Figar & Figar, 2011). Cecil (2010) argues that non-financial matters are growingly becoming crucial to the sustainable development of companies, and that disclosure practice functions as an essential approach to communicate the CSR effects of organizations' economic actions. Apart from that, disclosing CSR information signifies companies' execution of their accountability and good governance, as well as CSR-related programmes and activities for both their external and internal stakeholders. Stakeholder theory posits the dynamics of the interrelationship between a company and its business environment, which emphasizes responsibility and accountability (Gray et al., 1996). This theory affirms that: corporations continued existence requires the support of the stakeholders and their approval must be sought and the activities of the corporation adjusted to gain that approval.

The more powerful the stakeholders, the more company must adapt. Social disclosure is thus seen as part of the dialogue between the company and its stakeholders. (Gray et al., 1995) Stakeholder theory makes companies as the central point of stakeholders' circle of relationships. In a specific time period, a company will have relationships with two core stakeholder groups; often known as internal and external, or key and secondary (see Freeman and Reeds, 1983; Clarkson, 1995). This theory is highly found as a relevant perspective in understanding CSR activities. From the stakeholders' point of view, CSRD is relevant to various groups of stakeholders through the four different categories of CSR activities, which are community involvement, environment, marketplace and workplace. Hence, this study applies the stakeholder theory to understand corporate engagement in CSR practice.

METHODOLOGY

This study adopted Ex-post Facto and causal research designs and logistics regression in assessing the effect of corporate governance mechanism on CSRD in listed consumer company in Nigeria. The choice of this design was informed by the effectiveness of the design in revealing the association between two or more variables and the impact of one variable on another. Data was collected through secondary data sources from the NSE fact book and audited financial reports of the study firm from year 2014 – 2018. The data was empirically analysed using logistic regression technique on STATA 16. The variable of firm size and leverage were controlled in the study. The CSRD index used was as suggested by Branco and Rodrigues (2008). It was measured using dichotomous variable of 1, when CSR is disclosed and 0 when it is not disclosed

$$\text{Logit} \{ (CSRD) / [1 - PCSRD] \} = B_0 + B_1 BS_{it} + B_2 BI_{it} + B_3 BD_{it} + B_4 + Fsize_{it} + B_5 FLeverage_{it} + \varepsilon_{it}$$

CSRD = Corporate Social Responsibility Disclosure

BS = Board Size

BI = Board Independence

Effect of Corporate Governance on Corporate Social Responsibility Disclosure (CSRD) of Listed Consumer Goods Firms in Nigeria

BD = Board Diversity

Fsize = Firm Size

FLeverage = Firm Leverage

B₀ = Intercept

B₁- B₃ = Coefficients of independent variables

B₄ – B₅ = Coefficients of control variables

ε_{it} = Residual or error term of ‘I’ in period ‘t’.

Table 1 Variable Measurement

VARIABLES	NATURE OF VARIABLES	PROXY (IES)	MEASURE/ DEFINITION
Corporate Governance	Independent Variables	Board size	Total number of director in the board
”	”	Board independence	% of independent director
”	”	Board diversity	% of women on the board.
	Control Variables	Firm size	Log of total assets. Habbash (2016).
		Leverage	Total liabilities to total assets. Habbash (2016).
Corporate Social Responsibility Disclosure (CSRD)	Dependent Variables	Community involvement (5) Employee (6) Consumer (5) Environmental(6)	Following Branco and Rodrigues (2008) Dummy variable equal to 1 if any of the four theme used to represent CSRD is present and 0 otherwise

Researchers Compilation (2020)

RESULT AND DISCUSSION

Table 2 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
BD	85	.1626855	.0726854	0	.333333
BI	85	.4347139	.181253	.125	.8
BS	85	10.38824	2.786422	6	19
FS	85	7.836027	.8441291	5.599992	9.435637
LEV	85	.8850379	.8399921	.001518	3.889314
CSRD	85	.7882353	.4109837	0	1

Sources: Stata Output, 2020

Table 2 indicates that Board Diversity (BD) has an average value of 0.162685 with standard deviation of 0.072685, and minimum and maximum values of 0.000000 and 0.333333 respectively. The standard deviation signifies that the data deviate from both sides of the mean value by 0.072685. On the average that Board independence has an a average value of 0.434714 i.e. the composition of the Non-executive director is 43.47% of the Board, with standard deviation of 0.181253 and minimum and maximum values of 0.125000 and 0.800000 respectively. The standard deviation signifies that the data deviate from both sides of the mean value by 0.181253.

Table 2 also indicates that the average Board size of listed consumer goods companies is 10 members, with standard deviation of 2.786422 and minimum and maximum values of 6 and 19 respectively. The standard deviation signifies that the data deviate from both sides of the mean value by 2.786422.

Regression Diagnostics

The following healthiness tests are carried out to find out whether data used for analysis is reliable.

Effect of Corporate Governance on Corporate Social Responsibility Disclosure (CSR) of Listed Consumer Goods Firms in Nigeria

Table 3: Correlation Co-efficient

	CSR	BS	BI	BD	FS	LEV
CSR	1.000000					
BS	-0.447133	1.000000				
BI	0.382934	-0.322639	1.000000			
BD	-0.155064	-0.169081	0.015813	1.000000		
FS	0.329127	-0.063575	0.067256	-0.143555	1.000000	
LEV	-0.205632	0.130792	-0.098324	0.141581	-0.235775	1.000000

Sources: Stata Output, 2020

This table presents the spearman correlation coefficient between the variables involved in this study. The outcome variable, corporate social responsibility disclosure (CSR) is negatively associated with board size, board diversity and leverage, while board independence and firm size are positively associated with corporate social responsibility disclosure (CSR). Moreover, the strength of association between different variables indicates that multicollinearity can't affect the regression results.

Table 4: Logistic Regression Fit Statistic

Chi-square / Sig	40.00(0.0081)
Log likelihood	-23.886672
Hosmer & Lemeshow Chi-Square (df, sig.)	5.86 (0.6632)
Pseudo R2	0.4557

Sources: Stata Output, 2020

This table presents the statistics of the goodness of model and the explanatory power of the model. The model is based on board variables, which used leverage and firm size as control variables of the study. In the model, chi-square statistics suggest that sample data describe the purposed model. The Hosmer and statistic is 5.86 which has a prob. That is more than 0.05 thus we cannot reject the null hypothesis that the current model fits well. The pseudo R Square is 45.57% which is within the acceptable limit.

Table 5: Logistic Regression Result

CSR	Coef.	Std. Err.	WALD TEST	P>z	Odds Ratio
BS	-.4428154	.14413	-3.07	0.002	.6422258
BI	6.413817	2.535291	2.53	0.011	610.2185
BD	-8.893708	5.511906	-1.61	0.107	.0001372
FS	1.812181	.6572689	2.76	0.006	6.123787
LEV	-.0785778	.3965631	-0.20	0.843	.9244302
_CONS	-8.265547	5.090335	-1.62	0.104	.0002572

Sources: Stata Output, 2020

This table represents the results of logistic regression results in form of co-efficient (B), standard error (S.E), Wald statistic (Wald), significance (Sig.) and odds ratio (Exp(B)). In model, the impact of board size is significant at 5% level, but negatively associated, this implies that larger board's size might negatively influence an organisation CSR policy. This is consistent with the findings of Odoemelam et al (2018), but not consistent with the findings of Bello and Kamaral (2017), Harun (2016), Majeed et al (2015), Furtado et al (2015) and Muktar et al (2016) found positive relationship. CSR disclosure is 36% less likely with a one unit increase in board size.

However, board independence is positive and significantly associated with CSR disclosure as significance value less than 5%; this indicates that as the more independent a board is the more likely the influence on CSR policy. This finding is consistent with the works of Odoemelam and Okafor (2018), Bello et al

Effect of Corporate Governance on Corporate Social Responsibility Disclosure (CSRD) of Listed Consumer Goods Firms in Nigeria

(2017), Haslinda et al (2016), Meca et al (2018) all found positive significant relationship, while Habbash (2016) found it to have a negative relationship. In addition, the odd of CSR disclosure increases by a multiplicative factor 610.2185 as the number of independent directors on board increase by one unit.

Furthermore, board diversity has a negative and insignificant effect on CSR disclosure; this implies that a diverse Board does not improve the CSRD of listed Consumer Goods Companies in Nigeria. This result is consistent with the findings of Meca, Bohorquez and Ballesteros (2018) but not consistent with the results of Bello et al (2018) and Majeed et al (2015), Harun (2016), Majeed et al (2015), Furtado et al (2015) and Muktar et al (2016) found negative relationship, while Odoemelam et al (2018) but found it to have a positive relationship. The result shows that only the control variable of firm's size is significant, while that of leverage is insignificant. This suggests that larger firms are more likely to undertake corporate social responsibility activities, while firms with huge level of debt might not be willing to engage in such activities due to the prohibitive nature of the debt covenants.

CONCLUSION AND RECOMMENDATION

The study considers the effect of corporate governance mechanism on corporate social responsibility on disclosure. It is based on 85 firm's observations of listed consumer goods companies in Nigeria. The analysis shows that Board size has negative significant relationship on CSRD. This implies that larger Board size inhibits decision making on CSRD. The Board independence is positive and significant on CSRD. This concludes that the presence of independent non-executive directors on the board facilitate CSRD among listed consumer goods companies in Nigeria. Furthermore, the result of the analysis revealed a negative insignificant relationship between Board diversity and CSRD. This implies that an increase in Board diversity leads to a decrease in the amount of CSRD in listed consumer goods companies in Nigeria. Based on the findings and conclusions, the study recommends that:

- i. That the Board size should be relative small to fast track decision making on strategic issues including CSRD.
- ii. There is a need for more outside or non- executive director's presence on the board of listed consumer goods companies in Nigeria to facilitate easy CSRD.
- iii. The level of diversity on board should be kept at minimal level to promote CSRD in listed consumer goods companies in Nigeria.

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Impact of Pension Fund Investment on Capital Market Performance in Nigeria

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Abstract

The study investigates impact of pension fund investment on capital market performance in Nigeria. The study adopted Ordinary Least Square (OLS) in order to compare the relationship among the variables of interest. Variables of interest comprise of Market Capitalization, All Share Index and Debt Capitalization while the study period is from 2008 - 2018. To achieve these objectives, relevant secondary data were sourced from different sources. The result reveals that Pension Fund Net Asset value has a positive and significant effect on Market Capitalisation and Debt Capitalization but negative and insignificant effect on the All Share Index of the economy. It is recommended that PENCOM should ensure effective monitoring, supervision and enforcement of the provision of the PRA2004, which are the inevitable ingredients in the Contributory Pension Scheme towards Gross Domestic Product (GDP). Also, more emphasis should be placed on the management of pension assets in the capital market as well as government bond, real estate, investment trust to boost Gross Domestic Product (GDP) of the country (Nigeria).

Keywords: Pension Fund, Investment, Capital Market, Performance

INTRODUCTION

Globally, pension industry had undergone a series of reforms during the last two decades, as it is considered as a catalyst of economic growth and development. These reforms are largely necessitated by the increase in the population ageing and shortcomings of old age support mechanisms. The main objective of the reforms in pension industry is to ensure income security in old age at a least cost manner (Davis and Hu, 1998), they also targeted some macroeconomic benefits including aiding labour and financial markets developments. The resultants quality labour and efficient capital market are expected to facilitate economic growth and provide adequate resources for the elderly population in the economy without an undue burden on the working population. Yermo (2005) defined pension fund as a legal amalgamation of financial assets to which contributions are remitted for the sole reason of servicing retirement benefits liabilities. It is viewed as a sum of money paid regularly to a person who no longer work because of old age, disability or retirement or to his widowed or dependent children by the state, former employers or from provident fund to which he and his employer both contributed.

Capital market is a market for securities - debt or equity, where companies and governments can raise long term-term funds. It is defined as a market in which money is provided for periods longer than a year (Sheffrin, 2003) and also seen as a major catalyst of economic growth and development of any nation. It

impacts positively on the economy by providing financial resources through its intermediation process for the financing of long-term projects. This is supported by Coronado (1998), Vitta (2000) and Meng and Pfau (2010) that the creation of funded pension plans have major long-term implications for the functioning and growth of financial markets. Hence, without an efficient capital market, the economy may be starved of the required long term funds for sustainable growth. However, Pension funds are required by regulatory agent to allocate a large fraction of their capital in investment in a broad range of domestic assets and diversify risk as much as possible within the country. Henshaw (2012) argued that pension funds investment could provide long term funds for economic and social development of the country. Though, there have been considerable numbers of study in this field, most of the previous studies conducted were based on impact of pension fund investment on economic development in Nigeria, its sociological impact and its impact in financial institutions. It will be interesting to understand its impact on capital market performance in Nigeria. This study seek to examines the impact of pension fund investment in capital market development in Nigeria using data from Pension Fund Administrators (PFA) in Nigeria, Nigerian Stock Exchange and Securities Exchange Commission from the year 2008 to 2018, employing Ordinary Least Square regression technique to test its impact on dependent variable. It is a known fact that Pension funds have massive assets at their disposal which form part of investment landscapes all over the world.

An emerging economy like Nigeria needs a deep and liquid stock-market to achieve economic growth and development. It was recently reported that Nigerian pension funds' assets have grown by 3% between March and April 2017 alone to a record ₦6.5 trillion. By nature, pension funds are long-term assets which when invested in the capital market would promote access to financing for underdeveloped sectors of the economy (Okpaise, 2009). Pension funds also face the regulatory requirements to allocate a large fraction of their capital domestically and given the large size of their capital, they are expected to invest in a broad range of domestic assets and diversify risk as much as possible within the country. Therefore, relative to other institutional investors, pension funds are thought to be the ones which would contribute the most to the development of domestic capital markets. Based on this, there is need for investigation into how pension funds significantly contributed to the performance of capital market in Nigeria particularly; the value of shares traded per annum, the market capitalization held by pension funds. The hypothesis of this study is stated thus;

H₀₁: Pension Fund investments have no significant effect on the stock market capitalization in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Concept of Pension Fund Investment

Pension Fund Investment is a full funded pension scheme that tries to generate adequate funds (contribution) through savings. The scheme assists improvident individuals to save, and these savings are meant to satisfy the interest of the employee at retirement, shareholders, and also contribute effectively to economic development. Pension Fund Investment has been identified as an institutional investor that generates long-term contractual savings and stimulates the development of securities market (Mesike and Ibiwoye, 2012). This is made possible through some of the vital roles played such as accumulation of savings that enhance economic development, financial market development, reducing old age poverty, acting as consumers of financial services and provision of long-term investible funds. The new pension scheme in Nigeria is of immense relevant to the development of the Nigerian capital market. The Pension Fund Investment, which replaced the pre-reform Defined Benefit (DB) scheme, has grown its pension assets from ₦649.92 billion in 2006, when the scheme became generally effective to ₦3.1 trillion in December 2012 (PENCOM, 2014). Vitta (2010) stated that the creation of funded pension plans has major long-term implications for the functioning and growth of financial markets. He went further to state that The steady accumulation of long-term financial resources, which is a basic feature of funded pension plans, is bound to affect the composition of financial savings, even if it may not affect the rate of national saving. The Pension Fund Investment has enhanced mobilization of savings for the development of Nigerian Capital Market (Gunu & Tsado, 2012).

Capital Market Performance in Nigeria

The theoretical framework of the link of the secondary capital market to pension funds development, as savings and investment platform include opportunity to realize or liquidate holdings when pension liabilities crystallize. That is, such market can offer lower information and trading cost, diversified asset class and efficient clearing and settlement system. Hence, the loanable fund theory contends that *ceteris paribus* interest rate is determined by the interaction of savers and investors, such that investment varies inversely with the rate of interest, while savings is directly related with interest rate. Meng and Pfau (2010) examine the role of pension fund in capital markets development among OECD using least square dummy variable (LSDVC) estimation in a panel data study. All-together the study found that the impact of pension fund on capital market differs significantly depending on the depth of financial development. Countries with well-developed financial market (i.e. well managed investment strategies in the stock and bond markets) enjoy significant growth in their pension funds than those with thin financial development. Also, Megginson (2012) findings reveal that countries that rely mainly on compulsory private financed pension tends to have larger capital market and are most efficient (e.g. United States, United Kingdom; Netherlands; and Switzerland), compared to others, such as continental European countries that rely on state run unfunded pension system, who are characterized by relatively smaller market

EMPIRICAL REVIEW

Catalan, Wilbert, Kenneh, Friedman and Paddison (2010) conduct Granger causality tests on 14 OECD countries and 5 developing countries, separately, to see the causal relationship between stock market development and contractual savings institutions including pension funds. They conclude that contractual savings predominantly Granger cause stock market development. To a lesser extent, the causality happens simultaneously between them, and very slightly, the causality runs the other direction. Even though they find such causal evidence, their estimation might suffer from the small number of time period observations. For example, the number of observations is only 6 for Austria, 8 for Portugal, and 9 for Australia.

Catalan, et al (2011) examined whether there is a Granger-Causality relation between Capital Market All Share Index (ASI) and contractual savings via pension funds. They use two capital market indicators, stock market capitalization and stock market value traded across 26 countries, of which six are developing countries. They show that contractual savings institutions like pension funds granger-cause stock market capitalization. Furthermore, the potential benefits of developing contractual savings sectors are stronger for developing countries than for developed countries. Success in capital accumulation and mobilization for economic growth and development varies among nations and largely dependent on domestic savings and inflows of foreign capital. The positive relationship between capital market activities and real economic growths has long been established in previous empirical studies but in country specific studies, the structural variations among economies may not have been adequately accounted for. For instance, Olarenwaju (2011) focused on its sociological impact in the society, Odia and Okoye (2004) compare old pension scheme with pension reform act 2004 while others employed only descriptive statistics. The omission of these core variables that accounts for specific differences in the specification of the growth models have introduced some bias and inconclusiveness in the result of these previous studies. In other to fill the gap in the above literatures, this study will incorporate some vital variables such as total market capitalization, all share index traded in order to investigate the impact of pension fund investment on capital market development in Nigeria. Kigen, A. K. (2016) conducted a study on the effect of fund size on the financial performance of pension funds in Kenya for a period of 5 years (2011-2015) using contribution density, accumulated fund assets, number of members, administration costs and investment costs as independent variables. The results showed that administrative expenses, investment expenses, pension contribution and accumulated fund assets all had significant effect on the financial performance of pension funds in Kenya. Another work regarding the financial performance of pension funds was done by Were, Iravo and Wanjala (2017). The study aimed to determine the effect

access to capital, the impact of firm size, retained earnings and leverage has on the financial performance of Pension schemes in Kenya. The result revealed that access to capital, leverage, retained earnings and firm size are the main factors that determine the financial performance of pension funds in Kenya

Theoretical Framework

Rational Expectations Theory

Rational expectations theory states that the players in an economy will act in a way that conforms to what can logically be expected in the future. That is, a person will invest, spend, etc. according to what he or she rationally believes will happen in the future. Although this theory has become quite important to economics, its utility is doubtful. For example, an investor thinks a stock is going to go up, and by buying it, this act actually causes the stock to go up. This same transaction can be framed outside of rational expectations theory. An investor notices that a stock is undervalued, buys it, and watches as other investors notice the same thing, thus pushing the price up to its proper market value. This is the problem with Nigerian stock market trying to restore market confidence since after the global financial crunch. The general expectation of Nigerian investors is pessimistic and hence the market is dragging irrespective of the innovations introduced by the regulatory agency and the Nigerian stock exchange (Yunusa, 2013)

The Pension Fund Investment Theory

Fund accounting theory was first established by the economist William Joseph Vatter in 1947 in his book "The Fund Theory of Accounting and Its Implications for Financial Reports". According to the Dictionary of Accounting Terms, fund theory is a system applied to government organizations as well as non-profit bodies such as charitable organizations and hospitals. The fund includes a group of assets on which restrictions are placed as they are intended for specific purposes. Each fund has its assets restricted for concrete purposes and liabilities determine restrictions against those assets (Vittas, 2013).

Capital Asset Pricing Model (CAPM)

The Capital Asset Pricing Model (CAPM) is a model that describes the relationship between the expected returns and the risk of investing in a security. It shows that the expected return on a security is equal to the risk-free return plus a risk premium which is based on Beta of that security.

$$ER_i = \beta_i (ER_m - R_f)$$

ER_i = Expected return of investment

R_f = Risk-free rate

β_i = Beta of the investment

ER_m = Expected return of the market

$(ER_m - R_f)$ = The market risk premium, which is calculated by subtracting the risk-free rate from the expected return of the investment account.

Arbitrage Pricing Theory (APT)

Arbitrage pricing theory (APT) is a multi-factor asset pricing model based on the idea that an asset's returns can be predicted using the linear relationship between the asset's expected return and a number of macroeconomic variables that capture systematic risk. It is a useful tool for analyzing portfolios from a value investing perspective, in order to identify securities that may be temporarily mispriced. It is expressed as follows:

$$E(r)_i = E(r)_z + (E(i) - E(R)_z) + \beta$$

$E(R)_i$ = Expected return on the asset

R_z = Risk-free rate of return

β = Sensitivity of the asset price to macroeconomic factor n

E_i = THEORY

METHODOLOGY

In this study, correlational research design is adopted to examine the impact of pension funds' investments on capital market in Nigeria. The choice of this design is informed by the effectiveness of the method in investigating the relationships among theoretically related variables. The study will use secondary data from different sources: CBN quarterly economic reports and financial Statistical Bulletin, Nigeria Stock World Bank economic reports and the quarterly publications of the Pension Commission of Nigeria as well as the National Bureau of Statistics Economic reports. The data will be collected from the sources is a time series for the period 11 years (2008 - 2018). The sample for this study consists of 20 PFA's registered with PENCOM. Variables of interest comprise of Market Capitalization, All Share Index and Debt Capitalization while the study period is from 2008 - 2018.

The study also employed secondary data to achieve its objectives. The secondary data is derived from library documents and relevant materials to be researched. The study will incorporate secondary sources of data to enhance a balance between the research observation and available literature on the matter under consideration. This is always believed to promote objectivity. The plan, structure and strategy of investigation are conceived so as to obtain answers to research problems. It ensures that the required data are collected and they are accurate. Documentary evidence constitutes the instrument of data collection as the study is based on secondary data. The data is time series and are extracted from the Central Bank of Nigeria Statistical bulletin and the publications of Pension Commission of Nigeria for the year 2017. The study period covers the year 2008 - 2018. The study is restricted to 2018 due to the fact that data for 2019 are not available.

Procedure for Data Analysis and Model Specification

Ordinary Least Square (OLS) regression technique is utilized and it is useful for estimation. Some statistical and econometric test would be used to evaluate the regression. 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 logistic regression has multiple independent variables, in which all are categorized in to k levels. The dependent variables are explained by the odd ratio of the explanatory variables. The logistic regression is similar to the ordinal least square regression; however, it violates the assumption of explanatory variables such that Heteroskedasticity, linearity and normality assumption of ordinary least square regression. The variables of the study are the capital market performance variables (market capitalization, Nigerian All Share Index and Debt Capitalization) and Pension Funds' Assets. Pension funds' investments are measured using the total pension funds' assets. Therefore, the econometric models of the study are mathematically expressed as follows;

$$MCAP_t = \gamma_0 + \gamma_1 PFNAV_t + \mu_t \dots\dots\dots i$$

$$ASI_t = \gamma_0 + \gamma_1 PFNAV_t + \mu_t \dots\dots\dots ii$$

$$DCAP_t = \gamma_0 + \gamma_1 PFNAV_t + \mu_t \dots\dots\dots iii$$

Where; $PFNAV_t$ is the Pension Fund Net Asset Value at time t; $MCAP_t$ is the Total Market Capitalization in time t; ASI_t is the total Nigeria All Share Index at time t; $DCAP_t$ is the total Debt Capitalization at period t. t; γ_0 is the intercept, γ_1 is the coefficient and μ_t is the stochastic error term/disturbances.

RESULT AND DISCUSSION

Here, the result of regression analysis of the impact of Pension Fund Investment on capital market performance using Ordinary Least Square technique is presented, along side the results of other statistical

estimations such as correlation, R^2 , Adjusted R^2 , t-statistic and F-statistic. Table 1 presents the data used for the analysis in their raw form.

Table 1

Year	MCAP	DCAP	PFNAV	ASI
2008	222.77	705.26	1,099.01	31,450.8
2009	223.51	1,112.17	1,529.63	20,827.2
2010	382.13	1,446.96	2,029.77	24,770.5
2011	320.05	1,869.98	2,450.38	20,730.63
2012	364.06	2,496.6	3,153.12	28,079
2013	592.16	3,152.3	4,057.44	40,000
2014	542.29	3,740.4	4,611.62	34,657.15
2015	519.79	4,435.71	5,302.89	28,642.25
2016	500.43	5,269.78	6,164.77	26,874.62
2017	672	5,724.33	7,514.26	38,243.19
2018	649.21	6,256.56	6,960.11	31,430.50

Source: CBN Statistical Bulletin (2019 EDITION), Pencom Annual Report and Authors Computation

Note: **MCAP** = total market capitalization, **DCAP** = total Debt Capitalization, **PFNAV** = the Pension fund Net asset Value, **ASI** = the total Nigeria All Share Index.

In addition to the above, the research also examine the trends of Market Capitalisation, Debt Capitalisation, Pension Fund Asset Value and the total Nigeria All Share Index(2008-2018). Figure 1, 2, 3 and 4.below present their trends.

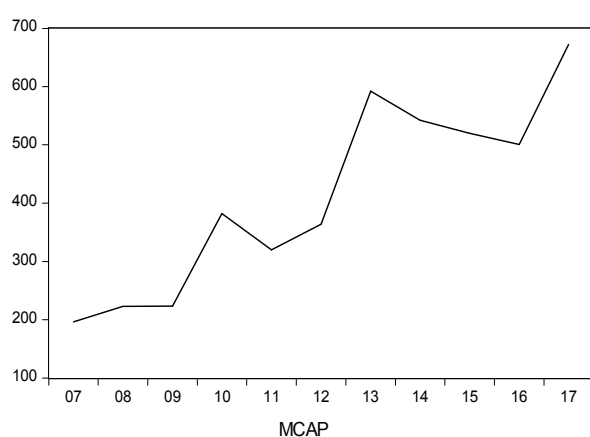


Figure 1: Total Market Capitalisation

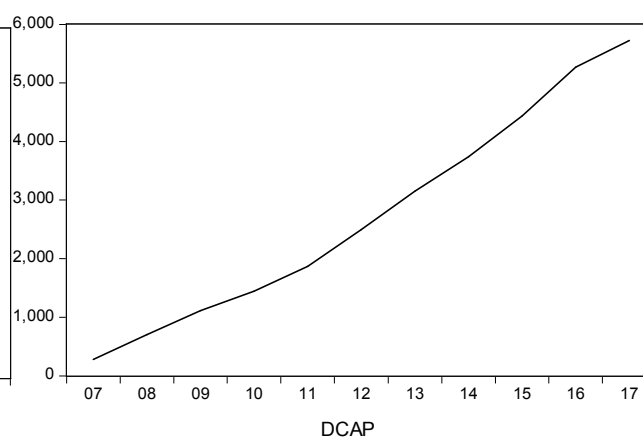


Figure 2: Debt Capitalisation

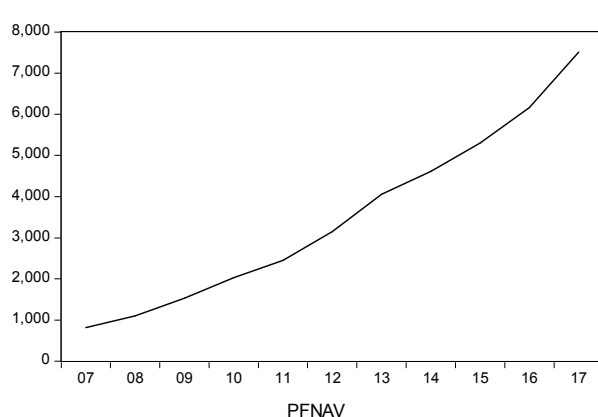


Figure 3: Pension Fund Net Asset Value

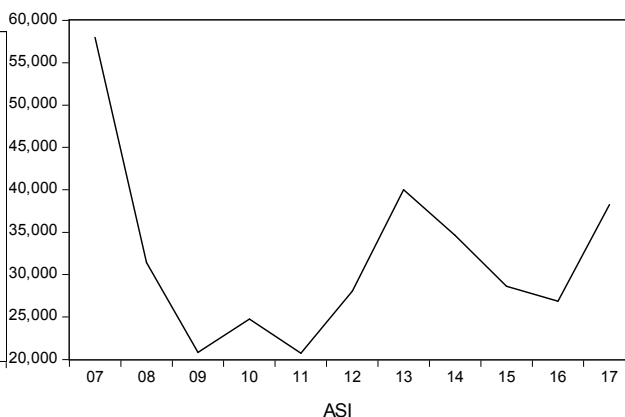


Figure 4: Total Nigeria All Share Index

Descriptive analysis

Descriptive statistics gives a presentation of the mean, maximum and minimum values of variables applied together with their standard deviations in this study. Table 2 in this study shows the descriptive statistics for the variables applied in the study. An analysis of all variables was obtained using the “Eview” software for the period of eleven years (2008 – 2018).

Table 2: Descriptive Statistics of the Variables

	MCAP	DCAP	PFNAV	ASI
Mean	412.3409	2748.497	3520.734	32024.14
Median	382.1300	2496.600	3153.120	28642.25
Maximum	672.0000	5724.330	7514.260	57990.20
Minimum	196.5600	279.9800	815.1800	20730.63
Std. Dev.	163.0541	1862.291	2196.506	10690.36
Skewness	0.070665	0.282108	0.423544	1.271443
Kurtosis	1.693106	1.766240	2.007341	4.177521
Jarque-Bera	0.791976	0.843564	0.780509	3.599211
Probability	0.673015	0.655877	0.676885	0.165364
Sum	4535.750	30233.47	38728.07	352265.5
Sum Sq. Dev.	265866.5	34681269	48246378	1.14E+09
Observations	11	11	11	11

Eview Output (2020)

Table 2 presents the descriptive statistics of the capital market variables and the pension funds’ investments in Nigeria during the period (first quarter of 2008 to last quarter of 2018). The table shows that the total market capitalization (equity and debt) has a mean of 4.12% of GDP with a standard deviation of 163.0541 and the minimum and maximum values of 196.5600 and 672.0000 of the GDP 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. From the other measure of capital market performance, total debt capitalization (DCAP) the table shows a mean of 2748.497 of GDP with standard deviation of 1862.291 and the minimum and maximum values of 5724.330 and 279.9800 of GDP respectively. This implies that capital market performance in terms of total debt traded is volatile during the period, as the standard deviation is large compared to the mean, together with the wide range between the minimum and maximum values. Similarly, Table 4.2

shows that the pension fund investments (PFNAV) during the period has an average value of 3520.734 of GDP with standard deviation of 2196.506 and the minimum and maximum values of 815.1800 and 7514.260 of the GDP respectively. This implies a tremendous increase in the pension fund assets during the period from 815.18 of GDP in 2008 to 7514.260 in the last quarter of 2018.

Regression Analysis

In regression analysis, the ultimate goal is estimation of the relationship between dependent and independent variables. This goal can be achieved through the estimation of the coefficients of each independent variable in the model. The sign of coefficients of independent variables indicates their relationship with dependent variable, while the magnitude of the coefficients implies the responses of dependent variables to independent variables.

Test of Hypothesis

H_{01} : Pension Fund investments have no significant effect on the stock market capitalization in Nigeria.

$$MCAP_t = \gamma_0 + \gamma_1 PFNAV_t + \mu_t$$

Where:

MCAP_t = Total Market Capitalization in time t

PFNAV_t = Pension Fund Net Asset Value at time t

γ_0 = the intercept of the regression line

γ_1 = the slope of the regression line

μ_t = Stochastic error term

A Priori Theoretical Expectation

From economic theoretical expositions and conventions, we expect: $\gamma_1 > 0$ and the result of the estimated regression model is presented below:

$$MCAP_t = \gamma_0 + \gamma_1 PFNAV_t + \mu_t$$

$$MCAP_t = 172.9802 + 0.067986 PFNAV$$

Dependent Variable: MCAP

Method: Least Squares

Sample: 2008 2018

Included observations: 11

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	172.9802	40.70276	4.249839	0.0021
PFNAV	0.067986	0.009936	6.842464	0.0001
R-squared	0.838765	Mean dependent var	412.3409	
Adjusted R-squared	0.820851	S.D. dependent var	163.0541	
S.E. of regression	69.01438	Akaike info criterion	11.46947	
Sum squared resid	42866.86	Schwarz criterion	11.54182	
Log likelihood	-61.08210	Hannan-Quinn criter.	11.42387	
F-statistic	46.81931	Durbin-Watson stat	1.804023	
Prob(F-statistic)	0.000075			

E-view output

The coefficient of multiple determinations (R^2) is 0.838765. This indicates that about 83.88 percent of the total variations in market capitalization is explained by the variations in the explanatory variable (pension fund asset value) while the remaining 16.12% of the variation in the model is captured by the error term.

This indicates that the model represent a good fit (i.e. 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, we conclude 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 pension fund asset value is statistically significant. Durbin Watson test shall be adopted to test for Autocorrelation. The Durbin Watson statistic is given as 1.804023 (approximately 2) which show that there is no autocorrelation in the model. The value of F-statistic is 46.81931 and the value of the probability of F-statistic is 0.000075. This result implies that the overall regression is statistically significant at 5% level of significant given that the probability of F-statistic is 0.000075 less than 0.05. The intercept is 172.9802. This shows that if the explanatory variable is held constant, market capitalization will be 172.9802. The coefficient of Pension Fund Net Asset Value (PFNAV) is 0.067986. This shows that PFNAV is positively related to market capitalization and that a unit increase in it will increase market capitalization by 6% approximately. This result is consistent with 'a priori' expectation which hypothesizes that increase in PFNAV will lead to increase in market capitalization. The result shows that PFNAV has significant positive impact on market capitalization in Nigeria. Therefore we fail to accept the null hypothesis that Pension Fund investments have no significant effect on the stock market capitalization in Nigeria. In other word, an increase in the volume and revenue of pension fund sector translates to more market capitalization in Nigeria.

CONCLUSION AND RECOMMENDATIONS

The study sought to establish the impact of pension fund investment on capital market performance in Nigeria. The specific objectives of the study were to examine the effect of pension fund investment on the stock market capitalization in Nigeria, assessing the effect of pension fund investment on the Nigerian all Share Index and to assess the effect of Pension fund investment in Bond in Nigeria. The null hypothesis was formulated to determine the significant relationship between pension fund investment and capital market performance. The independent variable for the study was pension fund net asset value while the dependent variables were stock market capitalisation, all share index and debt capitalisation. The study adopted a correlational research design. Secondary data was obtained from CBN quarterly economic reports and financial Statistical Bulletin, the quarterly publications of the Pension Commission of Nigeria as well as the National Bureau of Statistics Economic reports were analysed using "Eview" software. The study used annual data covering a period of 11 years (2008 - 2018). The result of the regression analysis shows that there is a significant relationship between the variables. The Ordinary Least Square (OLS) regression compares the relationship among the variables. The result shows significant relationship between capital market performance and pension fund investment. The result shows that pension fund net asset value has significant positive impact on market capitalization.

The study also reveals that the introduction and implementation of the funded pension scheme has had tremendous impact the Nigerian economy as a whole. The sectoral pension fund contribution has constituted a huge investment of fund in the capital and money markets, thus creating employment opportunities as well as improving the investment climate. The regression results also reveals that both public sector and private sector pension contributions (whether in its aggregated or disaggregated form), total pension fund assets, and market capitalization have appreciable impacts on gross domestic product. Undauntedly, the new contributory pension scheme has encouraged the release of un-invested fund and the channeling of excess liquidity into capital and money markets through instruments such as investment, bond, ordinary share, dividends etc. With good risk and portfolio management by pension fund administrators' and custodians, the contributory pension has served in effective and efficient capacity in boosting the Gross Domestic Product (GDP) in Nigeria and very convenient to retirees compared to the previous defined benefit scheme. Given the foregoing, the following recommendations are those which are fundamental to the study:

- i. One of the functions of the stock exchange is mobilization of surplus funds and making them available to the deficit sector to hasten the rate of investment. In the Nigerian context, this basically needs public enlightenment. More robust and far reaching advocacy should be undertaken, to arouse the interest of potential investing public who wish to avail themselves of the opportunities of investing in financial securities. Also, public awareness about the returns and benefits derivable from trading in stock and shares should be encouraged. Infrastructural deficiencies and malfunction are major impediment affecting the pace of investment growth in Nigeria. As a result, the overall result is drags and delays in handling of securities transactions and low dissemination of information as regards the operations of Nigerian stock exchange. Enabling infrastructural facilities, proper monitoring and dissemination of information should be adequately put into commensurate market expectations.
- ii. Adequate investment and management of the pool of fund contributed by employees and employers has immensely contributed to development of the economy.
- iii. There should be more emphasis on the management of pension assets in the capital market as well as government bond, real estate, investment trust to boost Gross Domestic Product (GDP) of the country (Nigeria).
- iv. PenCom should ensure effective monitoring, supervision and enforcement of the provision of the PRA2004, which are the inevitable ingredients in the Contributory Pension Scheme towards Gross Domestic Product (GDP).
- v. There should be prompt reconciliation between PFAs, PFCs and PENCOM and statements of accounts should be given to contributors regularly. This will bring transparency and accountability to the system.
- vi. Professionals should be employed by PFAs to bring competence and professionalism to the investment of funds and risks and return thereon.

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Effect of Detective and Preventive Internal Control Systems on Detection and Prevention of Financial Fraud in Nigerian Tertiary Institutions

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Abstract

The study investigated the effects of detective and preventive internal control systems on financial fraud detection and prevention in tertiary institutions in Nigeria with particular reference to university of Jos. In collecting data for the study, the use of causal research design was employed. Under this design, data were generated from both primary and secondary sources through the use of questionnaire and extensive review of related literatures relevant to the study respectively. In generating primary data for the study, questionnaire was designed and distributed to the sampled respondents of the accessible population which consists of staff of audit, bursary and other administrative units of the University of Jos. A model was specified using Logistic regression that was used to predict a dependent variable on the basis of independent variables and to determine the percentage of variance in the dependent variable as explained by the independent variables. Data were analysed using table while the hypotheses were tested using wald test. The outcome of the study revealed that segregation of duties has a significant effect on financial fraud detection and prevention in the Nigerian tertiary institutions; and internal control system; internal audit activities; and supervision also have significant effect on financial fraud detection and prevention in tertiary institutions in Nigeria. The study recommends among others that management and governing councils of tertiary institutions in Nigerian should ensure constant, regular and strict adherence to segregation of duties among staff of tertiary institutions in Nigerian. This can be done by putting structures and measures capable of querying and sanctioning defaulters in place; and that staff of internal audits of tertiary institutions in Nigeria should be properly and continuously trained on technical and more sophisticated internal control approaches, processes and procedures capable of easily unraveling fraud and other malpractices and that they should be encouraged to report fraud and malpractices discovered. Similarly, reports of internal auditors should be implemented, their independence should be granted and adequate resources should be provided for them to perform their internal audits effectively. This can be done by engaging staff that are professionally inclined who are encouraged to attend continuous professional development programmes or education.

Keywords: Internal Control System, Fraud detection, Fraud Prevention, Supervision, Internal Audits, Segregation of duties, Management Integrity

INTRODUCTION

Tertiary institutions all over the world are regarded as engines of economic and sustainable national development in every nation. Education contributes to the economic, social and political growth and development of any nation. Tertiary institutions transmit knowledge and train individual minds in different segments of the nation (Johnstone, 2005). In Nigeria, tertiary institutions; especially the universities are veritable tools for the realization of national development; the development of cultured citizens and the promotion of basic research and innovation. University education is therefore, the most powerful and critical success factor for individuals and the society at large (Aina, 2007). The Nigerian university system has grown in size and has undergone deep transformation since its inception over 60years ago. For tertiary institutions like universities to effectively perform their roles; there must be adequate funding and this has to be achieved by having internal control system set by the management and governing councils of the institutions (Bamiro & Adediji, 2010). Internal control system has been variously discussed in relation to its contribution towards institutional development. Internal control system has been so significant to any institutional development in Nigeria; especially in the aspect of fraud control; so as to enable adherence to laid down policies and rules established by the management and the governing councils of universities (Mu'azu & Siti, 2013). Yang, Lin and Koo (2011) noted that the major reason of having internal control system in an institution is to ensure the reliability of financial

Effect of Detective and Preventive Internal Control Systems on Detection and Prevention of Financial Fraud in Nigerian Tertiary Institutions

information, effectiveness and efficiency of conducting institutional financial and non-financial activities. The issue of internal control system cannot be overemphasised as it has been long recognised as an important feature of an institution's control system. Internal control system of institutions such as universities' covers the entire university system so as to ensure that there is strict/regular adherence to the control system put in place by the institutions (Kwanbo, 2009).

According to Adeniji (2012), internal control system is defined by The Auditing Practices Committee in their Guideline as, "the whole system of control, financial or otherwise, established by the management in order to carry on the business of the enterprise in an orderly and efficient manner, ensure adherence to management's policies, safeguard the assets and secure as far as possible the completeness and accuracy of the records." Internal control system can be described as the whole system of control, financial or otherwise, established by the management and the governing council of an institution to ensure that the activities of the institution adhere to a set of laid down rules and procedures to enable fraud detection and prevention in the institution to be achieved (Bejamin, 2001). The internal control system of an institution is a structure laid down by management for effective control of its institutional activities. It is closely linked with corporate governance audit which ensures adherence to policies set by the management of the institution. The Public Company Accounting Reform and Investor Protection Act (2002), otherwise generally referred to as the Sarbanes-Oxley Act (2002) introduced in the United States, made it mandatory for management to initiate good internal control and provide assessment of its effectiveness. The internal control system of an institution is a system designed by the management of the institution to ensure adherence to the policies, control measures and regulations set by the management to curb different forms of malpractices in the institution. One major malpractice that institutions are identified with is fraud (Abiola, 2009). In this study, detective and preventive internal control system is basically defined by segregation of duties, internal audits and supervision.

Financial Fraud is a critical issue in both the private and public sectors. Fraud is an intentional misrepresentation of financial information by one or more individuals among management, employees or third parties. It involves the use of criminal deception to obtain an unjust or illegal advantage (Association of Certified Fraud Examiners [ACFE], 2010). It is a deliberate cheating or deception intended to gain an undue advantage over an organization (Dandago, 1997). Fraud is a very worrisome issue in the Nigeria tertiary institutions. This is because it retards the institutional development of any tertiary institution (Abiola, 2009). As funds are released for the running of activities and also as other alternative sources of funds are employed to enable revenue generation for the institutions, it is necessary that every institution should have an internal control system to ensure that accounting systems provide an efficient means of financial control; capable of providing a reliable management information and protecting the institution's assets from fraud and misappropriation by perpetrators (Achibong, 1993). Internal controls have existed from time immemorial (Oyedeki, 2015). In Hellenistic Egypt, there was a dual administration, with one set of bureaucrats charged with the responsibility of collecting taxes and another set charged with the responsibility of supervising them (Siyanbola, 2013). It is a system by which an institution maintains environments that encourage incorruptibility and deter fraudulent activities by management and employees (Oyedeki, 2015).

Fraud causes tremendous loss to institutions and creates morale problems in the work place. When an institution is stripped of her money by fraudulent means, the consequences can be devastating. Fraud losses are serious problems to institutions that need to be properly managed. It needs to be effectively controlled and monitored (Gbegi & Adebisi, 2015). Fraud can cause a lot of havoc to institutions. Many private and public institutions have lost a lot of monies and properties as a result of fraudulent activities. It also restricts the development of an institution as funds that are allocated for certain purposes are not utilized accordingly. Even though, there exists the internal control system in some institutions, yet the system may not be capable of curtailing the level at which frauds are being perpetrated in such institutions. This is because even though, the system is in existence, it may also be possible that the system is weak or is not functioning properly. It is against this backdrop that the researcher intends to

Effect of Detective and Preventive Internal Control Systems on Detection and Prevention of Financial Fraud in Nigerian Tertiary Institutions

investigate the effects of detective and preventive internal control system on fraud detection and prevention in the Nigerian tertiary institutions' environments.

Internal control system is a control mechanism that needs to be established, assessed and constantly maintained and enhanced in an organisation so as to ensure effective and efficient operations in the organisation. The establishment and existence of internal control system in an organisation be it public or private can never be overemphasised. This is because the existence of a strong, reliable and effective internal control system helps in curtailing the mismanagement of both financial and non-financial resources as well as other malpractices in an organisation. The Nigerian tertiary institutions are perceived to have been witnessing financial crises due to mismanagement of financial and other resources in the institutions. These financial crises can be traced to either non-observance of laid-down rules, procedures and policies (internal controls) that are established by the management and governing councils (the regulatory authorities) of the respective institutions or non-existence of such internal control systems in those institutions (Oyedeji 2015). Oyedeji further stated that every organisation must establish and install efficient, strong, reliable and effective internal control system in order to protect its assets from possible losses resulting from misapplication of funds, misuse and falsification of financial and other assets. Unegbu and Kida (2011) emphasised the need to establish effective internal control system to create financial improvement in the government ministries. The custodians of financial resources in the Nigerian tertiary institutions are the institutions' bursars who head bursary units and the chief academic, administrative, and accounting officers in the institutions such as the vice chancellors, rectors and provosts. As the principal officers of the institutions, they are totally liable for the action and non-action in any financial matter (Adeniji, 2010).

Assets falsification and financial recklessness are parts of the reasons for setting up effective internal control system; therefore, the failure of the system often becomes a source of concern and a great pain in the neck of many tertiary institutions' chief accounting officers and custodians of financial resources such as the vice chancellors, rectors, provosts and the bursars respectively. In order to maintain the integrity of the bursary unit of every Nigerian tertiary institution, effective functioning of internal control system must be emphasized (Oyedeji, 2015). In line with Oyedeji's view, asset falsification and financial recklessness in the university community are very worrisome. This is occasioned by non-existence or weakness of internal control system in the universities' environments and as a result; a lot of fraudulent financial and other malpractices that are occurring in such environments remain undetected, thereby creating precedents to fraudulent minds. With this situation, frauds are commonly perpetrated and are not properly reported. The internal control systems in the Nigerian tertiary institutions are facing serious challenges in terms of poor segregation of duties, lack of or poor supervision and weak internal audits. This has become a worrisome issue as duties are not properly segregated to ensure effective control. The internal audit unit is set to ensure adherence to policies, regulations and procedures. In view of this, the study intends to investigate detective and preventive internal control system in the Nigerian tertiary institutions viz-aviz its effects on fraud detection and prevention in the institutions.

LITERATURE REVIEW

Conceptual Review

Internal Control System

In every organisation, it is important to ensure the existence of internal control system in the organisation. It is a structure put in place in order to ensure effective and efficient management of organisational resources. According to Adeniji (2012, p. 190-191), internal control system is defined by The Auditing Practices Committee in their Guideline as, "the whole system of control, financial or otherwise, established by the management in order to carry on the business of the enterprise in an orderly and efficient manner, ensure adherence to management's policies, safeguard the assets and secure as far as possible the completeness and accuracy of the records." Internal control system can be described as the whole system of control, financial or otherwise, established by the management and the governing

Effect of Detective and Preventive Internal Control Systems on Detection and Prevention of Financial Fraud in Nigerian Tertiary Institutions

council of an institution to ensure that the activities of the institution adhere to a set of laid down rules and procedures to enable fraud detection and prevention in the institution to be achieved (Bejamin,2001).

Olaoye (2009) opines that internal control is a process instituted and maintained by an institutional structure, work and authority flows, people and management information system, designed to help an organization to accomplish its specific goals. Olaoye and Etuk (2011) state that the objective of internal control, should be directed towards the attainment of the institutional objectives. According to Asuquo (2005), internal control is made up of internal checks, internal audit, accounting controls and other forms of controls such as budgetary and physical controls of institutional assets. Okozie (1999) opines that the primary responsibility for the maintenance of the effective internal control system rests with the management of any institution who is to ensure that there is an effective compliance with the requirements of the system. Based on the contributions of the scholars above, internal control system therefore, consists of structure of control designed by the management of an institution, organisation or an entity to enable them achieve the institutional goals of the institution, organisation or the entity. Such controls include internal checks, segregation of duties, authorization, accounting controls, asset verification and other non-financial controls. The Committee of Sponsoring Organisations (COSO) on Internal Control Integrated Framework (ICIF) (2013) indicates that the internal control is established by the management who designs such controls; to provide reasonable assurance regarding the achievement of objectives relating to operations in the institution and to ensure adequate compliance with such control measures. Operation objectives are related to the effectiveness and efficiency of an entity's operations, including operational and financial performance goals, and safeguarding assets against loss. The internal control system ensures that the control mechanisms designed by management and other personnel are effectively and efficiently utilised. Compliance objectives are related to adherence to laws and regulations that the entity must follow. Internal Control consists of five components as outlined in COSO on ICIF (2013). They are control environment, risk assessment, control activities, information and communication and monitoring activities.

Control Environment

This control environment is a set of standards, processes and structures that provide the basis for carrying out internal control across an institution. The management of the institution establishes the tone at the top regarding the importance of internal control and expected standards of conduct. The factors relating to effective control environment as stated by COSO are as identified below. Firstly, the organization should demonstrate a commitment to integrity and ethical values of its employees, to ensure that duties are done in line with ethical considerations. Secondly, the governing council is expected to be independent of the management of the institution who exercises an oversight function over the development and performance of internal control that is put in place in the institution. Lastly the institution is expected to hold individuals accountable for their internal control responsibilities in the pursuit of its goal to ensure that there is a strict adherence to policies and procedures.

Risk Assessment

Risk assessment involves a dynamic and iterative process for identifying and analyzing risks to achieve the entity's objectives, forming a basis for determining how risks should be managed. Management should consider possible changes in the external environment and within its own business model that may impede its ability to achieve its objectives. The framework recognizes that many institutions are taking a risk-based approach to internal control and that the risk assessment includes processes for risk identification, risk analysis and risk response; and that risk tolerance and an acceptable level of variation in performance should be considered in the assessment of acceptable risk levels; and the discussion of risk severity includes velocity and persistence in addition to impact and likelihood.

Control Activities

Control activities are the actions established by the policies and procedures to help ensure that management directives to mitigate risks for the achievement of objectives are carried out. Control activities are performed at all levels of the entity, at various stages within business processes and over the technological environment.

Effect of Detective and Preventive Internal Control Systems on Detection and Prevention of Financial Fraud in Nigerian Tertiary Institutions

They may be preventive or detective in nature and may encompass a range of manual and automated activities such as authorizations and approvals, verifications, reconciliations and business performance reviews. Segregation of duties is typically built into the selection and development of control activities. Where segregation of duties is not practical, management should select and develop alternative control activities. These activities are carried out within an organization to ensure that there is adherence to the set policies and laid down rules and regulations.

Information and Communication

Institutions are expected to ensure that there is adequate flow of information from the lower level to the higher level in an organisation. Information is necessary for an entity to carry out its internal control responsibilities in support of the achievement of its goals. Communication occurs to provide the institutions with the information needed to carry out their day-to-day internal control activities. Communication enables personnel to understand internal control responsibilities and their importance to the achievement of organisational goals. Information and communication are essential in an institutional set up. This enhances understanding of the mechanisms set to achieve the institutional objectives.

Monitoring Activities

The institutions are expected to monitor the activities that take place within their environment by using an evaluation method to ensure compliance at all the levels of control set by the management. The ongoing evaluations, separate evaluations or some combinations of the two are used to ascertain whether each of the five components of internal control, including controls to affect the principles within each component is present and functioning. Findings are evaluated and deficiencies are communicated in a timely manner; with serious matters reported to senior management officials and the governing councils of the institutions. Internal control system of an institution describes the entire system of the institution and the various control measures which the institution has put in place to ensure that there are compliances with the control measures in the system. As a result, the system put in place can ensure fraud detection, prevention and control.

Types of Internal Controls

There are three main types of internal controls: detective, preventative, and corrective (Crowdstrike, 2020). Controls are typically policies and procedures or technical safeguards that are implemented to prevent problems and protect the assets of an organization.

a) Detective Internal Controls

Detective internal controls are those controls that are used after the fact of a discretionary event. These controls are implemented to reveal errors and irregularities, once they take place. Think of Sherlock Holmes, walking onto the scene of an event, trying to piece together what happened. This is to identify what caused the event to occur; what process failed that allowed the event to occur; and is there a policy that can be implemented to keep the event from happening again in the future. Some examples of detective controls are internal audits, reviews, reconciliations, financial reporting, financial statements, and physical inventories.

b) Preventative Internal Controls

Preventative internal controls are those controls put in place to avert a negative event from occurring. These controls are introduced in the firm to stop errors and irregularities from taking place. For example, most applications have checks and balances built-in to avoid or minimize entering incorrect information. There are also physical controls or administrative preventive controls, such as segregation of duties that are routinely performed by companies. Assigning one person to write checks, and another staff member to authorize the payments, are segregation of duties that fall under the umbrella of preventative controls from an administrative standpoint. Others, like video surveillance or posting security guards at entry points for verifying ID credentials and restricting access, are illustrative of physical safeguards. Training programs, drug testing, firewalls,

computer and server backups are all types of preventative internal controls that avoid asset loss and undesirable events from occurring.

c) **Corrective Internal Controls**

Corrective internal controls are typically those controls put in place after the detective internal controls discover a problem. These controls could include disciplinary action, reports filed, software patches or modifications, and new policies prohibiting practices such as employee tailgating. They are usually put into place after discovering the reasons why they occurred in the first place. These controls are designed to take corrective action for removing errors and irregularities after they are detected.

Financial Fraud

Fraud is a critical issue in both the private and public sectors. Fraud is an intentional misrepresentation of financial information by one or more individuals among management, employees or third parties. It involves the use of criminal deception to obtain an unjust or illegal advantage (Association of Certified Fraud Examiners [ACFE], 2010). It is a deliberate cheating or deception intended to gain an undue advantage over an organization (Dandago, 1997). Benjamin (2001) defines fraud as simply a conscience and premeditated action taken by a person or group of people to be a truthful or factual action with a view to deriving selfish personal monetary gain. It involves the use of deceit and trick to forge or falsify documents and signatures in order to steal. Michael (2004) views fraud as an intentional misstatements or omissions of amounts or disclosures from an entity's accounting records or financial statements to embezzle monies from the organization by an employee. Kiragu, Wanjau, Gekara and Kanali (2013), define fraud as an act of deliberate action made by an entity, knowing that such action can result in a possession of unlawful benefits. Adeniji (2004) and Institute of Chartered Accountants of Nigeria (ICAN) (2009) state that fraud is an intentional act of individuals among management, employees or third parties who produce errors in financial reporting in favour of their personal desires. Gbegi and Adebisi (2015) opine that fraud is an act of obtaining financial value by trick or deceit through inflation of contract, kickbacks, paying or collecting money for non-existing commodity, misappropriation of cash, manipulation of accounts to disclose false position, wages fraud, computer frauds and ghost workers among others. Fraud can also be considered as any deliberate misrepresentation, concealing and negligence of a truth to manipulate the financial statements at the expenses of a firm (Abdullahi & Mansor, 2015a). From the above, fraud can be seen as a deliberate attempt by a person or a group of persons to distort the financial records of an organisation for personal or selfish advantage.

Theoretical Framework

The Fraud Triangle Theory

In 1950, Donald Cressey, a criminologist, started the study of fraud by arguing that there must be a reason behind everything people do. He asserted that three factors (pressure, opportunity, and rationalization) must be present for an offence to take place. The three elements of fraud as summarized by Cressey (1953) are commonly presented in the diagram shown in Figure 1 below. The top element of the diagram represents the pressure or motive to commit the fraudulent act while the two other elements at the bottom are perceived opportunity and rationalization (Wells, 2008).

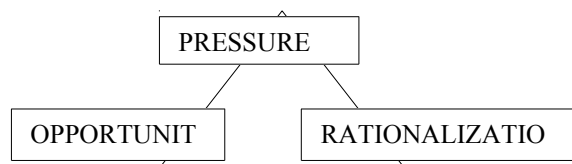


Figure 1: The Fraud Triangle Source: Cressey (1953)

(a) Perceived Pressure/Incentive/Motive

Effect of Detective and Preventive Internal Control Systems on Detection and Prevention of Financial Fraud in Nigerian Tertiary Institutions

Perceived pressure refers to the factors that lead to unethical behaviour. Every fraud perpetrator faces some pressures to commit unethical behaviour (Abdullahi & Mansor, 2015b). These pressures can either be financial or non-financial pressures. Lister (2007) stated that pressure is a significant factor to commit fraud. He determines three types of pressure which are personal, employment stress and external pressures. Vona (2008) further examines personal and corporate forces as motivations' proxies for fraud commitment. Examples of perceived pressure include greed, living beyond one's means, large expenses or large personal debts, family financial problems or health, drug addiction and gambling. Lister (2007) defined the pressure to commit fraud as the source of heat for the fire which can consume one's life. But having this pressure does not become a reason for someone to commit fraud. Murdock (2008) also argued that the pressure could be related to financial, non-financial, political and social factors. Political and social pressures occur in a situation whereby a person feels and believes that he cannot afford to fail due to his status or reputation in the society. According to Rae and Subramanian (2008), pressure relates to employees' motivation to commit fraud because of greed or personal financial pressure.

(b) Perceived Opportunity

The second necessary element for fraud to occur is perceived opportunity. Opportunity is created by ineffective control or governance system that allows an individual to commit organizational fraud. In the field of accounting, this is termed as internal control weakness. The concept of perceived opportunity suggests that people will take advantage of circumstances available to them (Kelly & Hartley, 2010). The nature of perceived opportunity is like perceived pressure in the sense that the opportunity does not have to be real too (Mercer, 2004). However, the opportunity exists in the perception and belief of the perpetrator. In most cases, the lower the risk of being caught, the more likely it is that fraud will take place (Cressey, 1953). Several factors lead to the existence of an opportunity to commit fraudulent activities in an organization such as negligence of employees in breach of policies and lack of disciplinary action (Sausser, 2007). Wilson (2004) explains opportunity as the ability to override fraud controls. Rae and Subramanian (2008) alarm that opportunity refers to the ability and power of an employee to realize the weaknesses of the organizational system and taking advantage of them by making fraud possible.

(c) Rationalization

Rationalization is difficult to notice, as it is impossible to read the mind of the fraud perpetrator. Individuals who commit fraud possess a particular mind-set that allows them to justify or excuse their fraudulent actions (Hooper & Pornelli, 2010). Rationalization is a justification of fraudulent behaviour because of an employee's lack of personal integrity or moral reasoning (Rae and Subramanian, 2008). The propensity to commit fraud depends on ethical values as well as on the personal attitudes of individuals (Kenyon & Tilton, 2006).

The Fraud Diamond Theory

Wolf and Hermanson (2004) proffer the Theory of the Fraud Diamond in place of the Fraud Triangle. They argue that the diamond offers a better view of the factors leading to fraud. They add a fourth variable, which is capacity, to the three-factor theory of Cressey. Capabilities mean that, the fraud perpetrator must have the necessary traits, abilities or positional authority to pull off his crime. The variables of the Fraud Diamond Theory are presented in Figure 2.

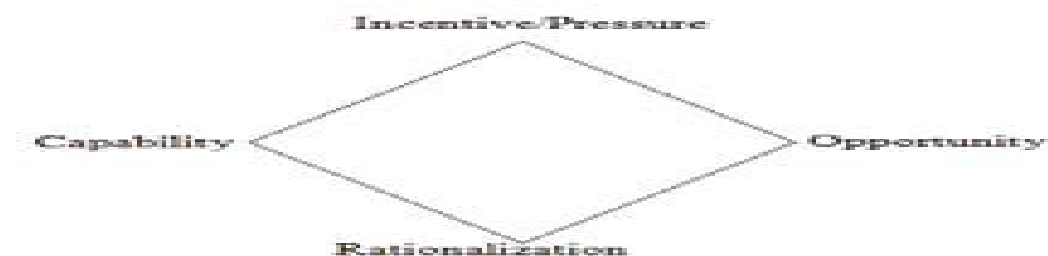


Figure 2: The Fraud Diamond Source: *Wolf and Hermanson (2004)*

Effect of Detective and Preventive Internal Control Systems on Detection and Prevention of Financial Fraud in Nigerian Tertiary Institutions

Theory of fraud Diamond offers a better view of the factors that lead to fraud. The theory adds fourth variable, which is capability, to the three-factor theory of fraud triangle. Wolf and Hermanson (2004) believed that many frauds would not have occurred without the right person with the right capabilities for implementing the details of the fraud. They also suggested four observation traits for committing fraud. First, authoritative position or function within the organization. Second is the capacity to understand and exploit accounting systems and internal control weakness. Third, confidence that he/she will not be detected or if caught he/she will get out of it easily. Fourth, capability to deal with the stress created within or otherwise, a fraud perpetrator is considered a good person when he or she commits bad acts. However, it can be noticed that both classifications are interrelated. For instance, personal pressure can come from both financial and non-financial sources. A person's financial pressure in this case could be gambling addiction or a sudden financial need, while a personal non-financial pressure can be lack of personal discipline or greed. By the same token, employment pressure and external pressure can come from either financial or non-financial pressure. Consequently, this study is anchored on the fraud diamond theory.

Empirical Review

Previous researches concerning fraud have addressed red flags, which are discovered as conditions that indicate potential fraud. A study conducted by Albrecht and Romney (1986) identified 87 red flags that were evaluated as predictions of fraud. In the study, questionnaires were distributed to CPA as forms which were separated into two groups. The control group consisted of ten patterns which had not detected fraud. Out of a list of 87 red flags, 31 red flags were found to be significant as predictions of management fraud. In a study conducted by Oyediji (2015) on internal control system and the integrity of bursary units in Nigerian Universities, he challenged the correctness or otherwise of the lack of computerization in bursary units of Nigerian University. Three Universities were selected and 100 questionnaires were distributed to the respondents and a multivariate analysis was used in testing the research hypothesis. The findings revealed that computerized internal control system impacts significantly at 5% and 10% levels on fraud detection in the financial system. He suggested the computerization of all internal control features for the bursary departments of universities.

Gbegi and Adebisi (2015) conducted a survey on fraud detection and prevention strategies in the Nigerian public sector. During the study, 392 questionnaires were distributed and out of which 350 were returned and they were analysed using means score while analysis of variance (ANOVA) was used in testing the hypotheses. The study found out that there is significant and positive relation between management policies and fraud management; and that there is no strong internal control system in existence. The study also revealed that management integrity has positive influence on fraud prevention in the public sector. The study suggested the need for developing and formulating strong management policies and such policies should be supported with continuous training and guidance. Loebbecke and Willingham (1989) used the red flags approach to develop a conceptual model to assess the probability of occurrence of material management fraud. They surveyed 277 audit partners at KPMG (Peat Marwick) and concluded that the auditor's assessment of the control environment of clients is important in order to assess the material misstatements during the planning of the audit. Pincus (1989) conducted a research on the efficiency of red flags. He employed the use of questionnaire for assessing the possibility of fraud and found out that auditors who did not employ red flags checklists outperformed those who did an experimental setting.

Internal control system and fraud detection and prevention have gained a lot of scholarly attention from scholars and writers in the field of accounting and other allied areas but none of these literatures has specifically addressed the effect of detective and preventive internal control system on fraud detection and prevention in Nigerian tertiary institutions. Benjamin (2001); Oyediji (2015); Pincus (1989); Achibong (1993); Albrecht and Romney (1986); Asuquo (2005); Dandogo (1997); Olaoye (2009); Murdock (2008); Siyanbola (2013); Abiola (2009); Kwambo (2009); Vona (2008) and several other scholars wrote and made contributions to internal control system and fraud in organisations but none of

them specifically focused attention on internal control system and fraud detection and prevention in tertiary institutions. This study therefore, is aimed at examining specifically the effects of detective and preventive internal control system on fraudulent practices in the Nigerian tertiary institutions.

METHODOLOGY

This is an exploratory and causal study designed to examine the effects of detective and preventive internal control system on fraud detection and prevention in the Nigerian tertiary institutions. The research design used for this study is causal research design incorporating both qualitative and quantitative designs. Under this design, data were generated from both primary and secondary sources through questionnaire and review of related literatures respectively. In generating primary data, the questionnaire was designed and administered to the respondents and the responses were analysed and tested using Logistic regression. The findings of the research enabled the researcher to draw conclusion and to make possible recommendations. The design is considered appropriate for this study for the fact that it assisted in the collection of data and detailed information on internal control system and fraud detection and detection in the Nigerian tertiary institutions. This is because the study is on the effects detective and preventive internal control system on fraud detection and prevention in the Nigerian tertiary institutions.

The population of the study comprises staff members of bursary department who are one hundred and fifty (150) in number, staff members of audit unit who are eighteen (18) in number and other administrative staff members who are one thousand two hundred and fourty one (1241)in number. The total population for the study therefore, is 1409. The sample size for the study is made up of three hundred and twelve (312) respondents drawn from a population of one thousand four hundred and nine (1409) staff of the bursary, audit and other administrative units of the University of Jos. The researcher adopted a simple random sampling technique in selecting the sample from the study units or the accessible population. The researcher determined the sample size using Yaro Yamane's formula which is usually used in determining the sample size for a study with a finite population. Therefore, this research adopted the Yamane formula to determine the sample size from the population of staff of the university. The Yaro Yamane's formula is given as follows:

$$n = N / 1 + N(\alpha^2)$$

Where:

n = Sample size

N = Total population size (known or estimated)

α = Precision level (0.05)

The population of the study as stated above is made up of one thousand four hundred and nine (1409) members; and the sample size is determined from the population using the formula stated above. The sample size is therefore, determined as follows:

$$n = 1409 / [1 + N(\alpha^2)]$$

$$n = 1409 / [1 + 1409(0.05^2)]$$

$$n = 311.55$$

$$n = 312 \text{ (approximately).}$$

Model Specification

Logistic regression is usually used to predict a dependent variable on the basis of independent variables and to determine the percentage of variance in the dependent variable explained by the independent variables. It is also used to rank the relative importance of independents; to assess interaction effects and to understand the effect of covariate control variables. The model is stated as follows:

$$Y = L_i = \ln \left(\frac{P_i}{1 - P_i} \right) = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i}$$

Effect of Detective and Preventive Internal Control Systems on Detection and Prevention of Financial Fraud in Nigerian Tertiary Institutions

Where:

L is called the logit.

P_i is the probability of fraud detection and prevention, which is measured as 1.

$(1 - P_i)$ is the probability of non-fraud detection and prevention, which is measured as 0.

Y= FDP = Fraud Detection and Prevention

X_1 =SD = Segregation of Duties

X_2 =EEDPICS = Extent of the Effects of Detective and PreventiveInternal Control System

X_3 =IA = Internal Audits

X_4 = SPV= Supervision

B_0 = Intercept of the Model

B_1 = Coefficient of Segregation of Duties

B_2 =Coefficient of the Extent of the Effects of Detective and PreventiveInternal Control System

B_3 =Coefficient of Internal Audit

B_4 =Coefficient of Supervision

RESULT AND DISCUSSIONS

Data presentation and Analysis

For the purpose of data presentation and analysis, a total number of three hundred and twelve (312) questionnaires were administered to the respondents who are staff members of the audit unit, bursary unit and other administrative units of the University of Jos. Out of the 312 questionnaires, two hundred and fifty (250) questionnaires were completed and returned by the respondents. The remaining 62 were not returned. Therefore 250 questionnaires were used for the data presentation and analysis. Analysis of data for this study is presented in table 2. The table shows the dependent variable (fraud detection and prevention) encoding for the study.

Table 2: Dependent Variable Encoding

Original Value	Internal Value
Fraud Detection& Prevention	1
Non-Fraud Detection& Prevention	0

Source: Data Analysis (2020)

Table 2 contains information relating to the value of the binary dependent variable for this study. The value of the binary dependent variable shows that 1 is assigned to fraud detectionand prevention while 0 is assigned to non-fraud detection and prevention.The variables in the equation are presented in table 3. The variables presented in the table serve as sources for the discussion of findings for this research.

Table 3: Variables in the Equation

	B	S.E.	Wald	DF	Sig.	Exp(B)
Segregation	.594	.183	10.513	1	.001	1.812
EEDPICS	.390	.215	3.295	1	.070	1.477
InternalAudit s	-1.258	.196	41.109	1	.000	0.284
Supervision	.665	.251	7.021	1	.008	1.944
Constant	1.286	.515	6.229	1	.013	3.618

Source: Data Analysis (2020)

Note: EEDPICS means extent of the effects of detective and preventive internal control system.

Effect of Detective and Preventive Internal Control Systems on Detection and Prevention of Financial Fraud in Nigerian Tertiary Institutions

Table 3 shows the inferred and generalized result of the logistic regression for financial fraud detection and prevention in tertiary institutions in Nigeria. The coefficient of the variable segregation of duties shows that segregation of duties has strong effect on financial fraud detection and prevention in the University of Jos. This indicates that segregation of duties brings about high level of financial fraud detection and prevention in the university system. The predictor variable shows that segregation of duties detects, prevents and controls financial fraud by 1.812 times and is more likely to help in the detection and prevention of the financial fraud in the University system. Similarly, the effect also shows significant effect as the p-value of 0.001 is less than the level of significance of 0.10. Therefore, the null hypothesis is rejected; and it is concluded that segregation of duties has a significant effect on financial fraud detection and prevention in the Nigerian tertiary institutions.

The coefficient of the variable extent of the effect of detective and preventive internal control system shows that there is a positive relationship between internal control system and financial fraud detection and prevention in University of Jos. This indicates that detective and preventive internal control system leads to financial fraud detection and prevention in the university set-up. The predictor variable shows that detective and preventive internal control system is more likely to detect and prevent financial fraud by 1.477 times in the university setting. Likewise, the effect shows a significant relationship as the p-value (0.070) is less than the level of significance of 0.10. Consequently, the null hypothesis is rejected and; it is concluded that detective and preventive internal control system has a significant relationship with financial fraud detection and prevention in the Nigerian tertiary institutions. The coefficient of the variable internal audit shows that a negative relationship exists between internal audit and financial fraud detection in the University of Jos. The predictor variable shows that internal audit is less likely to detect financial fraud by $(1-0.284)*100 = 71.6\%$ in the university. However, the effect shows a significant relationship as the p-value (0.000) is less than the level of significance of 0.10. Hence, the null hypothesis is rejected; and it is concluded that internal audit activities have a significant effect on financial fraud detection and prevention in the Nigerian tertiary institutions.

Finally, the coefficient of the variable supervision shows that a positive relationship exists between supervision and financial fraud detection and prevention in University of Jos. The predictor variable shows that supervision is more likely to have a pronounced effect in the detection and prevention of financial fraud by 1.944 times in the University. Similarly, the effect shows a significant relationship as the p-value (0.008) is less than the level of significance of 0.10. Therefore, the null hypothesis is rejected; and it is concluded that supervision can exert a paramount effect on financial fraud detection and prevention in the Nigerian tertiary institutions. From the analyses above, the results revealed that:

- i. Segregation of duties has a significant effect on financial fraud detection and prevention in the Nigerian tertiary institutions;
- ii. Internal control system has a significant relationship with financial fraud detection and prevention in the Nigerian tertiary institutions;
- iii. Internal audit cansignificantly detect and preventfinancial fraud in the Nigerian tertiary institutions;
- iv. Supervision exerts a paramount and significant effect on fraud detection and prevention in the Nigerian tertiary institutions; and
- v. Management integrity significantly enhances and/or improves a strong, reliable and effective internal control system capable of combating fraudulent acts in an organisation.

CONCLUSION AND RECOMMENDATIONS

It can therefore, be concluded that internal audit activities, proper segregation of duties could detect and prevent fraud in tertiary institutions in Nigeria. Since fraud cannot be totally eradicated, then there is need to find ways of minimizing it. Based on the findings of this study, recommendations are made as follows:

Effect of Detective and Preventive Internal Control Systems on Detection and Prevention of Financial Fraud in Nigerian Tertiary Institutions

- i. Management and governing councils of tertiary institutions in Nigeria should ensure constant, regular and strict adherence to segregation of duties among staff of tertiary institutions in Nigerian. This can be done by putting in place structures and measures capable of querying and sanctioning defaulters;
- ii. Strong, effective and reliable internal control system should be properly instituted, established, installed and continuously maintained in the Nigerian tertiary institutions where it does not exist. Where it exists but is not functioning properly, its strength, effectiveness and reliability should be vigorously pursued and ensured.
- iii. Staff of internal audits of tertiary institutions in Nigeria should be properly and continuously trained and guided on technical and more sophisticated internal control approaches, processes and procedures capable of easily unraveling fraud and other malpractices and that they should be encouraged to report fraud and malpractices discovered. Similarly, reports of internal auditors should be implemented, their independence should be granted and adequate resources should be provided for them to perform their internal audit functions smoothly, efficiently and effectively. This can be done by engaging staff that are professionally inclined who are encouraged to attend continuous professional development programmes and education. It is also done via internal audit report implementation and ensuring internal auditors' independence;
- iv. Management and governing councils of tertiary institutions should ensure constant, regular and strict supervision of subordinates by their superiors such as heads of departments/units, deans of faculties/schools and other principal officers. This can be done by giving all the necessary powers to the appropriate officers to maintain surveillance over the activities/operations of their respective departments/units; and
- v. Management integrity should be constantly earned, pursued, exercised, sustained and continuously maintained in tertiary institutions set up so as to strengthen the internal control system in the institutions. This can be pursued where the management strives to earn, exercise, sustain and maintain its integrity.

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Effects of Treasury Single Account (TSA) on Public Sector Financial Accountability of Tertiary Institutions in Nigeria

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Abstract

This study focused on the investigation of effects of Treasury Single Account (TSA) on financial accountability of tertiary institutions in Nigeria with evidence from Modibbo Adama University of Technology. To achieve this, survey design was utilised, questionnaire and chi-square were employed in the collection and analysis of data and a large volume of library and internet materials were deployed and subjected to a critical review. Based on the analysis and review, it was discovered that TSA fosters financial accountability of tertiary institutions in Nigeria. In view of these findings, the study recommends that government of Nigeria should secure and ensure as soon as possible the appropriate legislative support to facilitate the relevant regulatory environment which will drive the effective implementation and utilisation of the TSA in tertiary institutions all MDAs as well as the states and local governments in order to promote accountability and transparency at all levels of government.

Keywords: Treasury Single Account, Financial Accountability, Regular Monitoring, Fiscal Volatility, Tertiary Institutions

INTRODUCTION

Treasury Single Account (TSA) is considered as a powerful government policy structure and a reliable control measure in the management of public fund. Treasury single account is primarily designed to ensure accountability of government revenue, enhance transparency and avoid misapplication of fund (Ahmed, 2016). Treasury Single Account (TSA); a single pool for harvesting revenue inflows of all the Ministries, Departments and Agencies (MDAs) was conceived by the administration of President

Goodluck Jonathan, but it remained a mere policy on paper (Presidential Order, 2011). The introduction of Treasury Single Account in Nigeria is as a result of numerous corrupt practices that exist in the Country's public accounting system, lack of transparency and accountability. Before the introduction of TSA, all Ministries, Departments and Agencies used to keep and run separate accounts with deposit money banks which gave rise to leakages in the revenue of the federation as a result of non-remittance by the MDAs. Accountant General of the Federation suggested the utilization of TSA by the government of Nigeria and this led President Goodluck Jonathan to direct all the Ministries, Departments and Agencies (MDAs) to close all their accounts domiciled in the deposit money banks and transfer them to the Federation Account in January 2015; with February 28, 2015 as the deadline but the directive was ignored by the MDAs. One of the major challenges faced by developing countries and world at large involved inefficient resource allocation, distribution and effective economic balance. Nigeria, being a developing country through the Federal Government apparently introduced Treasury Single Account (TSA) policy because it has a lot of far reaching implications for Nigerian public sector.

Treasury single account is a public accounting system under which all government revenue, receipts, income are collected into one single account, usually maintained by the country's Central Bank and all payments are done through this account as well. Federal Government of Nigeria over the years had been raising a lot of revenue which ordinarily should have been used effectively to execute most of its developmental projects. The maintenance of TSA will help to ensure proper cash management by eliminating idle funds usually left with different commercial banks and in a way will enhance reconciliation of the collected revenue and payments (Gbadebo, 2014). Ahmed (2016) postulated that TSA ensures aggregated control over cash balances and avoids borrowing and paying additional interest charges to finance the expenditure of some agencies while other agencies keep idle balances in their bank accounts. Treasury Single Account (TSA) is in accordance with executive order No. 55 (2011) which stipulates that the Bureau of Treasury shall operate TSA to receive remittances of collections of internal revenue like taxes/customs duties from Bureau of Internal Revenue (BIR), Bureau of Customs (Authorized Agent Bank) as well as other National Government Agencies such as Government Depository Banks (Presidential Order, 2011). Treasury Single Account which is maintained at the Central Bank of Nigeria (CBN) aligns the government policy of greater financial management and control of its cash resources and it allows the unification of the structure of government bank accounts to enable consolidation and optimum utilization of government cash resources. According to Igbekoyi and Agbaje (2017), with TSA leading to the closure of 10,000 multiple bank accounts operated by MDAs in commercial banks, banks would have to wake up from their slumber. This is because the era when government money is either lent back to government or invested in Forex Speculation is over. It also means that no longer at Bankers' Committee meeting should member banks demand that Central Bank pursues their self-serving high interest rate to their benefits.

Accountability is a process where a person or group of people are required to present an account of their activities and the way in which they have or have not discharged their duties (Ganyam, 2018). By inference, a person is held accountable for not only his/her actions but also inactions. In the words of Laxmikanth (2006), the concept of accountability connotes the obligation of the administrators to give a satisfactory account of their performance and the manner in which they have exercised powers conferred on them. Nkoma (2004) maintained that public accountability is the requirement that those who hold public trust should account for the use of that trust to citizens or their representatives. Adejite (2010) defined accountability as the obligation to demonstrate that work has been conducted in accordance with agreed rules and standard, and the officer reports fairly and accurately on performance results vis-a-vis mandated roles and/or plans. Treasury Single Account (TSA) is new in Nigeria and the area is less exploited by researchers. Ganyam (2018) carried out a research on the effects of TSA on financial accountability, corruption and financial discipline in the Nigerian public sector restricting his study to MDAs that are solely involved in revenue generation in Makurdi. Lodikero, Fagbayimu and Olateru-Olagbegi (2018) carried out a research on treasury single account as a tool for accountability and transparency in Ondo State, Nigeria. This study is distinct from the studies conducted by Ganyam (2018)

and Lodikero, Fagbayimu and Olaten-Olagbegi (2018) as none of the studies examined the effects of (TSA) on public sector financial accountability in tertiary institutions, specifically the Federal Polytechnic Mubi which is an educational institution situated in the North-Eastern part of the country.

A great challenge facing most parts of the world and state, particularly, the developing countries like Nigeria is inefficient allocation of resources as well as stabilization of the public sector. An important factor for efficient management and control of government's cash resources is a unified structure of government banking. Such unified banking arrangements should be designed to minimize the cost of government borrowing and maximize the opportunity cost of cash resources. This requires that cash received is available for carrying out government's expenditure programmes and making payments in a timely manner. TSA is a structural policy and a control measure specifically designed and meant to ensure accountability of government revenue, enhance transparency and avoid misapplication of funds (Boulder. Co West View, 2016). It is expected to play a significant role in the management of public funds. However, this system is not implemented in most states in Nigeria and even if implemented, it is perceived not to have been properly administered and executed. Many emerging markets and low-income countries have fragmented systems for handling government receipts and payments. In states like Adamawa, the ministry of finance/treasury lacks a unified view and centralized control over government's cash resources. As a result, this cash lies idle for extended periods in numerous bank accounts held by spending agencies while the government continues to borrow to execute its budget. It is based on these reasons that the current global revolution in government accounting becomes paramount following which MDAs have initiated and implemented TSA and other series of economic policies to assist in the better management of her economy.

The outcome of this study is expected to produce immense benefits to a number of stakeholders. First, the study will benefit MDAs in general in that it will point out that TSA would pave way for timely capturing of all revenues going into government treasury as well as payments made from the accounts. This also suggests that TSA as a unified structure of government bank accounts will enable consolidation and optimal utilization of government cash resources so as to checkmate all the fraudulent activities of MDAs. Secondly, the study will benefit academics in that it will expand their understanding and knowledge of TSA viz-a-viz tertiary institutions' financial accountability. It will also serve as a study guide and teaching aid to them. Finally, it will benefit researchers as it will contribute to their existing knowledge about the effect of TSA on tertiary institutions' financial accountability; this in a nutshell will serve as reference material for future research. The study is on the effects of Treasury Single Account on public sector financial accountability in tertiary institutions in Nigeria. This study covered five (5) years, ranging from 2016-2020. This is due to the fact that the directive for implementation of TSA was given by President Muhammadu Buhari of Nigeria in September, 2015 but it took proper shape in 2016 (Chinedu & Emma, 2017). In order to properly guide this study, the following research hypotheses have been formulated based on the research questions and the objectives;

Ho₁ Regular monitoring of government cash balances through TSA has no significant effect on public sector financial accountability of tertiary institutions in Nigeria.

Ho₂ Unexpected fiscal volatility associated with TSA has no significant effect on public sector financial accountability of tertiary institutions in Nigeria.

Ho₃ Compliance with section 80(1) of the 1999 constitution of the Federal Republic of Nigeria does not significantly enhance public sector financial accountability of tertiary institutions in Nigeria.

LITERATURE REVIEW

Concept of Treasury Single Account

Treasury Single Account is a public sector accounting system under which all government revenue, receipts and income are collected into one single account, this account is often maintained by the country's Central Bank. The philosophical underpinning of TSA is primarily to ensure accountability of

government revenue, enhance transparency and avoid misapplication and mismanagement of public funds. The proponents of TSA argue that it will help to ensure proper cash management by eliminating idle funds usually left with different commercial banks and in a way enhance reconciliation of revenue collection and payment (Adeolu, 2015). TSA can be defined as an allied structure of government bank accounts ensuring a combination of government funds and the best use of government possessions. TSA possess three crucial fundamentals, first a combined arrangement of government bank accounts that permits total control of all cash reserves, secondly an option suitable for accessing and working with TSA based on institutional arrangement and payment settlement method and thirdly, the combination of government receipts not lacking anything that it needs to be complete as it should include all receipts including budgetary and extra-budgetary (Pattanayak&Fainborn, 2010). This implies that every public receipt regardless of whether the matching cash flows are dependent on budgetary control or not (situations of earmarked funds, reserve funds and other off-budget or extra-budget funds) should be controlled by the TSA (Oguntodu, Alalade, Adekunle&Adegie, 2016; Shah, 2007). Treasury Single Account was perceived by Nelson, AdeoyeandOgah, (2015). As an account that collates the balances of all the MDAs of the government, there is an intermediate account for MDAs that hold the total of the expenditures and receipts. In this way, the complete amount will be transferred in the end to the treasury single account.

The TSA has also been seen as unified structure of government bank accounts enabling consolidation and optimal utilization of government cash resources. Through this bank account or set of linked bank accounts, the government transacts all its receipts and payments and gets a consolidated view of its cash position at any given time (CBN, 2015). At a time when countries all over the world are contending with increased pressures on public financial in-balances, it is imperatives that public resources are used in the most effective, efficient and judicious way. Given that resources in the public sector are mostly generated through taxes and taxes create distortions in the allocation of resources and thus constrain economic growth, it is essential that public expenditures be used to improve long term growth perspectives and take equity considerations into account. Improved efficiency and effectiveness of public spending not only helps maintain the fiscal discipline requested by them but also is instrumental in promoting the structural reform agenda of the present government. It alleviates budget constraints as it allows achieving the same results at lower levels of spending or increases value for money by achieving better outcomes at the same level of spending. The payment of government revenue into multiple bank accounts operated by the MDAs in commercial banks, as obtained under the old order, was clearly against the Nigerian Constitution. Section 80(1) of the 1999 Constitution as amended states that all revenues, or other moneys raised or received by the Federation (not being revenues or other moneys payable under this Constitution or any Act of the National Assembly into any other public fund of the Federation established for a specific purpose) shall be paid into and form one Consolidated Revenue Fund of the Federation (Yusuf & Chiejina, 2015).

Successive governments have continued to operate multiple accounts for the collection and spending of government revenue in flagrant disregard to the provision of the Constitution, which requires that all government revenues be remitted into a single account. It was not until 2012 that government ran a pilot scheme for a single account using 217 MDAs as a test case. The pilot scheme saved Nigeria about N500 billion in frivolous spending. The success of the pilot scheme motivated the government to fully implement TSA, leading to the directives to banks to implement the technology platform that will help accommodate the TSA scheme (Okwe, Chijioke, Temiloluwa& David, 2015). The Presidential directive in 2015 that all government revenues should be remitted to a TSA is in consonance with this programme and in compliance with the provisions of the 1999 Constitution and also a determination to ensure discipline and greater transparency in the management of the nation's finances. According to the directive, all MDAs of government are expected to pay their earnings into a unified bank account known as TSA. The directive applies to the MDAs that are funded from the Federation Account such as Nigerian National Petroleum Corporation (NNPC), the Central Bank of Nigeria (CBN), the Securities and Exchange Commission (SEC), and the Nigerian Ports Authority (NPA), Federal Universities, the

Customs Service (NCS), Nigeria Immigration Service (NIS), Federal Inland Revenue Service (FIRS) and a host of others. The MDAs are to pay all their revenues to a sub-account linked to the TSA at CBN. To promote quick compliance with Presidential directive, the then Head of Service of the Federation, Danladi Kifasi, gave the name and number of the TSA as Accountant General (Federal Sub-treasury) Account Number 3000002095. The order on TSA, which came into effect on August 11, 2015, marks the beginning of MDAs' retirement of revenues due to the Federal Government into a unified account maintained by the Central Bank of Nigeria (CBN, 2015).

Origin of Treasury Single Account (TSA) in Nigeria

Treasury Single Account is not a new concept; it has been adopted for decades in developed countries such as the United States of America (USA), United Kingdom (UK), France and developing economies of India and Indonesia. In Nigeria, the policy was first recommended by the Federal Government's Economic Reform and Governance Programme in 2004, but however dumped in 2005, following intense pressure from the banking industry. TSA is part of the public financial management reforms which falls under the National Strategy for Public Service Reforms towards Vision 20:2020. The public financial management reforms were designed to address impediments to effective and efficient cash management (Chijioke & Orioha, 2016). It is globally recommended that no other government agency should operate bank accounts outside the oversight of the treasury. Institutional structures and transaction processing arrangements determine how TSA is accessed and operated. The treasury, as the chief financial agent of the government, should manage the government's cash (and debt) positions to ensure that sufficient funds are available to meet financial obligations, idle cash is efficiently invested, and debt is optimally issued according to the appropriate statutes. In some cases, debt management including issuance of debt is done by a Debt Management Office (DMO). Judging by the provisions of the Financial Regulations (FR) and the 1999 Constitution of the Federal Republic of Nigeria, some Ministries/Extra-ministerial Departments, Agencies and other arms of government that collect revenue such as Value Added Tax (VAT), Withholding Tax (WHT), fees, fines and interest are expected to remit same into the Consolidated Revenue Fund (CRF).

Features of Treasury Single Account (TSA)

In the opinion of Sailendra and Israel (2010), the essential features of TSA include unified government banking arrangement. This arrangement enables treasury to carry out oversight of government cash flows in and out of the bank accounts. The TSA structure contains ledger sub-accounts in a single banking institution (not necessarily a central bank), and accommodates external zero balance accounts (ZBAs) in a number of commercial banks. Secondly, with TSA, government agencies do not operate bank accounts outside the oversight of the treasury. Options for accessing and operating the TSA are mainly dependent upon institutional structures and payment settlement systems. Thirdly, the consolidation of government cash resources housed all government cash resources, both budgetary and extra-budgetary. Here, cash balance in the TSA main account is maintained at a sufficient level to meet the daily operational requirements of the government. Lastly, TSA must have a legal backing for it to function effectively.

Objectives of Treasury Single Account (TSA)

According to Eme, Chukwurah and Iheanacho (2015), the primary objectives of TSA, are to ensure effective aggregate control over government cash balances, facilitation of government cash management and minimization of borrowing costs. In the absence of a treasury single account (TSA), idle cash balances are maintained in several bank accounts. Minimization of transaction costs during budget execution, notably by controlling the delay in the remittance of government revenues by collecting banks, and making immediate payments of government expenses; facilitating reconciliation between banking and accounting data; efficient control and monitoring of funds allotted to various government agencies; and facilitating better coordination with the monetary policy implementation. Adoption of treasury single account (TSA) in Nigeria seeks to boost effective financial management of government agencies and

departments. In other countries, where the TSA policy has long been institutionalized, financial management is also the key goal of its adoption (Lienert, 2009). The TSA as implemented in Nigeria is a single bank account through which the government makes all receipts and payments and gets a consolidated view of its cash position at any point in time for proper accountability. It is a unified structure of government bank accounts enabling consolidation and optimal utilization of government cash resources (Eme&Chukwurah, 2015).

TSA also aimed at centralizing and reducing operating costs which is consistent with government policy of prudent management of financial resources. With the TSA, government expects to block all loopholes and leakages of financial resources of the government and also ensure a robust financial management system (Taiwo, 2015; Isa, 2016). As observed by Ocheni (2015), the Federal Ministry of Finance in Nigeria prior to implementation of TSA lacked a unified view and centralized control over government cash resources. Consequently, cash lied idle for extended periods in numerous bank accounts held by spending agencies while government continued to borrow to execute its budget. It is based on these reasons that the current global revolution in government bank accounts system becomes paramount following which Nigeria initiated and implemented TSA to improve management of her economy. Furthermore, it is argued globally that TSA is the medium through which proper monitoring of government receipts and expenditures are made. In Nigerian, TSA is expected to enhance accountability so that actual revenue and expenditure MDAs can be known at any time with certainty. It is also expected that proper implementation of TSA would allow complete and timely information on government cash resources especially countries with advance payment and settlement systems and an Integrated Financial Management Information System (IFMIS) with adequate interfaces with the banking system. It improves appropriation control as the Ministry of Finance would have full control over budget allocations and then strengthen the authority of budget appropriation. When separate bank accounts are maintained, the result is often a fragmented system and funds provided for budgetary appropriations are augmented by additional cash resources available through various ways.

Ocheni (2015) noted that TSA allows for improvement on operational control during budget execution. This is because TSA would provide the treasury with full information about cash resources, which aids planning and execution of the budget efficiently, transparently, and reliably. The uncertainty on whether the treasury will have sufficient funds to finance budgeted expenditure that give room for sub-optimal behavior by budget entities does not arise. Another expectation is that it would reduce bank fees and transaction costs by reducing the number of bank accounts; hence results in lower administrative costs for the government in maintaining these accounts, including the costs associated with bank reconciliation. It is also expected to facilitate efficient payment system such that there is no ambiguity regarding the volume or the location of the government funds, and makes it possible to monitor payment mechanisms precisely. Ocheni (2015) argued that TSA would allow effective reconciliation between government accounting systems and cash flow statements from the banking system. TSA reduces the volatility of cash flows through the treasury, thus allowing it to maintain a lower cash reserve/buffer to meet unexpected fiscal volatility.

Benefits of Treasury Single Account (TSA)

Ifaenyi (2015) gave out some benefits of TSA; which include; enhancement in tracking accurately all receipts and providing audit trails and ensuring full remittance of taxes from all tiers of government. It facilitates inter-governmental accounts reconciliations between Federal, State and Local Governments and reduction of fraud, corruption and financial irregularities. The scholar noted that the system has positive effect on fiscal and monetary policy management as it controls and efficiently manages amount of cash in circulation and in turn reduces borrowing and costs of borrowing. It also enhances the performance of duties of financial investigation agencies like Economic and Financial Crime Commission (EFCC) and Independent Corrupt Practices and other related Offences Commission (ICPC). TSA helps in real time accounting and reporting in the Public Sector especially when integrated with e-payment system. In the aspect of cost reduction, TSA reduces the cost of minting, printing and circulation,

processing and replacing currency notes as e-Receipts and e-Collection is the order. Finally, it minimizes socio-economic risks associated with movements of large amount of cash where most remittances are e-based.

Other benefits of TSA according to Akinmutimi (2015) include; improving transparency and accountability in public finance management. It will remove that organisational secrecy around the management of public finances. The discretionary aspect of accounting officers and politicians collaborating to do all manner of business with government finances before executing projects thereby, delays or negotiating interest rates with banks for private gains will be over. Secondly, revenue generating agencies that have been depriving the Treasury of due revenue through a plethora of bank accounts under their purview and which is not known to the authorities will no longer be able to defraud the revenue since all funds will be swept into the TSA. Thus, beyond transparency and accountability, the TSA will introduce economy and efficiency into overall management of public finances and this will in the long run lead to effectiveness of government spending since it places government in a better position to realize overall policy goals (Abayelu, 2015).

Treasury Single Account system in the public sector

Issues related to cash management should not be confused with issues related to the distribution of responsibilities for accounting control and administration of the payment system. TSA can operate with both centralized and decentralized (or deconcentrated) transaction processing and accounting control systems (Lienert, 2009); however, the feasibility of implementation depends on the level of technological development of the banking sector and the government, including an IFMIS and a reliable communications network. Poor banking and technological infrastructure in some developing countries and less developed countries is sometimes an obstacle to combining consolidation of cash balances with decentralization of payment processing. In countries with an underdeveloped banking infrastructure, daily clearing of accounts with various banks could be more difficult than daily settlement within a set of accounts at the central bank. Maintaining a large number of accounts at commercial banks could also hinder the implementation of appropriate clearing and consolidation procedures. The TSA system adopts two transaction models:

Centralized transaction processing

This implies a concentration of authority at the treasury to process transactions, and access and operates the TSA (Sailendra & Israel, 2011). In this case, the treasury provides payment services for spending agencies and has the exclusive authority to operate the TSA, including its regional treasury subaccounts. The budget institutions submit their payment requests to the centralized authority/treasury before making payments. Under this model, requests for payments are prepared by individual budget agencies and sent to a central treasury payment unit for control and execution. The central payment unit manages the float of outstanding invoices. This model may create a useful synergy between cash management on the one hand, and expenditure control and transaction accounting on the other hand. However, the centralization of expenditure transaction processing can also lead to inefficiencies, including high transaction costs, and potential for corruption in countries where the control systems are inadequate. Another issue that needs to be considered is whether the authorization of commitments is centralized or decentralized to individual spending agencies. In the latter case, if the commitment control and payment systems are not well integrated, payment arrears may occur. Although in this model, the payment and accounting functions are centralized, individual spending agencies are treated as distinct accounting entities through a treasury ledger system. Therefore, information on the individual ledger accounts of the spending agencies (including information on their respective transactions) is maintained and controlled internally by the treasury and thus not visible to the banking system. Under this model, only the treasury central unit deals with the commercial banks, making payments from the TSA and receiving collected revenues into the TSA.

Decentralized payment and accounting system

In this case, each budget institution processes its own transactions during budget execution and directly operates the respective bank account under a TSA system. Such a transaction processing model could be associated with either the centralized or the distributed TSA structure. Combining the options of the decentralized TSA structure and the decentralized transaction processing model would, however, require an efficient and reliable communication network and interbank settlement system for netting of balances of several transaction accounts with the TSA main account. Under this model, individual budget agencies process and make payments directly to suppliers and account for these transactions through a TSA system. Modern technology allows electronic links between spending agencies, the central bank, the commercial banks, and the treasury. The treasury sets the cash limits monthly or quarterly for the total. An amount of disbursements to be made by a particular budget agency, but does not control individual transactions. The authority to make commitments is granted to the budget agencies on a periodic basis (generally each quarter) by the budget office, and cash limits are set by the treasury, often on a monthly basis. This is a model of centralized cash control, but decentralized responsibility for commitments, payments, and accounting. This model makes the spending agency responsible for internal control and management, while keeping central control of cash through the TSA. An example of a decentralized model is one that combines TSA sub-accounts for line ministries and zero-balance accounts for individual spending agencies within each line ministry. Under this variant, the ministries/departments maintain sub-accounts of the TSA at the central bank. Various sub-accounts may be set up for different institutional types and each may have different operating rules. Cash limits should be set for each spending entity. On the other hand, individual spending agencies within a parent ministry/department have zero-balance transaction accounts authorized by the treasury, generally in commercial banks, which are automatically swept at the end of each day (if the banking sector is able to do this). Cash is transferred as specific payments are approved (or daily credit limits negotiated). At the end of the day, the central bank records the cash to the appropriate major institution subaccount in the central bank so that a balance of all government accounts incorporating the TSA can be seen.

Gains of Treasury Single Accounts (TSA) in Nigeria

Eseoghene, Estemetan and Oghenevwogaga (2018) revealed some tangible gains of treasury single account in Nigeria. These achievements according to them are the closure of seventeen thousand (17,000) deposit money banks accounts owned by various MDAs where government monies were hidden at the detriment of development projects to create jobs, wealth and eradicate poverty. A total sum of 5.2 trillion naira belonging to the three (3) tiers of government were mopped into TSA and disbursed accordingly as at 30th September, 2017. Furthermore, the research shows that the implementation of TSA saves the government of over one hundred and forty billion (N140,000,000,000) naira cost of turnover (COT). The research also revealed that financial activities of MDAs are being monitored on real-time through a Settlement Centre located in the Office of the Accountant General of the Federation (OAGF). There is no more project abandonment as a result of non-funding. Government funds are invested in the deposit money banks and interest income are not usually declared and paid to government coffers.

TSA, Financial Accountability and Transparency in the Public Sector

The primary objective of a TSA is to ensure effective aggregate control over government cash balances. The consolidation of cash resources through a TSA arrangement facilitates government cash management by minimizing borrowing costs (Lodikero, Fagbayimu & Olateru-Olagbegi, 2018). In the absence of TSA, idle cash balances are maintained in several bank accounts. Effective aggregate control of cash is also a key element in monetary and budget management. The adoption of TSA in the public sector minimizes transaction costs during budget execution, notably by controlling the delay in the remittance of government revenues (both tax and non-tax) by collecting banks, and making rapid payments of government expenses; facilitating reconciliation between banking and accounting data; efficient control

and monitoring of funds allocated to various government agencies; and facilitating better coordination with the monetary policy implementation.

Empirical Review

Igbekoyi and Agbaje (2017) assessed the implication of adoption of TSA on accountability and transparency in the Nigerian public sector; with a view to find out if the policy is capable of promoting government accountability function. The study considered all MDAs in the public service with sample size of ten (10) MDAs involved in revenue generation selected using purposive sampling technique. The hypotheses were tested using regression analysis (ANOVA). The finding of the study showed that, TSA has significant positive impact on financial leakages, transparency and can curb financial misappropriation. Fatileand Adejuwon (2017) examined the implication of TSA on cost of governance with specific reference to Buhari civilian administration in Nigeria. The study was qualitative in nature, relying on secondary source of data. It was anchored on Stakeholder Theory. The study revealed that increase in the cost of governance is not basically as a result of over-bloated bureaucracy rather corruption is considered as a major cause of the increase; that TSA is designed primarily to ensure accountability of government revenue, enhance transparency and avoid misappropriation of public funds. Akujuru and Enyioko (2017) examined the effects of TSA policy on corruption in Nigeria from 2011 to 2017. The study adopted a cross sectional survey design and used questionnaire to generate its data. The population of the study consisted of 6393 staff from the federal ministries, departments and agencies (MDAs) in Rivers State. The sample size of the study is 377staff which was determined using Taro Yamane sample size method. The data were analyzed using descriptive statistics. The study discovered that TSA policy was introduced to block financial leakages, reduce corruption, promote transparency and prevent mismanagement of government's revenue in public sector organizations. Omoderoand Okafor (2016) conducted a research on the efficiency and accountability of public sector revenue and expenditure in Nigeria (1970-2014). The study was carried out to examine the accountability of public officers in the management of the financial resources of the country in relationto achieving efficient, accountable and transparent society. The study used secondary data to examine totality of federal government revenue and expenditure. State governments' revenue and expenditure were obtained from statistical bulletin of Central Bank of Nigeria from 1970-2014. The results were analyzed using descriptive and inferential statistics; t-test statistical tools and regression was used to test the hypotheses of the study. The findings revealed that efficiency of public sector expenditure hassignificant implications for accountability in Nigeria. The research concluded that there is significant relationship between efficiency of public sector expenditure, recurrent expenditure and capital expenditure in Nigeria.

Ahmed (2016) conducted a study on TSA as an instrument of financial prudence and management: prospects and problems using content analysis approach. The study postulated that TSA can ensure effective aggregate control over government cash balances and can avoid borrowing and paying additional interest charges to finance the expenditure of some agencies while other agencies keep idle balances in their bank accounts. The researcher recommended unified arrangement which implies that no other government agency should be allowed to operate bank account without the oversight of the Treasury. In an empirical study conducted by Yusuf(2016) on effects of TSA on public financial management in Nigeria, content analysis was used as research design. The study revealed that TSA policy would go a long way in blocking financial leakages. The study recommendedamong others that government should overhaul the capacity of the Federal Ministry of Finance and the Central Bank of Nigeria to cope with the challenges associated with the enforcement of the provisions of the TSA.

Ahmed (2016) carried out a research on analysis of Pros and Cons of TSA policy in Nigeriausing content analysis as methodological research design. The study revealed that total commitment and sincerity of purpose are required of those who are to implement the policy. The study recommended that implementation will however; require the cooperation of the National Assembly with the executive arm to ensure strict compliance by the MDAs to make enforcement possible.Onuorah and Appah (2012)

Effects of Treasury Single Account (TSA) on Public Sector Financial Accountability of Tertiary Institutions in Nigeria

conducted a study on accountability and public sector financial management in Nigeria. Ex-post factor research design was employed for the study. The results revealed that accountability is not properly displayed in Nigeria because the attributes of accessibility, comprehensiveness, relevance, quality, reliability and timely disclosure of economic activities are poor. The study recommended among others that for accountability to be successful in the management of public funds in Nigeria; there must be a reduction in the level of corruption and improvement in public sector accounting and auditing standards. Legislators should serve as champions of accountability and that the public accounts committees should be restructured and the value of money must be applied in the conduct of government business.

Sailendra (2010) examined TSA as an essential tool for government cash management in Nigeria using content analysis design. The study postulated that TSA ensures effective aggregate control over government cash management. He recommended that all countries should aim at instituting TSA and should not be viewed as an independent activity but should be integrated with other treasury reforms, including changes to budget execution process. Clementina (2016) investigated the impact of Treasury Single Account on liquidity management of deposit money banks in Nigeria using survey design. He discovered that implementation of TSA in the public sector accounting system influences liquidity base and performance of banking sector. He recommended that Central Bank of Nigeria should come up with an arrangement that enhances the working of TSA. Adebisi and Okike (2016) conducted a study on the adoption of TSA and its effect on revenue leakages of Nigerian states. Primary data were collected using questionnaire while the analysis was done using regression analysis with the aid of SPSS 22. The result of the study revealed that the adoption of TSA serves as an effective tool for curbing revenue leakages in Nigerian states. It is recommended that those states that are yet to adopt the TSA, adopt and implement it for efficient fund management and curbing revenue leakage. In addition, that adequate working system of the TSA should be put in place to ensure its objective is achieved.

Igbokwe-Ibeto, Nkomah, Osakede and Kinge (2016) evaluated the policy of Treasury Single Account (TSA) adopted by the Nigerian government as an essential tool for enhancing transparency and accountability in public sector financial management. The study adopted both qualitative and quantitative research design and descriptive analysis to gain an insight into the nature and character of TSA operations in Nigeria. The study found that for an administration that has social contract with Nigerians in terms of service delivery; it has the obligation to aggregate states resources to provide social services, amenities and infrastructural development to the people. Oti, Igbeng and Obim (2016) appraised the policy impact of TSA in Nigeria with a view to proffering solution to the identified gaps. Questionnaires were administered to gather views of individuals and institutions. Data were equally gathered and analyzed using survey and exploratory research design. The study revealed various shades of opinions; while bankers decry the distortion of their liquidity management plan, the federal government on the other hand claims a huge success because it can now comment on its aggregate cash holding without the drudgery hitherto associated with getting to all commercial banks or MDAs with multiple accounts.

Akhidime (2012) conducted a study on accountability and financial reporting of public financial management in Nigeria: an empirical exploration. The study analyzed government financial reporting and accountability system, and carried out an empirical examination of the various aspects of accountability within the context of the role of government financial reporting in public accountability in Nigeria. The study used primary data generated using personal interview, questionnaire and accountability evaluation. Likert scale was employed in analyzing the data. The study revealed that effective implementation of development policies and programs is anchored on purity of action, honesty of purpose, probity and integrity, which are important hallmarks of accountability and transparency. Mutalib, Bulkachuwa, Urame and Chijioke (2015) examined the effect of TSA on accounting information and accountability of MDAs in Nigeria based on conceptual review. The study specifically examined the effect of TSA on accounting information and accountability of public funds used by MDAs in Nigeria. The study employed both primary and secondary data for the study. The result showed that introduction of TSA has significant effects on accounting information, corruption, mismanagement of public funds by MDAs; and that

government capital base will improve drastically thereby boosting the Nigerian economy so as to improve good governance and to attract potential investments.

Tari, Myatafadi and Kibikiwa (2016) examined TSA policy in Nigeria by reviving Jonathan's deed policy directives. The study mainly assessed the contributions of reviving the TSA policy. The study utilised secondary data to examine the fiscal impact of reviving TSA policy and anchored on incremental model as a framework of analysis. The study established that unless proper monitoring of government account is ensured in government institutions and strong punitive measures are used against defaulters and corrupt officers, TSA tends to fail in Nigeria. The study suggested that strong measures capable of making the TSA policy effective amidst the dwindling oil price and superiority of dollar over naira should be put in place.

Oguntode, Adekunle and Adegie (2016) analysed TSA and the economy of Nigeria between 1999 and 2015. The study was conducted to determine whether a unified structure of government bank accounts of TSA can address the problem of frivolous and unscrupulous spending of government funds, eradicate loss and enhance cash management and control. Secondary data were employed for the study; which were obtained from CBN statistical bulletin (1999-2015) and analyzed using OLS estimator. The result showed that the TSA has a positive significant impact on economic growth in Nigeria; though the impact is limited by factors such as the recent implementation of TSA policy in Nigeria which is detrimental to the generation of historical data. The study recommended that Federal Government of Nigeria should initiate policies and proper measures that can ensure proper accountings of funds accruing into the TSA; and those funds should follow due process. And that any foul play exhibited by any agencies or the CBN is duly prosecuted. Ekubiat and Edet (2016) analysed adoption of TSA by state governments of Nigeria: benefits, challenges and prospects. The study examined the benefits, challenges and prospects of adoption of TSA by state governments of Nigeria. The study used both primary and secondary data. Descriptive cross-sectional survey design was adopted for the study. The population of the study comprised 200 professional accountants in Akwa Ibom State. Taro Yamane's statistical formula was used to select sample size of 133. Purposive sampling technique was used to select the 133 sample from the population. The data obtained were analyzed using descriptive statistics and t-test statistics. It was found that TSA adoption and full implementation by the state governments has an invaluable benefit for the governments; that it has its challenges in the short-run but in the long-run; its benefits will definitely out-weigh the challenges. Aminatu (2016) examined the impact of Government Integrated Financial Management Information System (GIFMIS) on economic development of Ghana using both qualitative and quantitative data. Regression analysis was used as a statistical tool to analyze data accumulated over ten (10) years by the Ministry of Finance and Economic Planning. The study examined the impact of GIFMIS on Ghana's economic development using Gross Domestic Product (GDP), economic growth, and resource allocation to major sectors of the economy. It was noted from the analysis that some sectors of the economy contributed immensely to GDP growth whereas other sectors have an adverse effects. Analysis results also showed that GDP growth does not have a direct impact on economic growth.

Theoretical Framework

In examining the effects of TSA on public sector financial accountability in tertiary institutions in Nigeria, the Principal-Agent Theory of Accountability was used. Principal-Agent Theory of Accountability is a model in which the state is led and managed by a benevolent dictator (the principal). The main aim of the principal is to motivate other government officials (agents); this includes the citizens (stakeholders), to act with integrity in the use of public resources. This model believes in the crime and punishment theory of Baker G. of 1968, which stipulates that public officials are held accountable when the costs (punishment) associated with the crime of non-accountability and other corrupt acts exceed the gains. Thus, given the crime-punishment relationship, the principal can ensure accountability by reducing the number of transactions over which public officials have discretion. This reduction in the scope of gains (transactions with discretion) increases the possibility for restraining or increasing the punishment for corruption. Based on the increased possibility of restrain in the principal-agent relationship in the

state, Accountability (A) equals Monopoly (M) plus Discretion (D) minus Corruption (C) $\{A = M + D - C\}$ (Klitgaard, 1988). There are two variations of this theory; the state without legislators and the state with legislators' variations. In the state without legislators' variation, accountability can be ensured by rules-driven government that includes strong internal controls with little or no room for discretion by public officials (agents). This variation of the principal-agent model can gain wide acceptance in public policy circles and serve as a foundation for empirical research and policy design to combat administrative, bureaucratic, and petty corruption. However, the appropriateness of this approach in highly corrupt countries where the rules enforcers themselves add an extra burden to corruption and lack of discretion is thwarted by collusive behaviour by corruptors - has been challenged. Lack of discretion is often cited as a defense by corrupt officials who partake in corruption as part of a vertically well-knit network enjoying immunity from prosecution.

The second variation of this model integrates the role of legislators and elected officials into the analysis of corruption. The legislators and elected officials are representatives of the citizens. Their role is to check the excesses of the principal on behalf of the citizens and enhance the accountability relationship. However in highly corrupt countries, policy and legislation are manipulatively instituted in favour of particular interest groups (representing private sector interests and entities or individual units of public bureaucracy competing for higher budgets) in exchange for rents or side payments (in Nigeria this rents or side payments are popularly called *Ghana must go*). Legislators weigh the benefits of being non-accountable (the personal monetary gains from corrupt practices and improved chances of re-election) against the costs (the chance of being caught, punished, and losing an election with a tarnished reputation) to make a decision. The decision to compromise accountability and abate corruption has a number of factors. This includes: campaign financing mechanisms, information access by voters, the ability of citizens to vote out corrupt legislators, the degree of political contestability, the type of electoral system, the democratic institutions and traditions in place, and the institutions of accountability in governance (Bashir, 2016). This model applies also in the private sector. Where the managers are the principals, the employees are the agents and the owners and the communities in which the businesses exist are the stakeholders. The two variations also exist with and without the board of directors. This theoretical framework is useful in analyzing political, social, administrative, economic and financial accountability.

This study is anchored on the accountability theory as propounded by Vance in 2013. Accountability is a process in which a person has a potential obligation to explain his actions to another party who has right to pass judgment on those actions and to administer potential positive or negative consequences in response to them. According to Taiwo (2015), accountability theory explains how the perceived need to justify one's behaviors to another party causes one to consider and feel accountable for the process by which decisions and judgment have been reached. In turn, this perceived need to account for a decision-making process and outcome increases the likelihood that one would think deeply and systematically about one's procedural behaviors. This is linked to accountability and TSA as currently put in place by the Federal Government of Nigeria. Using information and communication technology to link all the accounts of MDAs to one central account with the Central Bank of Nigeria to achieve accountability called TSA has shown how accountability theory can be used to bring in full implementation of Treasury Single Account Policy (TSAP). Hence, the TSA was established to achieve accountability within the operation of government businesses in public sector.

METHODOLOGY

The study adopted survey as the research design of the study. Survey research design was adopted because it has high representativeness, low cost of operation, convenient data gathering, good statistical significance, little or no observer subjectivity and lastly precise results. The population of the study comprises the entire bursary and audit staff of Modibbo Adama University of Technology. The total number of bursary staff is 180 while that of audit is 70 making a total population of 250 for the study. The sample of the respondents consists of senior and junior staff of bursary department and audit unit of the University who number one hundred and fifty four (154) approximately. The sample size was determined

Effects of Treasury Single Account (TSA) on Public Sector Financial Accountability of Tertiary Institutions in Nigeria

using Taro Yamane Formula. This formula is used only when population can be scientifically determined or where the population is finite (Yamane, 1967). The study adopted both stratified and simple random sampling techniques in selecting the sample for the research. The method of data collection employed in this study is questionnaire survey with much emphasis on open-ended questions. The questionnaire contains questions and possible answers to facilitate the achievement of the research objective. The study also obtained some data from books, seminars and journals/periodicals. The study used simple percentage method and chi-square with the aid of SPSS for data analysis and statistical test. Chi-square is a statistical test commonly used for testing independence and goodness of fit. The level of significance used for the study is 5% (0.05). The formulae for the simple percentage is

$$\frac{\text{Number of responses}}{\text{Total number of respondents}} \times \frac{100}{1}$$

While the formula for Chi-square is $X^2 = \frac{\sum (f_o - f_e)^2}{f_e}$

Where:

X^2 = is the Chi-square.

f_o = is the observed frequency.

f_e = is the expected frequency.

Σ = is the symbol for summation meaning, addition.

Decision Rule: When the value of the test statistics (calculated value) is greater than the critical value (tabular value), we reject the null hypothesis. In contrast, when the value of the test statistics (calculated value) is less than the critical value (tabular value); we fail to reject the null hypothesis.

RESULT AND DISCUSSIONS

For the purpose of this, one hundred and fifty four (154) questionnaires were distributed to same number of respondents and the same questionnaires were completed and returned by the respondents which equate approximately 100% of the questionnaires distributed. The analysis would be based on the questionnaires completed and returned. The data presented are based on the questions contained in the questionnaire.

Table 1: Analysis Report for Test of H_{01}

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	165.72 ^a	2	2.2447E-7
Likelihood Ratio	188.421	2	7.3052E-8
Linear-by-Linear Association	145.251	1	0.011908
No of Valid Cases	288		

Source: Data Analysis (2020)

Table 1 gives the chi-square result of the analysis for test of H_{01} . The p-value of the Pearson chi-square (2.2447E-7) is less than $\alpha=0.05$; hence, the null hypothesis (H_0) is rejected. It is therefore, concluded that regular monitoring of government cash balances through TSA has significant positive effect on public sector financial accountability of tertiary institutions in Nigeria.

Table 2: Analysis Report for Test of H_{02}

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	165.72 ^a	2	1.0329E-36
Likelihood Ratio	188.421	2	1.2159E-41
Linear-by-Linear Association	145.251	1	1.8929E-33
No of Valid Cases	288		

Source: Data Analysis (2020)

Effects of Treasury Single Account (TSA) on Public Sector Financial Accountability of Tertiary Institutions in Nigeria

Table 2 gives the chi-square result of the analysis for test of H_{02} . The p-value of the Pearson chi-square (1.0329E-36) is less than $\alpha=0.05$; hence, the null hypothesis (H_0) is rejected. It is therefore, concluded that unexpected fiscal volatility associated with TSA has a significant direct effect on public sector financial accountability of tertiary institutions in Nigeria.

Analysis report for test of H_{03}

	Value	df	Asymp. Sig. (2 sided)
Pearson Chi-Square	81.119 ^a	2	2.4285E-18
Likelihood Ratio	87.842	2	8.4199E-20
Linear-by-Linear Association	.083	1	.773
No of Valid Cases	288		

Source: Data Analysis (2020)

Table3 gives the chi-square result of the analysis for test of H_{03} . The p-value of the Pearson chi-square (2.4285E-18) is less than $\alpha=0.05$; hence, the null hypothesis (H_0) is rejected. It is therefore, concluded that compliance with section 80(1) of the 1999 constitution of the Federal Republic Nigeria significantly enhances public sector financial accountability of tertiary institutions in Nigeria.

Discussion of Findings

The aim of the study is to assess the effect of Treasury Single Account (TSA) on financial accountability of tertiary institutions in Nigeria. The study focused on the tertiary institutions based on empirical evidence from Modibbo Adama University of Technology. The findings of this study showed that there exists a significant positive effect between regular monitoring of cash balances through TSA and financial accountability of tertiary institutions in Nigeria. TSA contributes to the reduction in financial loopholes and this implies that TSA is an effective tool in combating financial leakages in Nigeria public sector as it serves as a mechanism for ease collection of public funds, proper cash management and increased revenue generation. This finding is in line with the finding of a study conducted by Adebisi & Okike (2016) on adoption of Treasury Single Account (TSA) and its effect on revenue leakages of Nigerian states.

Unexpected fiscal volatility associated with TSA has a significant direct effect on public sector financial accountability of tertiary institutions in Nigeria. Unexpected and unpredictable centralization of revenue management, enhancement of consolidated government revenue and effective monitoring of public sector receipts and expenditure are joint predictors of TSA on financial transparency and accountability in the administration of public funds. This therefore implies that TSA has a significant effect in mitigating financial misappropriation in the public sector such that accountability and transparency can be better achieved via consolidation of revenue received as well as having a centralized revenue pool (Onyekpere, 2015). This finding conforms to the finding of the effects of Treasury Single Account on Nigerian banks conducted by Onyekpere (2015). Compliance with section 80(1) of the 1999 constitution of the Federal Republic Nigeria significantly enhances public sector financial accountability of tertiary institutions in Nigeria. This implies that the introduction of TSA has been an effective appropriation tool of budget and funds have been efficiently allocated as funds available can be easily determined and apportioned with certainty (Ahmed, 2016). The finding accords to the finding of a study by Ahmed (2016) on The Treasury Single Account as an instrument of financial prudence and management, prospects and problems.

CONCLUSION AND RECOMMENDATIONS

Based on the findings of this study, it is concluded that TSA has gone a long way in blocking the identified financial leakages in revenue generation and expenditure of government in Nigeria and it has enhanced transparency and accountability in the public sectors financial system. It has equally paved way for the timely payment and capturing of all revenues going into the government treasury, without the

Effects of Treasury Single Account (TSA) on Public Sector Financial Accountability of Tertiary Institutions in Nigeria

intermediation of multiple banking arrangements. The policy also enables the government at the centre to know the revenue and expenditure position of the nation at any given time without any hindrance and it reduces round-tripping of government deposits. One major shortcoming of this study is the inadequacy of literature because the policy is fairly new. The findings are as follows: Regular monitoring of government cash balances through TSA has significant positive effect on public sector financial accountability of tertiary institutions in Nigeria. Also unexpected fiscal volatility associated with TSA has a significant direct effect on public sector financial accountability of tertiary institutions in Nigeria. In addition, compliance with section 80(1) of the 1999 constitution of the Federal Republic Nigeria significantly enhances public sector financial accountability of tertiary institutions in Nigeria. Based on the finding of the study, the following recommendations are advanced:

- i. To cushion the liquidity impact on the financial system, government should emphasise regular monitoring of cash balances through an orderly migration of cash balances from the commercial bank accounts to the TSA, and it should be complemented with monetary policy measures.
- ii. Government should design structure that accommodates amiable unexpected volatility (unpredictable outcomes) of new emerging policies; especially fiscal policy that can achieve efficient allocation of resources and effective stabilization of business circle. This averts unexpected reactions and counter-reactions to a new policy of government. This can be done through unification of structure of government banking which is an important factor for efficient management and control of government's cash resources.
- iii. Considering the benefit of maintaining Treasury Single Account, federal government should ensure proper compliance with section 80(1) of the 1999 Constitution of the Federal Republic of Nigeria through appropriate legislative support to facilitate relevant regulatory environment capable of driving continuous effective implementation of the TSA in all MDAs as well as the states and local governments in order to promote accountability and transparency at all levels of government.
- iv. Government should make effort to develop a sustainable budgetary control mechanism so as to ensure that operation of TSA does not affect budgetary control as it is considered as a yardstick for performance measurement in the public sector.
- v. Government should overhaul the capacity of the Federal Ministry of Finance and the CBN to cope with challenges associated with enforcing the provisions of TSA. For the success of this policy, government should engage in massive public enlightenment programme about the benefits of the policy.

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Effect of Ownership Structure on Audit Quality of Deposit Money Banks (DMBs) in Nigeria

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Abstract

The study examines the effect of ownership structures on audit quality of Nigerian deposit Money Banks, the study primarily examines managerial ownership and institutional ownership; to be précised; on audit quality of the Nigerian Deposit Money Banks. In trying to achieve this, data were extracted from the sample of 10 banks out of the 24 population through Banks Annual Reports and Accounts for the periods 2015 to 2019. The data was empirically tested using OLS regression with the aid of SPSS technique. The study concluded that there is positive significant relationship between institutional shareholding and managerial shareholding with audit quality of the Nigerian Deposit Money Banks. It was therefore recommended that the Nigerian Deposit Money Banks should consider higher percentage of institutional shareholdings and managerial shareholdings in order to improve their monitoring and have better quality of audit.

Keywords: Ownership Structure, Audit Quality, Deposit Money Banks, Nigeria

INTRODUCTION

The financial scandals within the financial system led to the creation of various statutes and codes to save and sanitize the Nigerian banking system and promote sound banking practices. Invariably, governance failure was at the heart of processes that led to the crises which resulted into liquidity loss across the industries and diminution of value of capital of most of the financial institutions in Nigeria. Good governance by the board of directors is essential to improving the quality of financial reporting; which in turn; has impact on the confidence of investors. Levitt (1998 and 2002), good corporate governance reduces the negative effects of earnings management as well as the likelihood of creative financial reporting arising from fraud and errors (Beasley, 1996; Dechow, 1996 & MacMullin; 1996). Financial reporting system can equally play a pivotal role in developing the quality of corporate governance systems. One of the key tasks of financial reporting system is to limit the decisions made by top managers because top managers are motivated to protect either the interest of major shareholders (Johnson & Macling 1996; Watts 1978) or overall strategic shareholders interest (Melis 2002). Since good financial reporting is very vital, audit quality is also an important player to the development of good financial reporting. High quality auditing seems to improve the confidence of investors in financial reporting and increase fund raising possibilities (Lin & Liu, 2009). The external auditors have also played an important role in improving the credibility of financial information (Mautz & Sharafi, 1961 and Wallance, 1980).

Therefore, effective and sound corporate governance is very important must especially in developing countries like Nigeria in particular which is still trying to regain the confidence of investors both domestic and international as a result of the adverse effect global financial crises that seriously affects our Stock Exchange Market

Research has been conducted in ownership structure and audit quality, but there has been inconclusive evidence on the relationship between ownership structure and audit quality. Previous studies explain on the determinants of audit quality, relating it with the use of audit fees as matrix of audit quality, often report inconclusive results with respect to governance mechanism (Hay et al, 2006). Economists in 2004 suggested that there is question about the independence of big 4 (being a common proxy for audit quality) and pointed out that concentration is lowering the quality of audit. There are also few published studies that empirically analyzed the relationship between audit quality and ownership structure. Another impediment is the adverse effect of global financial crises which was as a result of the weakness of corporate governance. This has invariably led to the corporate failure and the collapse of the global stock exchange.

Recently in Nigeria, there have been a number of financial irregularities which seriously call the attention of investors and the regulators. Therefore, it was as a result of the aforementioned statements that this study is originated to use Nigerian Deposit Money Banks as case study to empirically investigate the likely impact of ownership structure on audit. One of the distinctive attributes of this study is the employment of audit quality index proxies by (the Big 4 auditors, Audit Tenure and Audit experience). Consequently, in testing the validity or otherwise of the research, the following null hypotheses were raised:

H₀: There is no significant relationship between institutional ownership and audit quality

H₀: There is no significant relationship between managerial ownership and audit quality

LITERATURE REVIEW

Conceptual and Empirical Discussion

Concept of Audit Quality

Audit quality adds a significant value to investors in capital markets because they often use audited financial statements by auditors as the main basis for investment decisions (Sudsomboon and Vssahawanitchakit, 2009). The use of audited financial statements by investors has been proved by many researches (Loudder, et. al., 1992; Chen, et. al., 2000; Zureigat, 2010; Kathleen, et. al., 2007) who found a market reaction to the different types of audit reports. Because the purpose of an audit is to provide an assurance as regards to the financial statements, this role can be successful only; if an audit opinion reflects the true findings of the audit engagement (Al-Ajmi, 2009). DeAngelo (1981) argued that audit quality depends on the joint probability of an auditor discovering and disclosing a problem in an accounting system. Bradshaw et. al. (2001) defined audit quality as the willingness to report any material manipulation or misstatements that will increase the material uncertainties and/or going concern problems; Baotham and Ussahawanitchakit (2009) addressed another definition as the probability that an auditor will not issue an unqualified report for statements containing material errors. Palmrose (1988) asserted that high audit quality is associated with the absence of material omissions or misstatements in the financial statements. Audit quality and the measurement of audit quality have been studied widely, Kilgore (2007) indicated that no single generally accepted definition of audit quality has emerged, nor has any single generally accepted measure been introduced. Reisch (2000) attributed the absence of a single measure of audit quality to the fact that it is a multidimensional latent construct and is therefore, somewhat difficult to measure. This was a reason that many researchers study this area and have used different proxies for measuring the level of audit quality. Manry, et. al. (2008) used estimated discretionary accruals to measure audit quality, Knechel&Vanstraelan (2007) used the likelihood of an auditor issuing a going concern opinion as an indicator of audit quality, Li and Lin (2005) examined audit quality using non-audit fees, Chen et. al. (2010) used the propensity to issue modified audit opinion as a proxy for audit quality.

Kilgore (2007) indicated that the most commonly used surrogate for audit quality is the size of the audit firm, Chang et. al. (2008) agreed because of the wide range of theoretical and empirical evidence that large audit firms may provide higher quality audits. DeAngelo (1981) proposed that the larger audit firms receive fee premiums because they have a greater reputation at stake and that reputation, together with their more substantial clients base, provides them with the incentive to be more independent, leading to a higher level of audit quality. Gearemynck, et. al. (2008) indicated that audit quality is affected by expected future losses of audit firms, which trigger increased audit quality as they get larger. Furthermore, many studies found an evidence that clients audited by larger audit firms disclose more information voluntarily (Depoers, 2000; Chau and Gray, 2002). Simunic and Stein (1987) asserted that larger audit firms are better than smaller audit firms at detecting errors because they have greater resources at their disposal and can attract employees with superior skills and experience.

An audit can be seen as an independent opinion on the truth and fairness of financial reporting of an organization at a particular period of time usually one accounting period. Thus, audit quality has been defined as the joint probability that an auditor will detect and report a material misstatement (De Angelo 1981). The above definition consists of two components; the ability to detect misstatement and the willingness to report the misstatements that are uncovered during the course of an audit. A lot of extensive empirical evidences show that the various proxy variables for audit quality are corrected with the increased trustworthiness of financial reports (Mai Joor&Vanstraelen, 2006; Defond&Jambalvo, 1993; Lin & Hwang, 2010; Francis et al, 1999). This indicates that high quality audits are associated with fewer errors and irregularities (C. F. Defond&Jambalvo, 1991). However, Lin and Hwang (2010) pointed out that a high audit quality is expected to both constraint opportunistic, earnings management and reduce the risk material misstatement or omissions will be present in financial reports. One of the objectives of auditing is the production of assurance and the development of confidence for investors. Audited financial statements are more reliable by the investors. To be more precise, the role of auditing is to reduce information asymmetry on accounting numbers and to minimize the residual loss resulting from managers' opportunism in financial reporting (Adeyemi and Fagbemi 2010). However, in addition to the direct effects of audit quality on accounting trustworthiness, the indirect effects are also observed. These efforts are mediated by the associations between audit quality and other mechanism of corporate governance (Sullivan, 2000; Carcello et al, 2002; Abbot et al, 2003; Knechel and Willekens, 2006). Therefore, effective auditing will be adopted only when benefits of imposing the monetary device (reducing agency, costs or lowering the capital raising costs) outweigh the costs of using the device (forfeited benefits stemmed from governance constraints) (Lin and Liu 2009). This means that agency theory recognizes auditing as one of the major monetary mechanisms to regulate (conflict of interest and reduce agency cost)

It is argued that different audit firms have different levels of audit quality (De Angelo, 1981; Simunic and Stein, 1987). Studies of IPOS show less under-pricing in the presence of a big 6 audits or big 4 (Jang and Lin 1993). The auditor change literature indicates that the market is unfavourable to a switch from a big 6 to a non-big auditor (Eichenster et al 1995), and unfavourably when the change is in the opposite direction. External governance controls are in the auditor choice literature as proxy for the extent of agency conflicts (Francis and Wilson 1988; Defound 1992). The study also used one or two governance proxies in addition to measure such leverage, to proxy for the extent of agency conflict. The studies found that, when agency conflicts increase, monetary increases at a higher standard of audit quality demanded. Yeoh and Jubb (2001) study the auditor choice literature thereby establishing evidences which shows the association between audit quality and a complete range of internal governance devices which theoretically affects the extent of agency conflict and demand for additional monetary via higher degree of audit quality. One company in UK Cadbury once reports that "the annual audit is one of the bedrock of corporate governance" (Cadbury report 1992). Still mentions that the governance literature excluding research on audit committees has generally recently began to consider the relationship between external audit quality and as governance device, and internal corporate governance mechanisms (e.g. Anderson et al (1993); Malolcsy et al (1999); Jubb (2000). Anderson et al (1993) argue that the corporate governance determines the internal and, external audit quality (or quantity), and the board of directors, are substitutable dependent on the nature of company, its greater assets in place versus growth. They generally found that companies with greater stability use more monetary via audit than via directorships, and that more is spent on internal auditing than on external audit. This findings also are supported by Matolcsy et al (1999) where they found that governance from directors is greater compared to governance from external audit in firms with high growth options.

Ownership Structure and Audit Quality

Institutional ownership is an investment from certain institutions which is usually higher than the investments of individual. It represents the percentage of the firms which are held by main investing

institutions (own more than 5% of firm stock) Hoseinbeglou et al (2013). Abdullahi (2008), argues that institutional shareholders have more influenced than individual investors. Warfield et al (1995) showed that the higher the holding of institutions and block holders the smaller the discretionary accruals and the greater the informativeness of earnings. Kane and Velury (2004) found that the greater level of institutional ownership, the more likely that a firm will provide audits that are conducted by large firm. (Han et al, 2007) found that an increase in institutional shares leads to a general increase in the demand for higher quality audit in China. However, the management ownership is represented by the ratio of directors' shareholding to the total outstanding shares of a particular firm. This relationship of ownership structure can best be described by agency theory which reduces agency cost. Dong and Zhang (2008) suggested that ownership structure is one of the most important corporate governance mechanisms that directly influences the board of directors,

Theoretical Review

Agency Theory

For the purpose of this research, agency theory will be adopted as underpinning theoretical framework. This is due to the fact that governance mechanisms, internal governance, to be precise are generally regarded as agent of the shareholders while the external auditors who are responsible and answerable to shareholders are considered to act as the principals since they are liable to report to the organization's shareholders their opinion on the truth and fair view of the statement of the affairs of the enterprises financial statement. Agency theory assumes that the most of the principals and agents may not be aligned and that monetary of managers is a method of reducing agency costs (Jensen and Meckling, 1976). The external audit being a monetary device (Watts and Zimmern 1983). Both managers and shareholders have incentives to engage such monetary (Fama and Jensen 1993), review in agency labour. The substitution effect presumes that corporate governance measures are interchangeable among each other. This has been shown to hold for takeover market (John and Senbert 1998), Morck et al (1989) Generally, when internal governance practices are weak, the external governance mechanisms of takeover market dominate (Yeoh and Jubb, 2011). Moreover, when management outstanding increases, there is less likelihood of hostile turnover and more friendly acquisition. Morck et al (1989).

The general literature suggesting that governance mechanisms maintains are substitutable shows that the substitutions hypothesis may be a significant predictor of audit quality choice whereby monetary via high external audit quality is placed with internal governance device so that an audit of lesser quality becomes acceptable (Yeoh and Jubb, 2011). The insurance and hypothesis postulates that the auditor is for any investment losses for investors, creditors (Menon and Williams 1994); Schwartz and Menon (1985). As such the need for insurance ill drive companies to demand large auditors (De Angelo 1981); Francis and Wilson (1988), since they are considered to be more responsible in paying damages awarded or setting the case for large sum (Schwartz and Menon 1985). They also indicate that larger auditors have a comprehensive advantage in provision of insurance as they are able to spread the risk of litigation over a large of clients. In general insurance hypothesis assumes that there may be a positive relationship between some corporate attributes that are jointly governance mechanisms relating to owners of the company (e.g. block holders) or to directors and if quality choice, rather than negative relationship proposed by the substitution hypothesis.

Signaling theory

Signaling theory via auditor choice is related to agency theory, and it is in manner by which managers and/or directors may communicate to the market auditors' information about their company and their own behaviour. As the type of financial statements produced have become standardized, potential information asymmetry which a company use to send a signal to the market via its financial statements is reduced. Companies are therefore provided an incentive to signal, other than via transparency as their notes to the accounts and other voluntary, discloses, via their choice of auditor. However, even in the presence of a

quality auditor, a company that is audited by a higher quality auditors sends a signal to the market that its financial statements are more credible and reliable than those audited by lower quality auditors. The market perceives big 6 (now the big 4) and specialist or experienced auditors to be of a higher quality than other reward (punishes) companies with higher improvements or falls in share prices accordingly (TeohawWohg, 1993). Signaling theory does not actually indicate higher audit quality, it merely needs the market to be believed that top tier firms are associated with higher audit quality because of the fees premium they are able to command (Moizer 1997).

METHODOLOGY

The research was empirically analyzed using multiple regressions owing to the fact that it is co- relational in nature. Audit quality and ownership structure are the variables of the study. Audit quality is represented by audit quality index (big 4 auditors, audit tenure and audit experience), institutional shareholdings and managerial shareholdings. The data was extracted from Zenith Bank Annual Reports from 2015 to 2019. The population consists of 21 banks out of which Zenith bank were randomly selected, the remaining were filtered out due to the fact that some banks were merged within that period.

Model specification

$$AQ = \beta_0 + \beta_1 MOS + \beta_2 IOS + e$$

Where:

AQ = Audit Quality

β_0 = Constant

MOS = Managerial Ownership

ISO = Institutional Shareholding

e = other variables that were not captured in the study

Variable Measurements and Definition

Variables	Definition and measurement
Audit Quality	Measured by audit quality index, proxied by the big 4 audit firms, audit tenure, and audit experience. For big 4 audit; any firm that is audited by the big 4 is coded as 1 and when otherwise 0. For audit tenure; if there is no change of auditors during the year, it is coded as 1 and otherwise 0. As for the audit experience; any firm that is audited by the audit firm whose experience is above 10 years is coded as 1 and otherwise 0.
Managerial Ownership	Percentage of directors' ownership to total equity of the firm
Institutional shareholding	Percentage of stock which are held by main investing institutions (having more than 5% of firm stock)

Source; Researchers Compilation, 2020

RESULT AND DISCUSSION

Multiple regression is used to determine the relationship between ownership structure as independent variables proxied by (managerial shareholdings and institutional shareholdings) and audit quality being the dependent variable proxied by (the big 4 audit firm, audit tenure and audit experience). The ordinary least square technique has been used to test the regression coefficient with the following model

$$AQ = \beta_0 + \beta_1 MOS + \beta_2 IOS$$

The results are presented, analyzed and interpreted in the following pattern: First is the presentation of correlation of all the variables of the study, followed by the presentation of the regression results thereby discussing individual impact of each independent variable on the dependent variable and finally, the discussion of the overall impact ownership structure on audit quality.

Table 2: Correlation Matrix

AQ	1	.288 (0.043)	0.698 (0.000)
IOS		1	0.288 (0.043)
MOS		-.019 (0.898)	1

Source: SPSS Output, 2020

The correlation matrix is used to determine the degree of the association between the dependent and independent variables of the study as well as independent variables themselves. Table 2, shows a significant positive association between institutional ownership and managerial ownership with audit quality. This implies that the proxies as components of ownership structure have positively impacted on audit quality; this means that institutional ownership and managerial ownership play a positive significant role on improving the quality of audit of Nigerian deposit money banks. This indicates that audit quality is positively related to institutional shareholding and managerial ownership. The multi-co linearity problem between the independent variables of the study can be clearly observed from these two indicators (i.e. tolerance value and variance inflation factor VIF) which are within less than 1 and less than 10 respectively. This shows the fitness of the model of study taking the two independent variables.

Table 3 shows institutional shareholding and managerial ownership of listed Deposit Money banks relate to audit quality. The relationship from equation (model) shows the following values.

Table 3: Summary of Regression Result

Variables	Audit Quality
Intercept	.177 (0.000)
MOS	0.578 (0.000)
ISO	.0.72 (0.003)
R	0.76
R ²	0.578
Adj. R ²	0.560
F-Stats	32.147
F-significant	0.000
Durbin Watson	1.41

Source: SPSS Output, 2020

$$AQ = .177 + 0.538MOS + 0.72IOS$$

The model shows that all the variables of the ownership structure (MOS and IOS) have positive significant impact on audit quality of Nigerian Deposit Money Deposit Banks. This implies that managerial ownership and institutional ownership determine quality of audit in Nigerian banks. This is in line with the work of Chan *et al.* (2007) who found that an increase in institutional ownership brings about a general increase in the demand for higher audit quality in china and Abdulla (2008) found that institutional ownership is an important factor that could assist companies to perform effectively. He also found that the companies tend to be audited by the Big 4 if the level of institutional ownership increases and also Mitra, *et al.* (2007) found that institutional ownership was significantly and positively related to audit quality. Invariably, the combine and overall impact of the proxies ownership structure on audit quality of Nigerian Deposit Money Banks is shown in the model summary of the regression results at 1% level of significance (0.000). The overall relationship between the dependent and independent variables of the study is represented by R^2 is 57.80%, this implies that ownership structures in the Nigerian Deposit Money Banks have 57.8% predictive power on improving the quality of audit in the Nigerian Deposit Money Bank and the remaining 42.2% remains to be explained by other factors. Therefore, ownership structure proxied by institutional ownership and managerial ownership play significant role in improving the quality of audit in the Nigerian Deposit Money Banks.

CONCLUSION AND RECOMMENDATIONS

The findings show that both managerial ownership and institutional ownership are important factors for Nigerian deposit money banks in selecting auditors, the results give evidence that companies tend to hire high quality auditors (Big4) when the percentage of managerial and institutional ownership increased, such results can be explained through tending managerial and institutional investors to use one of the Big-4 audit companies as high quality auditors in order to keep them having high quality financial statements which they can use to support their decisions.

The banking system is an integral sector that uplifts and promotes all other sectors of the economy, and therefore care needs to be taken in sanitizing, projecting and promoting the sector. Based on these findings, the research concluded that institutional ownership and managerial ownership play a positive significant role in improving the quality of audit of Nigerian deposit money banks, and on the overall, it can conclusively say that ownership structure has significant impact on audit quality of the Nigerian Deposit Money Banks. It is therefore recommend that the Nigerian Deposit Money Banks should consider higher percentage of institutional ownership as well as managerial ownership, in order to improve their monitoring and have better quality of audit.

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Impact of Accounting Information on the Decision Making Process of Management

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Abstract

In the field of accounting, economic information is of great interest, meaning that accounting information plays an important part in the economic book-keeping/registration system in general, but also in the economic information system especially for decision making necessary for the business. Although accounting information are available for a wide range of users - stakeholders (managers, employees, suppliers, customers, financial creditors, government and its institutions, the public, the media, etc.), the investors (shareholders) are recognized as the privileged users of accounting information. Four principal qualitative characteristics must be met for the accounting information to be useful in the management system: understandability, relevance, reliability and compatibility of information. Any economic transaction processing involves collecting, categorizing, summing and analysing the data. From the findings of this research, it shows that accounting information play a vital role in making investment, financing, dividend and lending decisions. The sufficient supply and proper use of accounting information had gone a long way in helping management in making efficient and effective decision and for this, there is a significant of impact of the use of accounting information as an aid to management decision making in the institutions.

Keywords: Accounting Information, Decision Making, Management, Users

INTRODUCTION

Economic information is of particular interest for accounting. Accounting information belongs to this category. It is obtained by specific methods, procedures and instruments for processing economic data. It is the most real, accurate, complete and operative information representing in fact the support on which the management process is based. Most of the decisions that are made in the process of work rely on information obtained from accounting. It means the accounting information plays an important part in the overall economic system but also in the economic information system, especially for decision making necessary for the business. Resources are relatively scarce and limited and so management in most cases finds itself confronted with the decision-making problem. In this regard, good accounting information should be accessible to offer suitable help to the management to aid them in their decision-making process.

Management is the art of working particularly through people, for the achievement of the broad goals of an organization (Ejiofor, 1987), in trying to achieve these goals the manager has to map out strategies to find out the accounting information suitable for the company. Making decisions is part of our everyday lives. Considering organizational life, it is often one of the main functions and tasks of management, as underlined also in the statement above. Indeed, management and decision-making are often regarded as belonging together, as management usually makes the major decisions of the organization. Decision-making involves the selection of the best course of action. In order to decide on the best option, management has to judge the effectiveness of various alternatives. Therefore, they need some guidance that is usually provided in form of data and information. For this reason, they often rely on financial and economic information gathered by management accounting and financial accounting (Drury 2003).

Financial accounting information is meant for external users, such as investors, employees, creditors, government or general public and is given by the financial statements, consisting of balance sheet, profit and loss account, statement of changes in equity, cash flow statement and the accounting policies and explanatory notes thereto. Managerial accounting information is for internal users or the entity's management and includes information on the unit cost of products, cost behaviour relative to the volume of business or profitability per product. As can be derived from this definition, accountants play a crucial

role in providing information for making economic and financial decisions. These decisions are important elements for the organization. Implementing the wrong ones can affect the company in a very negative way and may sometimes also lead to its bankruptcy. Suma (2010) even goes so far to claim that “the road to bankruptcy is paved with poor decisions.” As the outcome of a decision cannot always be predicted with certainty, management often faces the risk of choosing the wrong ones. Hence, management always needs to have some courage as well when facing decisions. Apparently, good decisions are important and ensure the wellbeing and also the survival of an organization.

LITERATURE REVIEW

Accounting Information System

According to Collier (2003), accounting is a collection of systems and processes used to record, report, and interpret an economic entity's business transactions, which provides in financial terms an explanation or report about the transactions of an organization. That can be simply described, as the process of recognizing, evaluating and communicating information to allow informed judgements and decisions by users of the information. This is to say that accounting information is valuable to those who need to make decisions and plans about business and control the businesses. (Atrill, et al., 2014) Thus, the key aspects of accounting are identifying the key financial component of an organization, measuring the monetary values of these to represent a true and fair view of the organization, and communicating this financial information in a way useful to the users of that information (Black, 2005)

Qualitative Characteristics of Accounting Information

Within the managerial system, for the accounting information to be useful, it is necessary for it to fulfil four principal qualitative characteristics: comprehensibility, relevance, reliability and compatibility of the information (OMPF, 2014). Comprehensibility is an essential quality which implies that accounting information must be easily understood by users. To that end, the users are assumed to have a reasonable knowledge of business and carry out the tasks given by economic activities. Relevance is their ability to be useful to the beneficiaries in decision making. Accounting information is relevant when it influences the economic decisions of users by helping them evaluate past, present or future events, confirming or correcting them. With respect to credibility, accounting information has the quality of being reliable when it does not contain significant errors and is not biased and users can trust that the information represents correctly what it aims to represent or what is reasonably expected to represent. Consequently, compatibility implies that users can compare the information presented in the financial statements of an enterprise over time to identify trends in its financial position and performance.

Accounting Information Tools

Statements of Financial position

The statement of financial position follows the basic accounting equation assets equal liabilities plus owners' equity. The difference between what a company has and what it owes equals equity, or net worth. A high net worth may indicate that a company is relatively debt free, particularly if its owners' equity is higher, expressed as a percentage of assets, than other companies in its industry.

Statement of comprehensive Income

The statement of comprehensive income shows how much profit a company has earned during a given period. The format includes a gross profit calculation, followed by an operating income section. This produces operating income. Non-operating income or losses, including one-time or special sources of revenue or expense, are then added to derive net income. Gross profit is based on revenue minus the cost of producing the goods or services that a company sells, called the cost of goods sold. This shows how efficiently the company generates income from its production. Operating income considers many other costs along with the cost of goods sold, including overhead and depreciation on equipment. This is

important in determining the company's basic profitability, especially when compared to prior periods or to other companies in its field. Growing operating income is a good sign. Special items may positively or negatively affect a period's net income, but they are less likely to affect long-term concerns.

Cash Flow Statement

The statement of cash flows also reveals useful information when making investment decisions. It shows the net change in the company's cash position during a given period. In general, stable or growing cash flow means the company can cover its short-term debt payments and expenses, while also keeping up with any long-term debt obligations. You can also look over the structure of the cash flow to see how much cash is generated from operating activities versus financing and investing. It is a good sign when a company's cash from operating income routinely exceeds its net income. This shows income is turning into cash. Typically, an effective cash position is favourable in an investment because it shows less risk of loan defaults or bankruptcy.

Statements of retained earnings

The statement of retained earnings presents the changes in a company's or organization's retained earnings over a specific period of time. These statements show the beginning and final balance of retained earnings, as well as any adjustments to the balance that occur during the reporting period. This information is sometimes included as part of the balance sheet or it may be combined with an income statement. However, it is frequently provided as a completely separate statement.

Statement of Owners' Equity

The statement of owners' equity isolates the equity section of the balance sheet. Its primary purpose is to show the trend in retained earnings for the company. Retained earnings are accumulated profits not paid out in dividends. This is useful in investment decisions because higher retained earnings relative to dividends means you get less dividend income. However, this often means the company is looking to grow and is holding onto income for reinvestment versus paying it out in the near term.

Statement of Accounting Policies

The statement of accounting policies comprises specific policies and procedures used by a company to prepare its financial statements. These include any methods, measurement systems and procedures for presenting disclosures. Accounting policies differ from accounting principles in that the principles are the rules and the policies are a company's way of adhering to the rules.

Notes on the accounts

The notes to the accounts are a series of notes that are referred to in the main body of the financial statements. The notes give further details on the numbers given in the accounts. The importance of these numbers should not be underestimated. The accounts are not complete without the notes. Investors who rely on the main body of the accounts and ignore the notes are likely to find themselves misled.

Usefulness of Accounting Information on Management Decision

In particular, Atrill and McLaney (2009) identifies four broad areas, where management accounting information is necessary to support managers in decision-making especially in terms of developing long-term plans and strategies, performance evaluation and control, allocating resources and determining costs and benefits

Developing objectives and plans

Managers are responsible for establishing the mission and objectives of the business and then developing strategies and plans to achieve these objectives. Management accounting information can help in gathering information that will be useful in developing appropriate objectives and strategies. It can also

generate financial plans that set out the likely outcomes from adopting particular strategies. Managers can then use these financial plans to evaluate each strategy and use this as a basis for deciding between the various strategies on offer.

Performance evaluation and control

Management accounting information can help in reviewing the performance of the business against agreed criteria. We shall see below that non-financial indicators are increasingly used to evaluate performance, along with financial indicators. Controls need to be in place to ensure that actual performance conforms to planned performance. Actual outcomes will, therefore, be compared with plans to see whether the performance is better or worse than expected. Where there is a significant difference, some investigation should be carried out and corrective action taken where necessary.

Allocating resources

Resources available to a business are limited and it is the responsibility of managers to try to ensure that they are used in an efficient and effective manner. Decisions concerning such matters as the optimum level of output, the optimum mix of products and the appropriate type of investment in new equipment will all require management accounting information.

Determining costs and benefits

Many management decisions require knowledge of the costs and benefits of pursuing a particular course of action such as providing a service, producing a new product or closing down a department. The decision will involve weighing the costs against the benefits. The management accountant can help managers by providing details of particular costs and benefits. In some cases, costs and benefits may be extremely difficult to quantify; however, some approximation is usually better than nothing at all.

METHODOLOGY

Descriptive statistics were used to analyse the data that was collected i.e. (mean and standard deviation) and regression model. All this played an important role in helping to draw inferences on the relationship that exists between study variables. Regression and correlation analysis were included to represent inferential statistics. The researcher used statistical package for social sciences (SPSS) when analysing the information which helped in determining and testing regression and correlation between dependent and independent variables. Test of correlation was done to test the strength and association between the dependent and independent variables. Regression analysis included fit of the model, Analysis of Variance (ANOVA) and Regression of Coefficients. Fit of the model was construed by assessing R Square to assess the extent to which the independent variable (Accounting Information Quality) explained the dependent variable (Decision Making). ANOVA was used to test the significance level of the model using the 0.05 conventional level where a variable is said to be statistically significant if it falls within the conventional threshold of 0.05. Tables, figures and frequencies were used to present the data. These Statistical tools were adopted because it has been used by other accounting information researchers Table

Data Analysis and Presentation

CATEGORY	VARIABLES	OPERATIONALIZATION	MEASUREMENT
Dependent Variable	Decision Making	1. AIS 2. Success 3. Clear Methodology	Likert Scale 1-5
Independent Variable	Reliability	1. Completeness 2. Faithful representation	Likert Scale 1-5

3. Verifiable			
Independent Variable	Comparability	1. Accounting period are Comparable 2. Used with ease 3. Accounting Information Comparability	Likert Scale 1-5

Source: Reserachers Computation

Model Specification

The model specification used in this study is based on the description of the relationship between the dependent and independent variables of this research work.

$Y = f(\text{Explanatory variables}) + \text{error term}$ ------(I)

Where Y = Dependent Variable “management decision making”

X = Independent Variable which was represented by Reliability and comparability of accounting information.

The multiple linear regression models for this study is defined as:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$ ----- (II)

$Y = \beta_0 + \beta_1 RAI_1 + \beta_2 CAI_2 + e$ ----- (III)

Where: β_0 = Constant

e = Error term

Study Variable

Independent Variable (X)	Dependent Variable (Y)
Reliability of Accounting Information (RAI1)	Decision Making
Comparability of Accounting Information (CAI2)	

Source: Reserachers Computation

RESULT AND DISCUSSION

From the findings, it can be observed that accounting information play a vital role in making investment, financing, dividend and lending decisions. The sufficient supply and proper use of accounting information had gone a long way in helping management in making efficient and effective decision and for this, there is a significant of impact of the use of accounting information as an aid to management decision making in the institutions. The study also found that accounting information system leads to good financial reports and also leading to better decision making. This study agrees with a number of empirical literatures. Okoli, (2012), aimed at studying how effective and efficient the instrument of good accounting information is in decision making in an organization. Their findings revealed that the use of accounting information improves and enhances decision making in organizations. Similarly, Amedu (2012), researched on the Contribution of Financial Statement Investment Decision making in Nigeria and finding reveal that financial statements are useful for forecasting company’s performance. It equally provided various facts of a business such as accurate records of its income and expenses as well as the assets and liabilities that were relied upon in investment decision making.

CONCLUSION AND RECOMMENDATIONS

From the foregoing, accounting information holds the crucial role in substantiating the economic decisions, offering the possibility of an accurate representation of economic phenomena and processes. Users of accounting information act, operate and make decisions constantly, by using and understanding the accounting information provided by financial statements. The financial statements published by companies are aimed at providing data able to ensure markets' efficiency and the optimal allocation of economic resources. Through this study the researcher recommended the following specific task as a way of insuring that accounting information is important in management to make decisions.

- i. All systems have to be computerized and modern speed system network should be established so that the information could reach the accounting department on time. The management should also train its workers on the accounting package for quick and efficient accounting records.
- ii. Qualified and capable personnel should be employed for accounting information preparation and presentation.
- iii. Monitoring and control actions should be enhanced in the decision- making process on specific decisions according to the stipulated processes associated so that desired goals are achieved in improving the functionality and performance of the organization.

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Corporate Board Structure and Profitability of Insurance Companies in Nigeria: Empirical Evidence from Selected Listed Insurance Companies

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Abstract

The study investigated the effect of corporate board structure on the profitability of listed insurance companies in Nigeria. Specifically, the study examined the effect of board size and board composition on the profitability of the four (4) listed insurance Companies in Nigeria. The firms' profitability was defined as Return on Assets (ROA). This study adopted a descriptive research design. The study population comprised all the twenty three insurance companies which were quoted on the floor of the Nigerian Stock Exchange as at March 9, 2020. Both probability and non-probability methods in the form of purposive and simple random sampling techniques were employed to select a sample from the population. Secondary data were generated from only secondary source using documentary records from the companies' financial statements and annual reports for the period 2015 to 2019 using content analysis method of data collection. Descriptive and inferential statistical tools based on multivariate regression analysis using E-view Processor were used to analyze the data collected. The study revealed that corporate board structure does not significantly affect the profitability of insurance companies in Nigeria. Board size and board composition were found to have no effect on the profitability as a measure of financial performance of insurance companies listed on the NSE. The study recommends among other things that insurance companies should have an optimal board size and board composition so as to enhance investor's confidence in the companies which is attracted by increased independency of the board; capable of enhancing financial performance. It further suggests that board of directors should practice due care and diligence in discharging their duties and that the majority of board members should be non-executive directors composed mostly of independent directors.

Keywords: Corporate Board Structure, Corporate Governance, Profitability, Insurance Companies, Board Size, Board Composition, Return on Assets

INTRODUCTION

Corporate governance issues have been variously discussed in relation to performance of corporate organisations. Recently corporate governance became a hot topic among a wide spectrum of people, government, industry operations, directors, investors, shareholders, academics and international organisations to mention a few. The background of corporate governance dates back to the 19th Century when state corporation laws enhanced the rights of corporate boards without unanimous consent of shareholders (Wheeler, Colbert and Freeman, 2002; Ghosh, 2015). The concept propounds that corporations should have a good board structure in order to enhance performance (Securities and Exchange Commission ([SEC], 2003; 2011). It is firmly rooted on the assumption that good corporate governance practices enhance corporate performance. They did it in exchange for statutory benefits such as appraisal rights in order to make corporate governance more efficient. Corporate governance is considered as one of the most debated issues in the finance and accounting literature in the recent years. This debate is expected to have been occasioned by the recent corporate failures experienced around the world such as Enron Corporation and WorldCom among others (Mang'anyi, 2011). The early debates came up after the increase in agency problem, which emanated from separation of ownership and control created in the case of *Salomon v Salomon*, (1897). Today's world has seen that organisations' transparency, financial disclosure, independency, board size, board composition, board committees, board diversity, board meetings, duality of positions of Board Chairman and Managing Director/Chief Executive Officer, to mention a few is the cornerstone of good governance practices. These variables are in the main agenda of most meetings and conferences worldwide including the World Bank, International Monetary Fund (IMF) and Organisation of Economic Co-operation and Development (OECD) (Inyanga, 2009).

Corporate governance can be defined as the system of principles, policies, procedures, and clearly defined responsibilities and accountabilities used by stakeholders to overcome conflicts of interest inherent in the corporate form. Maimako (2010) defines corporate governance as an internal system or mechanism encompassing policies, processes and people, which serve the needs of shareholders and other stakeholders by directing and controlling management activities with good business savvy, objectivity, accountability and integrity. According to Nworji, Olagunju and Adeyanju (2015), corporate governance is a diligent manner by which providers of corporate capital are legally and ethically rewarded. Corporate governance is described as the system by which companies are controlled and directed in the best interest of the owners (Cadbury, 2010). It is viewed as the set of processes, customs, policies, laws and institutions affecting the manner a corporation (company) is directed, administered and controlled. It is concerned with a system, principle, practice and policy that require the management to admit that shareholders are the true and legalized owners of business entities. It is about the acceptance by management of the inalienable rights of shareholders as the true owners of the corporation and of their own role as trustees on behalf of the shareholders; it is about commitment to values, about ethical business conduct, and about making a distinction between personal and corporate funds in the management of a company. It involves a structure that prescribes set of relationships among a company's management, its board, its shareholders and other stakeholders. Corporate board is central to corporate governance practice as it is regarded an important element in the enhancement and sustenance of private sector growth and development. This is because corporate governance pursues not only to strengthen the ability of companies to attract investment and ensure growth, but also to guarantee strength, effectiveness, efficiency, and more accountability of the companies to their stakeholders (Coleman, 2008; International Finance Corporation [IFC], 2010, 2014). The Cadbury Report was issued in reaction to corporate collapses such as Maxwell Communications Plc and Polly Peck International Plc in the United Kingdom (UK). Ten years later, the enactment in the United States of America (USA) of the Sarbanes-Oxley Act in 2002 was in reaction to the collapse of Enron Corporation and WorldCom (Souster, 2012). The collapse of these corporate giants was linked to lack of sound corporate governance principles.

Board structure is a framework that encompasses the entire elements and components that qualify the board. Global practice reveals that there are basically two types of board structure; a single-tier or unitary board and a two-tier board. Board structure is an arrangement that basically and narrowly deals with the board size and the board composition. From a wider dimension, board structure covers board size, board composition, board diversity, internal board committees, board meetings and duality of the positions of the Board Chairman and the Chief Executive Officer (CEO). The definition of board structure as given by Tricker (1994) is adopted in this study since board structure is a corporate governance mechanism. Tricker (1994) noted that board structure distinguishes between those directors who hold management positions in a company and those who do not engage in the management affairs of the company. In other words, board structure classifies directors into executive directors and non-executive directors. It further classifies directors into independent directors and dependent directors. Profitability as a parameter of financial performance is measured by the firm's optimum attainment of targeted financial returns through effective and efficient utilization of human, material and financial resources at its disposal (Oparanma, 2010). Profitability is the ability of a company to use its resources to generate revenues in excess of its expenses. In other words, this is a company's capability of generating profits from its operations. Profitability is one of four building blocks for analyzing financial statements and company performance as a whole. The profitability of a firm measures its gains over its operative years. As contained in Bauer (2004), from the agency cost theory view point, firms with more profit should have higher leverage for income they shield from taxes. It holds the view that more profit firms should make use of more debts purposely to serve as a disciplinary measure for the managers. For this reason, the need for flexible and appropriate board structure for quick and informed decision making is necessary to respond quickly to the current dynamic business environment. Profitability measure of financial performance is a complex issue that has no single approach for its measurement. Firms face diverse stakeholder demands to choose from various alternatives to address financial performance challenges from internal and external environments. At this juncture, Berle and Means (1932), opine that in contract of agency, the agent's interest often comes into conflict with that of the principal which results to suboptimal performance of the organization as a result of moral hazards and adverse selection. Therefore, there is an increasing demand for corroborating good governance to protect the firm's shareholders' wealth, enhance firm's profitability and financial performance for sustainable growth and development (Dembo & Rasaratnam, 2014).

Many of the modern day corporations are not controlled by those who own them. This is what sparked Berle and Means (1932) ground-breaking study, when they warned that the growing dispersion of ownership was giving rise to a potential value-reducing separation of ownership and control. Berle and Means (1932) expected an inverse relationship between the diffuseness of shareholdings and financial performance. Berle and Means (1932) argued that shareholder diffusion makes it difficult for the firm's equity owners to act collectively and hence influence management to a great extent. The board of directors was therefore assigned with the fiduciary duty to act in the diffused owners' best interest. However, in some cases, these directors suffered from the same principal-agent problems faced by those diffused shareholders. Studies conducted on the effect of corporate governance on financial performance of firms by Brown and Caylor (2004); Gompers, Ishii and Metrick (2003) found that companies with effective corporate governance systems tend to have higher measures of profitability and generate higher returns for shareholders. In essence, it can be deduced from above that ineffective corporate governance systems and practices increase the risk to an investor, thus affecting the financial performance of the company. Ineffective corporate governance systems could even cause a company to go bankrupt, as seen from recent examples such as the failure of the Enron Corporation, WorldCom, Tyco, Adelphia and Global Crossings. The occurrence of major corporate scandals, such as Enron and WorldCom in America and Regal Bank and Leisurennet in South Africa, has brought increased attention to corporate governance issues and regulations aimed at improving the corporate governance environment. Poor governance, lack of oversight functions, relinquished control and lack of accountability by the board of directors are some of the reasons for those corporate failures. As a result, various corporate governance

reforms such as the Sarbanes-Oxley Act (2002) in America, the Cadbury Report (1992) in the United Kingdom, the King Report (1994) in South Africa and the Securities and Exchange Commission (SEC) Code (2011) as amended in Nigeria were issued. These corporate governance reforms among other things specifically emphasized changes to listed companies' board structures in an attempt to reduce the likelihood of similar corporate failures occurring in the future (Abidin, Kamal & Jusoff, 2009).

The diversity of corporate practices around the world challenges a common definition for corporate governance (Aguilera & Jackson, 2003). However, the major role of an operational corporate governance system, as reflected in most accounting and finance literature, is to abridge the underlying principal-agent problems in a firm (Desender, 2009). An agency relationship occurs when an agent acts on behalf of a principal. Such a relationship may create a latent for a principal-agent problem where the agent may act for his own well-being rather than for that of the principal. Effective corporate governance systems are primarily concerned with minimizing the potential principal-agent problems between managers and shareholders and between directors and shareholders. Monitoring these principal-agent problems can result to agency costs to shareholders. To reduce these costs, shareholders nominate corporate directors to monitor and prevent principal-agent problems that may arise in the firm (Shleifer & Vishny, 1997). Hence, the board of directors is at the core of ensuring that good corporate governance is practised by a firm (Desender, 2009). Studies by Hermalin and Weisbach (1998) found that one important criterion to ensure the success of the board of directors as managers of the company is to have an effective board structure in place. Brennan, (2006) opined that the monitoring duty of a board is influenced by factors such as board composition, board ownership, board diversity, board size, board committees, board meetings, CEO duality and information asymmetries. A number of studies were conducted on board structure and firm performance in recent years (Golmohammadi, Ranjdoost & Cherati, 2012; Jackling & Johl, 2009; Uadiale, 2010; Tornyeva & Wereko, 2012). However, a few researches were known to be conducted in Nigeria like that of Garba & Abubakar (2014), Adeyele & Maiturare (2012), who studied corporate governance and financial performance of listed Nigerian companies. To the best of the researchers' knowledge, there is little or no study that was conducted on board structure and profitability as a measure of financial performance of listed insurance companies in Nigeria. Therefore, this research aims to fill this gap by examining the effect of board structure on the profitability as a measure of financial performance of listed insurance companies in Nigeria.

LITERATURE REVIEW

Conceptual Review

Corporate boards have become synonymous with the control and management of listed firms, characterised by management teams that are different from the owners. The separation of management from ownership of firms brings about agency conflicts, which according to agency theory proponents as captured in Jensen and Meckling, (1976); Fama and Jensen (1983) arise from the human tendency to misappropriate the resources of others unless one is motivated against or deterred from such actions. The corporate board is simply a committee of selected representatives of the shareholders, investors and other stakeholders of an economic entity whose main responsibility is to provide superior supervision over the actions of employees and hired professional managers in order to ensure that actions are taken in the best interests of the stakeholders of the entity. There are several criteria for judging the effectiveness of corporate boards such as board size, diversity, and duality of Chairman/CEO positions, shareholding by board members, attendance at board meetings, gender diversity, and age of directors, board committees and nationality of members. Only literature on board size, board composition, board diversity, internal board committee, the duality of positions the Chairman/CEO, and board meetings is reviewed under this section. However, other characteristics, as they relate to the Nigerian insurance companies, are not discussed in this paper.

Importance and Key Characteristics of Corporate Governance

Corporate governance has taken a stronger foothold in developed countries when compared to emerging economies. Kolk and Pinkse (2010) assert that good corporate governance has many benefits to the organization. The importance of corporate governance tends to be different with the level of organizational governance (IFC, 2014). Calabrese et al. (2013) argued that company level, well-governed companies tend to have better and cheaper access to capital, and tend to outperform their poorly governed peers over the long-term. Companies that insist upon the highest standards of governance reduce many of the risks inherent to an investment in a company (IFC, 2004). In a similar view, Caprio, Laeven and Levine (2007) pointed out that good corporate governance can reduce the risk of financial crisis, which can have devastating social and economic costs. Finally, good corporate governance can lead to better relationship with all stakeholders and thus improve labour relations as well as the climate for improving social aspects such as environmental protection (Enobakhane, 2010). The directors are the key characteristic of good corporate governance mechanism (Blair, 1995) and are regarded as the officers of the company by the company law (Coleman, 2008). Based on the literature board structure (board size, board composition, board committees, and board diversity) could be used as a proxy for measuring corporate governance practices in firms (Enobakhane, 2010) since directors are the once who control the company. Board structure refers to how the organisation is structured in terms of the board of directors (Vaithilingam, Mahendhiran & Muthi, 2006). Ogbachie and Koufopoulos (2007) argued that a board structure is an integral part of the corporation as it plays a key role in the wellbeing of the firm.

Corporate Board Structure

To be effective, corporate boards must take steps, both in their structures and in their nominating procedures, to ensure that insiders and executive owners are unable to exercise undue control over the boards' activities and decisions. To ensure that shareowners' interests are served, boards must be appropriately independent so as to provide a variety of views, including those of investors, on strategy, governance, and financial performance (Othman, Ponirin & Ghani, 2009). In doing so, boards should seek competent professionals while refraining from nominating individuals with a large number of existing board memberships (Ogbachie & Koufopoulos, 2010). The primary responsibility of a corporate board of directors is to protect the assets of shareholders and ensure they receive a positive return on their investment. The board of directors has a fiduciary responsibility under United States (US) law to the company's shareholders (HillmanShropshire & Cannella, 2007). The board of directors is the highest governing authority within the management structure of a corporation or publicly traded business (Sundaram&Inkpen, 2004). It is the board's job to select, evaluate, and approve compensation for the company's Chief Executive Officer (CEO), evaluate the attractiveness of and pay dividend, recommend stock splits, oversee share repurchase, approve the company's financial statements, and recommend or reject merger and acquisition opportunities, and the like (SEC, 2011).

A board of directors is essentially a panel of people who are elected to represent shareholders and other stakeholders. A board of directors is an elected group of individuals that represent shareholders. The board is a governing body that typically meets at regular intervals to set policies for corporate management and oversight. Every public company must have a board of directors. Some private and nonprofit organizations must also have a board of directors (Attiye&Robina, 2007). A board of directors is a group of people who jointly supervise the activities of an organization, which can be either a for-profit business, nonprofit organization, or a government agency. Such a board's structure, powers, duties, and responsibilities are determined by government regulations (including the jurisdiction of the corporation's law) and the organization's own constitution and bylaws. These authorities or bylaws may specify the number of members of the board, the manner in which members of the board are elected (example, by shareholders vote at an annual general meeting), and how often the board meets. While there is no set number of members for a board, most range from 3 to 31 members. Some analysts believe the ideal size is seven. The board of directors should be a representation of both management and shareholder interests and include both internal and external members. The directors of an organization are

the persons who are members of its board. Several specific terms categorize directors by the presence or absence of their other relationships to the organization. A board is composed of individual men and women who are elected by the company's shareholders for multiple-year terms (SEC, 2003).

Board structure is a framework that encompasses the entire elements and components that qualify the board. Board structure is an arrangement that basically and narrowly deals with the board size and the board composition. From a wider dimension, board structure covers board size, board composition, board diversity, internal board committee, board meetings and duality of the positions of the Board Chairman and the Chief Executive Officer (CEO). Board structure in this study is based on the definition of board structure given by Tricker (1994). He noted that board structure distinguishes between those directors who hold management positions in the company and those who do not. In other words, board structure classifies directors into executive directors and non-executive directors. An executive director is an inside director who is also an executive with the organization. The term is also used, in a completely different sense, to refer to a CEO. A non-executive director is a member of a company's board of directors who is not part of the executive team. A non-executive director alternatively is an inside director who is not an executive of an organisation or typically does not engage in the day-to-day management of the organization but is involved in policymaking and planning exercises. In addition, non-executive directors' responsibilities include the monitoring of the executive directors and acting in the interest of the company stakeholders. Both the executive director and the non-executive director constitute dependent (insider) director, who, in addition to serving on the board, has a meaningful connection to the organization (Johnson, Daily & Ellstrand, 1996). Independent director alias outside director is a director who, other than serving on the board, has no meaningful connections to the organization (Organisation for Economic Co-operation and Development [OECD], 2004; Securities and Exchange Commission [SEC], 2003). Global practice reveals that there are basically two types of board structure, a single-tier or unitary board and a two-tier board. The two-tier board is further split into an upper-tier board and a lower-tier board. In a two-tier board, the upper-tier maintains a neighbouring watch on the executives at the lower-tier. Examples of countries that operate the two-tier board system are Germany, Austria and Netherlands. Many countries practice the single-tier or unitary board system. Nigeria, Britain, United States are examples Maimako (2010).

Board Size

This is considered to be a crucial characteristic of board structure. It refers to the total number of members sitting on the board. Historically, nonprofit boards have often had large boards with up to twenty-four members, but a modern trend is to have smaller boards as small as six or seven people. Studies suggest that after seven people, each additional person reduces the effectiveness of group decision-making (Wikipedia, 2020). According to the Corporate Library's study, the average size of publicly traded company's board is 9.2 members, and most boards range from 3 to 31 members. Some analysts' think the ideal size is seven (Clifford & Evans, 1997; Wen, Rwegasira & Bilderbeek, 2002; Wikipedia, 2020). State law may specify a minimum number of directors, maximum number of directors, and qualifications for directors (Blair, 1995; Bhagat & Blach, 1999; Wikipedia, 2020). For example, whether board members must be individuals or may be business entities. Thus, as an extra member is included in the board, a potential trade-off exists between diversity and coordination. According to Yermack (1996), coordination, communication and decision-making problems increasingly impede company performance when the number of directors increases. However, board size recommendations tend to be industry-specific, since Adams and Mehran (2003) indicated that bank holding companies have board size significantly larger than those of manufacturing firms.

Board Composition

Board composition dwells on the position that the board should strive for a diversity of backgrounds, expertise, and perspectives, including an increased investor focus. The rationale is board composition with these attributes will improve the likelihood that the board will act independently of management and

in the best interests of shareowners; reduce the influence of board members who are executive or financial officers of other companies who might have a natural inclination to support management's perspectives; ensure that board members are able to understand the many complicated financial transactions and activities; ensure that company activities are presented properly in the financial statements; and ensure that shareowner and investor views are considered along with the perspectives of CPAs (Wikipedia, 2020). The Companies and Allied Matters Act ([CAMA], 2004) in section 246 (1) prescribes the minimum number of directors for a registered company as two. The Act does not prescribe the maximum number of directors for a registered company. The Act allows each company to decide on the number of directors. However, The Code of Best Practices on Corporate Governance in Nigeria (2011) requires that the minimum number of directors should be five while the maximum number should be fifteen. The CBN code recommends a maximum number of twenty directors for a Nigerian bank. It further states that the number of non-executive directors on the board should exceed that of the executive directors. The CBN code provides that at least two non-executive board members should be independent directors. The actual number of director on a board varies from company to company (Maimako, 2010). A single-tier board is usually headed by a chairman. The board membership consists of executive directors, non-executive directors and independent directors. Non-executive directors do not exercise executive powers and are not employees of the companies on whose boards they sit. Executive directors who usually exercise executive powers are employees. The appointment of independent directors is a recent phenomenon in some companies. An independent director does not represent any particular shareholder's interest in the company (Maimako, 2010).

In single-tier boards, most governance codes recommend the separation of the position of a chairman from the position of a Managing Director (MD)/Chief Executive Officer (CEO) to prevent one individual from having unfettered powers of decision making. Although the Code of Best Practices for Governance in Nigeria recommends the separation of the position of the chairman from the position of MD/CEO, it states that in exceptional cases, the two may be combined (Okolo, 2016). The code suggests that there should be a strong Non-executive Independent Director as vice chairman of the board. However, the CBN code forbids the combination of the positions of chairman and MD/CEO and stipulates that no executive chairman is recognised in the structure. To promote balance of power within the leadership structure, a separation of the two positions is not just desirable but considered to be best practice (Maimako, 2010).

Board Diversity

Board diversity relates to the composition of the gender, age, skills, ethnicity, and other demographic factors of the individual members of the board. Although several attempts have been made to establish the relationship between the individual aspects of board diversity on the performance of the firm (Ujunwu, Okoyeuzu & Nwakoby, 2012; Laible, 2013; Adams, Gray & Nowland, 2011; Marimuthu & Kolandaisamy, 2009), there appears to be no consensus on whether one aspect of board diversity impacts more on the performance of the firm than another. However, literature is unanimous that board diversity in general does affect the performance of the firm and results in diverse opinions that impacts on the quality of corporate decisions (Bernardi & Threadgill, 2010; Adams & Ferreira, 2008; Dobbin & Jung, 2011; Salehnezhad & Abbasi, 2013). The resource dependence theory supports diverse boards because of the inherent human and social capital and associated resources that diverse persons would bring into the organisation (Pfeffer & Salancik, 1978). Thus, broadening the ethnic and gender diversity of boards not only helps increase the size of the candidate pool and therefore the quality of potential board members, but also helps broaden the perspectives and experience of the whole team. The literature indicates that the number of women in corporate boards is very low ranging from 9% to 16% in the Americas and Europe except in Norway where regulation specifies an enhanced quota for female board members (Sweigart, 2012; European Commission, 2014).

The empirical evidence in literature is that inclusion of females in corporate boards provides some level of corporate legitimacy to investors, increases social and environmental responsibility, improvements in intra-board communication and overall management style leading to improved financial performance and

shareholder value, increased customer and employee satisfaction, rising investor confidence, and greater market knowledge and reputation (Adams & Ferreira; 2008; Adams, Gray & Nowland, 2011; Sweigart, 2012; IFC, 2014). There are not any regulatory provisions in any governance code in Nigeria which require the inclusion of women in the boards of listed companies including banks. However, some passive provisions on the quality of board members are contained in both the CBN (2006) and the SEC (2011) Codes. The CBN (2006) Code indicates that only people of proven integrity and who are knowledgeable in business and financial matters should be on the board of listed banks while the SEC (2011) code states that board members of listed companies (including listed banks) should be individuals of upright personal characteristics, relevant core competence and entrepreneurial spirit with records of tangible achievements and knowledgeable in board matters. There are no requirements on age, minimum educational qualifications, and number of years of experience, foreign representatives, or other demographic factors pertaining to board membership in Nigeria.

Internal Board Committees

While a board may have several committees, two committees comprising the compensation committee and audit committee are critical and must be made up of at least three independent directors and no inside directors. Other common committees in boards are nominating and governance (Wikipedia, 2020). The functions of board of directors are performed through its various standing committees. The number of board committees varies from company to company depending on the type and size of a company. Committee charters usually define the purpose of the committees, their structures and composition, duties and responsibilities, frequency of meetings and reporting lines to the board. When committees of the board are established, their mandate, composition and working procedures should be well defined and disclosed by the board (OECD, 2004). Although functions are assigned to the committee, the full board takes final responsibility. In line with best practice, the chairman of the board should not chair any board committee (Maimako, 2010).

Duality of Positions

There appears to be a universal concern as to whether to separate the positions of the chairman of the board and the CEO or to allow one person to occupy both positions. From the agency theory perspective, independent board leadership is necessary to prevent managerial entrenchment. Whereas agency theory supports the split of the two positions to avoid over-concentration of power in a single individual which may impede effective control of the firm, stakeholder theory supports the concentration of the two positions in one individual for effective command and quick decision making (Dalton & Kesner, 1987; Abdullah, 2004). In the case of the banking sector, shareholders and other corporate governance activists appear to favour the splitting of the two positions between two independent persons (Bank for International Settlements, 2010; Tribbett, 2012). Literature is divided as to whether firms with chairman/CEO duality perform better than those that split the holding of the two positions. Empirical findings have also not been conclusive in that research findings have supported both opinions (Peng, Zhang & Li, 2007; Krause & Semadeni, 2013).

Rechner and Dalton (1991) found that firms with independent governance consistently outperformed the CEO duality firms (one person holds both positions as CEO and Chairman). On the contrary, Wong and Yek (1991) found that CEO duality did not lower the firm value. They argue that the internal incentives (bonus and stock options) and external market system (market for corporate control) have effectively motivated and adequately disciplined management of firms. Balinga, Moyer and Roa (1996); Brickley, Coles and Terry (1994) support the claim as their studies found companies with independent board leadership did not show enhanced performance. In Singapore, Wong and Yek (1991) found a significant and positive relationship between CEO duality and modified Tobin's Q. Tan, Chang and Tan (2001) also found CEO duality had positive and significant relationship with Tobin's Q during financial crisis (1997). In Malaysia, Haniffa and Hudaib (2006) found that independent leadership had insignificant relationship to Tobin's Q but had a significant and positive relationship to Return on Assets (ROA). Due to mixed

results, the present study adopts agency theory because independent board leadership is highly recommended by the Malaysian Code on Corporate Governance (MCCG) by Securities Commission Malaysia ([SCM], 2017). The guiding criteria for corporate boards' structure have been identified to include shareholders' demands and structure, regulatory requirements, state of the firm and cost-benefits trade-offs (Gabrielsson, Huse&Minichilli, 2007; Sridharan&Marsinko, 1997; Kakabadse, Kakabadse& Barratt, 2006; Thuy-Nga, 2010). The Nigerian experience is similar. Both the CBN Code (2006) for deposit collecting banks and the SECCode (2011) for all listed companies in Nigeria indicate that the positions of the chairman of the board and the CEO should be held by different individuals. In the case of banks in Nigeria, the CBN Code rejects the creation of the position of executive vice-chairman which would allow the holder to sit as alternate chairman of the board and also as the CEO of the bank. The Nigerian experience, according to CBN (2006), indicates that banks that had chairmen or CEOs with overbearing influence recorded serious corporate governance infractions. The occupation of position of the chairman of the board by a non-executive director not connected to the CEO is considered necessary as a check on the occupants of both offices and to improve corporate governance performance, reduce the powers of both occupants and ensure that the corporate board performs effectively and with significant independence (OECD, 2004; CBN, 2006).

Board Meetings

For corporate boards to carry out their responsibilities and duties effectively, members must of necessity hold meetings. A board of directors conducts its meetings according to the rules and procedures contained in its governing documents. These procedures may allow the board to conduct its business by conference call or other electronic means. They may also specify how a quorum is to be determined (Wikipedia, 2020). Many organizations in the English-speaking world have adopted Robert's Rules of Order as a guide to supplement their own rules (Wikipedia, 2020). In this book, the rules for conducting board meetings may be less formal if there are no more than about a dozen board members present (Wikipedia, 2020). An example of the informality is that motions are not required if it's clear what is being discussed (Wikipedia, 2020). In their study of 169 listed corporations from 2002 to 2007 in South Africa, Ntim and Osei (2011) observed that there is a statistically significant and positive association between the frequency of corporate board meetings and corporate performance, which implies that firms whose boards meet frequently are likely to perform better than those firms whose boards do not meet regularly. This indication provides empirical evidence to the agency theory suggestion that for effective control of firms for high performance, boards should meet more regularly. Chou, Chung and Yin (2012) also found in a study of Taiwanese firms a positive relationship between board attendance by directors and the profitability of firms. Both the SEC (2011) and the CBN (2006) Codes indicate that regular board meetings and the attendance by board members would ensure that the board performs its oversight function and monitors management's performance effectively. All listed firms in Nigeria are expected to hold board meeting at least once every quarter in the year. The SEC (2011) Code indicates that every board member should attend at least two-thirds of all board meetings to qualify for re-nomination.

Profitability as a Measure of Financial Performance

The capacity and ability of a firm to use its assets to generate revenue from its primary mode of business depict its overall financial health. When this is measured periodically, it forms the basis for both horizontal and vertical analyses and comparison. According to Demsetz and Lehn (2004), financial performance involves measuring a firm's policies and operations in monetary terms which are depicted in the firm's return on investment, return on assets, and value added, among others. Profitability is the ability of a company to use its resources to generate revenues in excess of its expenses. In other words, this is a company's capability of generating profits from its operations. Profitability is one of four building blocks for analyzing financial statements and company performance as a whole. The other three are efficiency, solvency, and market prospects. Investors, creditors, and managers use these key concepts to analyze how well a company is doing and the future potential it could have if operations were managed properly. Studying profitability allows policymakers to determine financial performance. That is,

accounting profit ratios proxy financial performance. The profitability of a firm measures its gains over its operative years. According to a recent literature review, most researchers calculate profitability through return on assets (ROA) or return on equities (ROE) or both, such as Beck et al. (2013). Some studies include net interest margin (NIM) such as Ghosh (2015) and Houston et al. (2010). However, insurance companies' profits are attained through charging fees on their services and through interest. As a result, the most profitable insurance companies are more efficient, competitive and stable (Apergis, 2014). Determinants of profitability can be internal (company-specific variables) and external (macroeconomic variables). However, focusing on determinants of profitability simplifies understanding of the reasons behind any loss or profits which lets senior company management look for alternative plans if there is any drop in returns. In case of a rise in profits, insurance companies are able to create higher earnings by focusing on variables that increase profits.

Corporate governance has been found to correlate positively with firms' profitability and overall financial performance which are both seen from the accounting ratios of the firms and the movement of price in the stock market. While the accounting profit ratios are measured by the accountants, constrained only by the standards set by their profession, the performance as reflected by the movement in the prices of securities in the stock market is measured by the investors, constrained by their acumen, information, optimism or pessimism and general psychology. In either case however, Young (2000) suggests that best governance practices exert a positive influence on firm financial performance since it prevents management and controlling investors from taking initiatives to expropriate minority investors. Thus, it is argued it impacts positively on the firm's goodwill and ability to attract equity capital from prospective marginal investors. Hence in considering approaches to measurement of firms' level of financial performance, Sanda, Minkailu and Garba (2005) insist that this is found in social science research based on market prices, accounting ratios and total factor profitability where market prices are readily obtained from national stock exchanges for all listed firms.

While profit is a flow concept, profit margin measures the flow of profits over some period compared with revenue and costs and thus there could be gross profit margin, operating profit margin, return on equity and return on assets among others. The relationship between corporate governance and a firm's financial performance stems from the understanding that economic value is driven by governance mechanisms such as the legal protection of capital, the firm's competitive environment, its board composition and board size, board diversity, CEO duality, board meetings, board committees (existence of Supervisory Committee and Audit Committee) and financial policy (Uadiale, 2010). In this light, Gompers, Ishii and Metrick (2003) revealed that stock returns are higher for firms with strong shareholder rights as compared to firms with weak shareholder rights. This suggests that firms with stronger or better corporate governance provisions outperform those with poor governance provisions in terms of profits, capital acquisition and sales growth. They also add that there is substantial evidence showing that weakly governed firms experience lower performance based on operating performance measures, lower sales growth and profit. This has been corroborated by Khatab, Masood, Zamam, Saleem, and Saeed (2011) from a study of twenty listed firms in the Karachi Stock Exchange in Pakistan.

Corporate Board Structure and Profitability

Board Size and Profitability

A review of the empirical evidence on the effect of board size on profitability shows mixed results. According to Adams and Mehran (2003), firms with a large board of directors ensure a better performance. Shukeri, Shin, and Shaari (2012) opine that board size had positive influence on firms' Return on Assets (ROA). However, the results of Haniffa and Hudaib (2006) are inconclusive. Using a market return as a measure of performance, their results suggest that a large board is seen as less effective in monitoring performance, but when accounting returns are used, large boards seem to provide the firms with the diversity in contacts, experience and expertise needed to enhance profitability as a

measure of financial performance. Finally, Connelly and Limpaphayom (2004) found that board size does not have any relation with firm's financial performance.

Board Composition and Profitability

When analysing the relationship between board composition viz-a-viz board diversity and profitability, the results of empirical studies are mixed. A number of studies, from around the world, indicate that non-executive directors have been considered effective in monitoring managers and protecting the interests of shareholders, resulting in a positive effect on profitability as a measure of financial performance. Dehaene, De-Vuyist, and Ooghe (2001) found that the percentage of outside directors is positively related to the financial performance of Belgian firms. Connelly and Limpaphayom (2004) found that board composition has a positive relation with profitability of life insurance firms in Thailand. However, there is also a fair amount of studies that tend not to support this positive perspective. Some of them find no significant relationship between accounting performance measures and the proportion of non-executive directors (Weir, Laing & McKnight, 2002; Haniffa & Hudaib, 2006). Haniffa and Hudaib (2006) summarized a number of views expressed in the literature which may justify this non-positive relationship, such that high proportion of non-executive directors may engulf the companies in excessive monitoring, which may be harmful to companies as they may stifle strategic actions, lack real independence, and lack the business knowledge to be truly effective.

Theoretical Framework

Corporate Governance is defined as the process and structure used to direct and manage business affairs of companies towards enhancing prosperity and corporate accounting with the ultimate objective of realizing shareholder long term value while taking into account the interest of other stakeholders. Various theories have been put forward to help understand the concept of Corporate Governance. However, the agency theory as endorsed in the literature by Mulili and Wong (2010) has been adopted for this study.

Agency Theory

Agency theory was developed by Jensen and Meckling in 1976 to address the conflict between shareholders and managers. Agency theory is defined as the relationship between the principals, such as shareholders and agents such as the company executives and managers. In this theory, shareholders who are the owners or principals of the company, hires the agents to perform work. Principals delegate the running of business to the directors or managers, who are the shareholder's agents (Clarke, 2004). Agency theory suggests that employees or managers in organizations can be self-interested. The shareholders expect the agents to act and make decisions in the principals' interest. On the contrary, the agents may not necessarily make decisions in the best interests of the principals (Padilla, 2000). The agents may be succumbed to self-interest, opportunistic behavior and falling short of congruence between the aspirations of the principals and the agents pursuits. Even the understanding of risk defers in its approach. Although with such setbacks, agency theory was introduced basically as a separation of ownership and control (Bhimani, 2008). The agents are controlled by principal-made rules, with the aim of maximizing shareholders value. Hence, a more individualistic view is applied in this theory (Clarke, 2004). The theory concluded that shareholders, who are the principals, can assure themselves that the agents (management) will only act in the best interest of shareholders if appropriate incentives are given and only if they are monitored.

Shareholders therefore, elect board of directors to monitor managers (Muth & Donaldson, 1998). The board of directors which serves as the link between shareholders and management performs an important oversight function on the company. The board of directors ensures that management acts in the best interest of the shareholders (Jensen & Meckling, 1976). Indeed, agency theory can be employed to explore the relationship between the ownership and management structure. However, where there is a separation, the agency model can be applied to align the goals of the management with that of the owners. The model

of an employee portrayed in the agency theory is more of a self-interested, individualistic and are bounded rationality where rewards and punishments seem to take priority (Jensen & Meckling, 1976).

Empirical Review

Various empirical studies have been carried out to determine whether any relationship exists between corporate board structure and financial performance and whether this corporate board structure has effect on corporate performance of listed companies in Nigeria. Kamardin, Abdul-Latif, Mohd and Adam (2014) examined the effect of some of board of directors' attributes namely board diversity, multiple directorships and ownership structure on firm performance in the Malaysian setting prior to the revised Malaysian Code of Corporate Governance 2012. Samples of the study are Malaysian listed companies on Bursa Malaysia from 2006 to 2010. Firm performance is measured by market to book value (MTBV) and return on assets (ROA). Findings of the study showed that higher fraction of either Malay or Chinese directors affect both measures of performance negatively. They suggested that board diversity in terms of ethnicity lead to better performance as diverse board could exploit the strength of ethnically diverse members. Multiple directorships are shown to have positive relationships with both measures of firm performance which support the assumption in quality hypothesis. Shungu, Ngirande and Ndlovu (2014) examined the impact of corporate governance on the performance of commercial banks in Zimbabwe. Using data gathered from 2009-2012 for a sample of five commercial banks, it applied multi-regression model, to assess the causal relationship between corporate governance measures (board size, board composition, internal board committees and board diversity) and bank performance. The results indicated unidirectional causal relationship between corporate governance and bank performance. In addition, there is a positive relationship between board composition, board diversity and commercial bank performance, although a negative relationship appears between board size, board committees and bank performance. The study recommended that in order to improve performance in commercial banks; good corporate governance practices which include; improving board structures, disclosure, and fiduciary duties of directors must be implemented. The study further suggested that Reserve Bank of Zimbabwe should ensure or put in place robust supervisory and regulatory policies; as the development and implementation of a national corporate governance code is long overdue.

Noushabadi and Kamyabi (2014) investigated the relationship between corporate governance and firm value of Iranian listed companies on Tehran stock exchange. The study Used 81 listed companies on Tehran Stock Exchange during 2008 to 2012 and utilised percentage of active non-executive managers in the board, managerial ownership, institutional ownership, state ownership, ownership concentration, duality of CEO and chairman the board as independent variables and firm value as dependent variable. Ordinary Least Squares (OLS) regression was applied to examine each of our hypothesis. The research results found that there is no any significant relationship between percentage of active nonexecutive managers in the board, managerial ownership, state ownership and firm value, but institutional ownership, the duality of duty of CEO are positively associated with a firm value. Kamyabi and Noushabadi (2014) conducted a study on the relationship between corporate governance and dividend payment policy in listed companies of Tehran Stock Exchange. The study utilized board size, duality of CEO and ownership of institutional shareholders as independent variables and dividend payment policy as dependent variable by controlling firm size, firm growth, financial leverage and return on assets. Using EVIEWS software 7, the study applied Ordinary Least Squares (OLS) method to test hypotheses. Based on a sample of 83 listed companies in Tehran Stock Exchange during 2008 to 2012 years, the empirical results indicated that boards size and institutional shareholders are in positive and significant relation to dividend payment policy of the listed companies in Tehran stock, but duality of CEO is not related to dividend payment policy of the listed companies in Tehran stock exchange.

Aina (2013) discussed and analyzed with the aid of comparative law, the Code of Corporate Governance in Nigeria and its effect on the board structure, the role, effectiveness and duties of the non-executive directors (NEDs) and how their independence can be assured, guaranteed and monitored to enhance the board's effectiveness, ensure full compliance with the codes of corporate governance. The study revealed

that regime of compliance and regulation with the codes of corporate governance is extremely. The study recommended a specialized regulatory agency to monitor compliance with the codes, upgrade standard and harmonize the different codes. Miring'u and Muoria (2011) analyzed the effects of Corporate Governance on performance of commercial state corporations in Kenya. Using a descriptive study design, the study sampled 30 State Corporations out of 41 state corporations in Kenya and studied the relationship between financial performance, board composition and size. The study found a positive relationship between Financial Performance and board compositions of all State Corporations. Furthermore and in the same vain, Ongore and K'Obonyo (2011) examined the interrelations among ownership, board and manager characteristics and firm performance in a sample of 54 firms listed at the Nairobi Kenya's Securities Exchange. The findings from this study show a positive relationship between managerial discretion and performance.

Uadiale (2010) studied the impact of board structure on corporate financial performance in Nigeria. The results of the study indicate that there is a positive association between board composition and financial performance and a strong positive association between board size and financial performance. Ogbechie and Koufopoulos (2007) evaluated corporate governance issues in Banks operating in Nigeria that deal with board characteristics, composition, operations and processes, and as well as their degree of compliance with Central bank of Nigeria Code of Corporate Governance. The empirical findings of the study revealed useful insights with respect to Corporate Governance Practices in Banks operating in Nigeria. The results showed that Nigerian Banks have embraced the principles of good Corporate Governance and have achieved high degree of compliance with the Central Bank of Nigeria Code of Corporate Governance. Based on the findings, the study suggested that for the majority of banks, board leadership should be independent, CEO and Chairperson Seats are held by different persons, and Nigerian banks should have large boards. Using data on companies in many African countries, including Ghana, South Africa, Nigeria and Kenya, Kyereboah-Coleman (2007) revealed that better governance practices are associated with higher valuations and better financial performance.

METHODOLOGY

The purpose of this study is to empirically investigate the effect of corporate board structure on profitability of listed insurance companies in Nigeria. The study is descriptive in nature; hence, the research design adopted for the study is the descriptive type. The population of the study comprised the twenty-three insurance companies listed on the floor of the Nigerian Stock Exchange (NSE) as obtained from the internet as at March 9, 2020. This population is considered appropriate for this study as data for the study are supposed to be generated from the financial information of insurance companies. From this population, a sample was selected to represent the entire insurance companies that were listed on the NSE. To be specific, selection of the sample was based on the following criteria as specified Bebeji, Mohammed and Tanko (2015). Insurance companies with missing values for the variable used were excluded. Secondly, the insurance companies were not involved in any merger during the study period. Lastly, for the empirical analysis of this study, the data are limited to insurance companies that were in existence throughout the period of the study (2015-2019). The justification of this study period was informed from the fact that NAICOM issued a specific Code of Corporate Governance which was industry-specific for all insurance companies listed on the Nigerian stock Exchange, effective February, 2009. On the basis of the above criteria, four insurance companies were selected. They include Aiico Insurance Plc., Cornerstone Insurance Plc., N.E.M Insurance Plc. and Niger Insurance Plc. Both probability and non-probability methods in the form of purposive and simple random sampling techniques were employed in selecting the insurance companies into the sample.

The study utilized only the secondary source of data. This is appropriate because the estimation of the model (Ordinary Least Square) in the study requires the use of cross sectional/time series (panel data) in the form of financial information which were generated from the financial statements of the sampled insurance companies. The data were sourced from the annual reports and accounts of the sampled insurance companies for all the relevant years covered by the study. In generating the data for the content

Corporate Board Structure and Profitability of Insurance Companies in Nigeria: Empirical Evidence from Selected Listed Insurance Companies

analysis method of data collection was employed. Data generated were analyzed using the multivariate regression analysis using E-view Processor. The insurance companies' financial performance linked to two explanatory variables (board size, and board composition) was considered. Correlation matrix was used to examine the nature and the degree of relationship among variables of consideration.

Model Specification

The model employed is an Ordinary Least Squares (OLS) regression to examine the separate and combined effect of board size, and board composition on profitability as a measure of financial performance of insurance companies in Nigeria. The model was adopted from the works of Djordjevic (2002); Klapper and Love (2002); Sanda et al. (2005); Musa (2006); and Hassan (2012). The model is specified below.

$$ROA = \beta_0 + \beta_1 BS + \beta_2 BC + \varepsilon \dots \dots \dots (1)$$

Where: ROA = Return on Assets;

BS = Board Size;

BC = Board Composition;

β_0 = Regression Intercept;

β_1 = Coefficient of Board Size;

β_2 = Coefficient of Board Composition;

ε = Error term.

RESULT AND DISCUSSIONS

Data Presentation, Analysis and Interpretation

Table 1: Descriptive Statistics of Variables

VARIABLES	MEAN	STD-DIV	MINIMUM	MAXIMUM
ROA	0.133351	0.317414	-0.030400	1.596600
BS	8.666667	1.785611	6.000000	11.000000
BC	0.570708	0.121601	0.428600	0.727300

Source: Data Analysis (E-View 8 Output)

Table 1 summarizes the descriptive details for 2 variables that are considered capable of influencing return on assets of the four (4) selected quoted insurance companies in Nigeria and the result shows that average ROA is 0.133351 with a standard deviation of 0.317414 with regard to all four insurance companies observed and has a range from -0.030400 to 1.596600. The mean value for Board size is 8.666667 with a standard deviation of 1.785611 and has a range from 6.000000 to 11.000000. Board composition has a range from 0.428600 to 0.727300 and its average is 0.570708 with a standard deviation of 0.121601.

Table 2: Correlation Analysis of the Study Variables

	ROA	BS	BC
ROA	1.00000		
BS	0.243226	1.000000	
BC	0.270964	0.659441	1.000000

Source: Data Analysis (E-View 8 Output)

Table 2 shows that there is a positive correlation between return on assets (the dependent variable) and each of Board Size (BS) and Board Composition (BC) with coefficients of (0.243226) and (0.270964) respectively.

Table 3: Test of Hypothesis – Regression Analysis

VARIABLE	COEFFICIENT	STD. ERROR	T-STATISTIC	PROB.
C	-0.307834	0.361530	-0.851474	0.4071
BS	0.021968	0.050188	0.437716	0.6674
BC	0.439445	0.745516	0.589451	0.5638

Corporate Board Structure and Profitability of Insurance Companies in Nigeria: Empirical Evidence from Selected Listed Insurance Companies

R-squared	0.281482			
Adjusted R -squared	-0.032870			
F-statistic	0.895436			

Source: Data Analysis (E-View 8 Output)

The results in Table 3 revealed that 28% of variations experienced in ROA of the various insurance companies are caused by changes in the independent variables; while the probability of the F-statistic shows that the independent variables are significant in exerting pressure on the dependent variable. However, considering the individual coefficient in the relative statistics, the overall constant is not significant and negatively related to Return on Assets (ROA); Board Size (BS) is not significant but positively related to return on assets. Therefore, null hypothesis HO_1 is failed to be rejected. Hence, this indicates apparent evidence that board size has no significant effect on the profitability of insurance companies in Nigeria. This is not in conformity with the view of Shukeri, Shin and Shaari (2012) who opines that board size had positive influence on firms ROA. However, the results of Haniffa and Hudaib (2006) are inconclusive. Using a market return measure of performance, their results suggested that a large board is seen as less effective in monitoring performance, but when accounting returns are used, large boards seem to provide the firms with the diversity in contacts, experience and expertise needed to enhance financial performance. Nevertheless, Connelly and Limpaphayom (2004) found that board size does not have any relation with firm's financial performance which is in conformity with this study. On the other hand, Board Composition (BC) is not significant and also has positive relationship with return on assets. Therefore, null hypotheses HO_2 is failed to be rejected. This indicates that board composition has no significant effect on the profitability of insurance companies in Nigeria. Miring'u and Muoria (2011) analyzed the effects of corporate governance on performance of commercial state corporations in Kenya. Using a descriptive study design, the study sampled 30 state corporations out of 41 state corporations in Kenya and studied the relationship between financial performance, board composition and board size. The study found a positive relationship between financial performance and board composition of all the state corporations. This does not conform to this study. The result of this study is also not consistent with the study conducted by Uadiale (2010) who studied the impact of board structure on corporate financial performance in Nigeria. The results of the study indicated that there is a positive association between board composition and financial performance.

CONCLUSION AND RECOMMENDATIONS

Corporate board structure has attracted increasing studies in legal, business and social sciences. This is because corporate boards are the fulcrum of corporate governance and the pillars that support the effective formulation of corporate strategies and performance required to ensure the optimal performance of the firm (IFC, 2014; Kyereboah-Coleman, 2008). The regression results have shown insignificant effects of board size and board composition on insurance companies' performance in Nigeria. Board size has no significant effect on the profitability of insurance companies in Nigeria. This signifies that an increase or decrease in board size would not affect ROA. Similarly, board composition has no significant effect on the profitability of insurance companies in Nigeria. This signifies that an increase or decrease in board composition would not affect ROA. The overall conclusion of the study is that corporate board structure has no significant effect on the profitability of insurance companies in Nigeria. The recommendations of this study are directed at different parties that are involved in monitoring the institutionalization of an effective system of corporate governance in Nigeria. These parties include, share-holders, board of directors, board committees, and government/regulatory bodies. On the basis of this and the findings of this study, the following recommendations are made:

- i. Insurance companies should have an optimal board size and board composition so as to draw investor's confidence in the companies which is attracted by increased independency of the board; capable of enhancing financial performance. This can be done by ensuring that insurance companies have adequate board size to the scale and complexity of the company's operations and be composed in such a way as to ensure diversity of experience without

- compromising independence, compatibility and integrity. The board size should not be too large and must be made up of qualified professionals who are conversant with oversight functions. The majority of board members should be non-executive directors whom should be independent directors. There is also a need for insurance companies to comply with corporate governance regulatory requirements and codes of best practices so as to avoid bankruptcy and placement under judicial management.
- ii. The directors should practice due care and diligence in discharging their duties. The directors should disclose up all their activities to the public through audited financial statements. This would help the insurance companies attract return for its customers and investors where the directors discharge their duties in an ethical way. There is also a need for directors to address issues of board structure in order to avoid a large chunk of directors in the companies' board. The directors are also mandated by the Companies Act to ensure responsibility and accountability. The board structure as shown by the regression should have more independent non-executive directors. This would tend to attract more potential investors since investors favour companies with more independent non-executive directors than executive directors.
 - iii. Investors with a profit motive should target insurance companies with good corporate governance practices. It is believed that formulation and implementation of complimentary good corporate governance practices and performance growth policies would lead to achievement of the oral objective of the companies, shareholder wealth maximization which is needed by investors. Shareholders of insurance companies should seek to positively influence the standard of corporate governance in the insurance companies in which they invest by making sure there is strict compliance with the codes of corporate governance. Further, it is the responsibility of the shareholders to ensure that the committee is constituted in the manner stipulated and is able to effectively discharge its statutory duties and responsibilities.
 - iv. Government should come up with the national corporate governance policy, which will make governance equality among companies in the country. Since without such a policy framework, monitoring and assessment companies' corporate governance will be limited to only in-house organisational appraisals. In addition, this would help regulators to enforce companies' regulation and supervision on an equal platform to all insurance companies.

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Impact of Auditors on Fraud Detection and Prevention in Deposit Money Banks (DMBs) in Nigeria

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Abstract

This study examined the impact of auditors captured by risk assessment, system audit and verification of financial report on banking fraud control in Southwest Nigeria. The study employed survey design in which a set of questionnaire was administered on the selected banks in Southwest Nigeria. Multiple regression technique and ANOVA were used for the analysis. The results indicated that the level of fraud control in Nigerian banks during the period covered was low; and that risk assessment management, system audit and verification of financial reports adopted by the banking industry in Southwest Nigeria limit the fraudulent activities among the Nigerian banks by 35, 13 and 18 percent respectively; the results also showed that audit roles captured by risk assessment, system audit and verification of financial reports were statistically significant in determining the fraudulent act in banking industry in Nigeria. Based on the findings, the study concluded that risk assessment, system audit and financial report verifications are carried out to determine the effectiveness and impact of auditors on fraud control in Nigerian banks which reveals that auditors' roles need to be improved to enhance fraud control in banking industry. The study recommended that auditors should increase the scope of their activities on the efficiency of banks internal control system, risk assessment and system audit as this will enhance the detection of fraudulent activities. Also, management of banks should ensure strict compliance with their respective internal control system.

Keywords: Auditor, Risk Assessment, System Audit, Financial Report, Fraud, Auditor

INTRODUCTION

The impact of auditors in fraud control and monument is essential. Fraud has been one of the most problematic and unsolvable matter for business all over the world for a long time; however, there has been much more attention and research dedicated to the topic after the scandals such as Enron, WorldCom and others. Frauds have led to loss of huge amount of money in the banking industry and nation's economy in general (Fatoki, 2015). Researchers have discovered that fraud contributed drastically to the financial distress of poor performance of many banks in Nigeria (Austin, 2011). According to Olorunsegun (2010), fraud is a major challenge of banking industry and this makes all banks vulnerable and distress. The management of each bank spends their hard-earned money to curtail its occurrence. Moreover, it puts question marks on the integrity of the employees and management of the banks and also gives rise to absolute loss of customers' confidence in banking. Adeyemo (2012) asserted that banking frauds are made possible with insiders or staffs collaboration. The management and staffs of every bank are expected to carry out their responsibilities with ultimate sincerity of purpose devoid of fraudulent practices to enhance public gain, trust and goodwill. Besides the role played by banking industry in growth and development of the nation economy, fraud goes a long way in depriving the economy of the necessary funds required for sound economic activities. It was discovered that the actions taken by the management of the banks in the aftermath of fraud cases are insufficient in stopping another fraud from being perpetrated. In a study carried out by Onwujiuba (2013), it was revealed that the managements of banking industry are not putting up enough measures that can prevent and control banking frauds, hence, the reason for incessant fraudulent practices in Nigeria.

Adeyemi and Uadiale (2011) opined that the existing duties and responsibilities of auditors are inadequate and are not clearly defined. Also, the expectation of the people on the issues of the auditors' responsibilities in detecting and curtailing fraudulent act are high. As a result, a significant number of people or respondents believed that auditors' responsibilities should be widened. Abu-Saeed and Kabir

(2012) revealed that the internal audit unit needs to be alive in discharging their responsibilities and the need to acquire basic or necessary knowledge that can engender fraud prevention in the banking industry. Sorunke (2016) observed that internal audit unit did not contribute significantly to fraud prevention and control in reality. The question is, what then, is the impact of auditors in the prevention of fraudulent activities in Nigeria's banking industry? In view of this, the study was carried out to investigate the impact of auditor on bank fraud in Nigeria.

LITERATURE REVIEW

Conceptual Clarification

Concept of Banking

Banking represent the means and methods through which funds are obtained, controlled, allotted and used (Ciuhureanu, Balteş & Brezai, 2009), a bank can be associated with a financial service conglomerate which is able to provide basic financial services and other functions within the economic, political, legal and international environment that determines its profit and expansion opportunities, interest rates, exchange rates and the particular resources a bank need (Drigă, 2006). The efficiency and effectiveness of the banking system is a key determinant of the economy growth of a nation (Dura & Drigă, 2015). The existence of an effective banking industry is a panacea to growing any nation's economy. The pivot of any economic development is the financial sector through its creditable roles in intermediating funds/capital from the surplus units to deficit units. These two laudable and reliant functions bring the banks face to face and in contact with the public who come to obtain their services. However, the roles of mobilizing deposit (surplus) and directing such deposit to the deficit sectors of the economy makes DMBs to attend to a large number of customers who they may not, most of the time, personally know, or whose identity may not be immediately known to the banks. This shows that banks may not be familiar with the true identity of these customers all of whom either have genuine/honest or fraudulent intentions (Dimejesi, 2014).

Concept of Fraud

The terms "fraud" has received attention and different definitions from different scholars, researchers and authors. What is very peculiar to the definitions is that the concept has been associated with embezzlement, financial misstatement and misappropriation, extortion, illegal amassing of wealth through dubious means, act of deception, bribery, false representation, theft, concealment of material fact etc. According to Adeyemo (2012), fraud is defined as "any illegal act characterized by deceit, concealment or violation of trust. These acts are not dependent on the application of threat or violence or of physical force. On the other hand, Mutesi (2011) defined fraud as "any premeditated act of criminal deceit, trickery or falsification by a person or group of persons with the intention of altering facts in order to obtain undue personal monetary advantage. Osioma (2013) defined fraud as all the multifarious means which human ingenuity can devise and are resorted to by one individual to get any advantage over another. It includes all surprise, trick, cunning, dissembling and unfair ways by which another is deceived. Fraud covers a plethora of corporate crimes like embezzlement, larceny, theft, misappropriation of assets, among others. Penny (2002) explains fraud as an illicit financial gain for the fraudster or loss for the victim while Mahinda (2012) introduces a different concept to the definition of fraud. He argues that the menace occurs as a result of a person in position of trust or accountability who advances his own personal interests at the expense of the public interests through digressing from the set standards and rules.

Types of Fraud

Fraud in the banking is varies widely in nature, character and method of perpetration. Olaoye, Dada and Adebay (2014) categorize perpetrators into three namely; management of the banks (otherwise referred to as management fraud), insider (employee), outsider (customers and noncustomers) and insider/outsider. These are explained thus: Management Fraud is a kind of fraud frequently committed by management

Impact of Auditors on Fraud Detection and Prevention in Deposit Money Banks (DMBs) in Nigeria

staff of a reporting entity, which comprises the director, general managers, and managing directors to mention but a few. As management fraud is normally committed by persons in positions of trust, they have the authority to override internal controls (Singleton, Bologna & Lindquist, 2006).

According to Ahmed et al., (2014) the category of victims of management frauds are investors and creditors, and the medium for perpetrating the fraud is financial statement. Insiders/employees frauds are the frauds perpetrated by the employees of the bank or organization is also known as nonmanagement fraud. According to Olaoye (2009) it is the fraud perpetrated to the detriment of the organization and generally it is for the direct or indirect benefit of an employee. Boniface (1991) identifies some of the typical manifestations of employee's frauds in the banks to include: Cash thefts from the tills by banks' staff, forging of customer's signature with the intention of illegally withdrawing money from the account with the bank, use of forged cheques to withdraw money from the customer's accounts, opening and operating of fictitious account to which illegal transfers could be made and false balance credited, lending to fictitious borrowers effected through fictitious account opened at a branch, claiming of overtime for hours not worked, suppression of cash/cheques; fund diversion and computer fraud. Outsiders' fraud is frauds perpetrated by customers and non-customers to the detriment of the banks. This class of fraud as describe by Perspectives on the Nigerian Financial Safety-net (NDIC 2009) includes: advance fee fraud ("419") that usually involves an agent approaching a bank with an offer to access large funds for services purportedly rendered or contracts executed. According to Olaoye (2014), the collaboration of an accomplice is sought through the agent who must receive a fee or commission "in advance". As soon as the agent collects the fee, he disappears, and the funds never get to the bank. This is popularly known as "419" in Nigeria. Lastly, Outsiders/insiders fraud, this is the types of fraud committed by outsiders (customers/non-customers) of the bank with the effort of an insider (bank staff). For this type of frauds to be successful, there must be an insider providing necessary information and other logistic in secret (Olaoye, et al 2014).

Causes of Bank Fraud

NDIC (2009) groups the causes of bank fraud into three namely; institutional, social and individual. Institutional factors are conditions unconsciously created by institutions that allow fraud to flourish. In such institutions, a lot of loopholes are allowed to exist which fraudsters easily identify and exploit to commit their acts. Olaoye, Dada & Adebayo (2014) highlighted here under the common institutional causes of fraud: inadequate internal control, inexperience of staff/inadequate staff training, employment disaffection, poor management, banks reluctance to report fraud due to the perceived negative publicity or image from the public, inadequate training and re-training, failure to engage in regular call-over, employees refusal to abide by laid-down procedures without any penalty or sanction, automation and computerization and disregard to know your customer (KYC) rules. Social factors such as societal values, placing of high value on accumulation of wealth by the society without regard for the source, promotion of nepotism in office where by only those with people in "high places" or high deposit or people who have relations or people holding sensitive political positions are favored, thereby placing less emphasis on professionalism, poor economy and slow legal process are part of social factor that influence fraud (Olaoye, et al. 2014; Akindele 2011 & Adewunmi 1996); Individual factors are factors that pertain to the person, that is, those that are peculiar to the individual and may encourage him to live a fraudulent life. These factors include: Biological make-up – e.g. poor moral upbringing, criminal background, insatiable appetite for adventure- criminal or otherwise, wrong choice of friends or mentors, crime fathers, friends or parental influence to slow down investigation and weak mind.

Auditors Role

According to Awe (2005), Oladipupo (2005) and Babatunde (2002), auditor is an independent person appointed by the shareholders to examine the records and financial statements of an organization for the purpose of forming an opinion on the accuracy and correctness of the financial statements. When planning and performing audit procedures and in evaluating and reporting the results thereof, the auditors

should consider the risk of material misstatements in the financial statements, including those resulting from fraud or error. The main objective of an audit of financial statements is to enable the auditor to express an opinion whether the financial statements are prepared, in all material respects, in accordance with an identified financial reporting framework and that the financial statements give a true and fair view or present fairly, in all material respects of the financial results and state of affairs of the client entity (Babatunde 2002). Although the auditor's opinion enhances the credibility of the financial statements, the user cannot assume that the opinion is an assurance as to the future viability of the entity nor the efficiency or effectiveness with which management has conducted the affairs of the entity. The subsidiary objectives are, as described by (Awe, 2005; Oladipupo, 2005 and Babatunde, 2002): to detect errors and fraud; to prevent errors and fraud; and to help the client to improve upon his accounting and internal control systems. It must be emphasized that audit is not designed to detect errors, fraud and significant weaknesses in the client's systems but the audit work should be carried out in such a manner as to be able to expose errors, frauds and weaknesses (if they exist). In accordance with ISA 200, the auditor shall maintain professional skepticism throughout the audit, recognizing the possibility that a material misstatement due to fraud could exist, notwithstanding the auditor's past experience of the honesty and integrity of the entity's management and those charged with governance.

Auditors shall be responsible for prevention and assessment. Prevention though, it is not the auditor's function to prevent fraud and error, the fact that an annual audit assignment is carried out may create fear in the heart of the fraudster, hence, act as a deterrent. Risk Assessment is the 'process of assessing, understanding and managing risks that the entity is inevitably subject to in attempting to achieve its corporate objectives (CIMA, 2005). When planning the audit, as stipulated in International Standard on Auditing (ISA 315 and SAS No. 82,) an auditor should assess the risk that fraud or error may cause the financial statements to contain material misstatements ISA 315. Though, Porter (1977) concluded that the primary objective of an audit in the pre-1920 was to uncover fraud. However, according to Oyinlola (2010) the primary objective of an audit has changed to verification of accounts and expression of opinion on the financial statement. This is most likely due to the increase in size and volume of companies' transactions which in turn made it unlikely that auditors could examine all transactions. The existence of a fraud risk assessment and the fact that an auditor is articulating its existence may even deter would-be fraud perpetrators (IIA, AICPA, & ACFE). Furthermore, Oyinlola (2010) claims that auditors are required to be more proactive in searching for fraud during the course of an audit assignment. Their duties now include considering incentives and an opportunity presented to potential fraudsters, as well as rationalizations that the fraudulent act is justified. Auditors are also expected to inquire more closely into reasons behind such matters as, for example, errors in accounting estimates, unusual transactions that appear to lack business rationale, and a reluctance to correct immaterial errors discovered by the audit. Based on their risk assessment, according to ISA 330, the auditors should design audit procedure so as to have a reasonable expectation of detecting misstatements arising from fraud or error which are material to the financial statements. The auditors seek sufficient appropriate audit evidence that fraud and error which may be material to the financial statement have not occurred or that, if they have occurred, the effect of fraud is properly reflected in the financial statements or the error is corrected. Therefore, auditors shall report the fraud detected to those saddled with entity governance on time. He shall also report to those charged with the governance of the entity any other matter related to fraud (Babatunde, 2009). Auditor shall report to: members of the company, management of the company, and Third parties.

LITERATURE REVIEW

Salameh, Al-Weshah, Al-Nsour and Al-Hixain (2011) examined the impact of internal audit structures and perceived effectiveness of fraud prevention in Canada using t-test. Based on their findings they concluded that fraud could be prevented with effective internal audit units. Arivid and Cornelia (2012) assessed the impact of fraud prevention on bank-customer relationships" using least square method and discovered another dimension to the issue of fraud when they found a positive association between customer familiarity with and knowledge about fraud prevention and the quality of customer relationship

Impact of Auditors on Fraud Detection and Prevention in Deposit Money Banks (DMBs) in Nigeria

as a measured of satisfaction, trust and commitment. Linder Bresster (2010) investigated the role of forensic accountant in fraud investigations: importance of Attorney and Judge's perception and concluded that training of auditors is important for fraud prevention. He argues that this will make them to become experts in fraud prevention. However, Chen, fifth, Gao and Rui (2006) assessed the ownership structure, corporate governance and fraud in China using table and percentage. They concluded that a large number of outside directors contributed to financial statement fraud. The large proportion of outside directors would be helpful in monitoring the firm's activity to reduce fraud. Reinstein, Moehrlr and Moehrlr (2006) adopted Kohlberg Model in their work to investigate crime and punishment in the marketplace: Accountants and Business executives repeating history and concludes that financial statement fraud begins with financial and morale problems in the banks but Zhang, Zhou and Zhou (2007) disclosed in their study on audit committee quality, auditor independence, internal control weaknesses and effective role of the audit committee contributed to better internal control of the industry.

In addition to the competence of the audit committees are also expected to be independent in overseeing the bank's internal control. The audit committee is also responsible for ensuring that management does not engage in fraudulent conduct. Agyei, Kusi-Aye and Owusu-Yeboah (2013) assessed Audit Expectation Gap in Ghana using regression analysis and found that there exists expectation gap concerning auditor's responsibility relating to fraud detection and prevention. The work corroborates Bogdanoviciute (2011) who empirically reviewed Audit Expectation Gap: The case of Lithuania and Saeidi, (2012) who empirically examined audit expectations gap and corporate fraud in Iran. Fadzil, Haron and Jantan (2005) assessed internal auditing practices and internal control system using t-test statistic. They discovered that the professional proficiency of internal auditors influenced the effectiveness of the internal audit function on fraud detection. Zacharia, Jerry and Danjuma, (2012) examined the adequacy of external auditing on fraud in Nigerian commercial banks. The study was done using analysis of variance and they found that external audit is not adequate in detecting fraud. Adeoti (2011) appraised the impact of Automated Teller Machine (ATM) on Frauds in Nigeria using chi-square and discovered that bankers and customers have roles to play in curtailing fraudulent act in our banks. He established that ATM helps in preventing fraud. Kabri (2009) evaluated the role of forensic auditing in combating fraud in the Nigerian banking sector using Main-Whitney U-Test. The study revealed the need for modifying regulatory framework in Nigeria by using macro environmental forces such as regulatory and legal pressure on auditing profession to be more responsive for fraud detection in financial statements. Uchenn and Agbo (2013) assessed the impact of fraud and fraudulent practices on the performance of banks in Nigeria. The study adopted multiple regression method and from the finding it was established that fraudulent activities inflict severe financial difficulties on banks which affects the amount of money available for economic development. Oyinlola (2010) investigated the role of auditors in fraud detection, prevention and reporting in Nigeria. The employed table and percentage discovered that the respondents are very concerned about the problem of fraud and that the duty of auditor is fraud detection.

METHODOLOGY

This study adopted survey design as a research strategy. The study employed the use of primary data in order to achieve the stated objective of the study. Descriptive and inferential statistical method was adopted in order to provide a proficient appraisal of the impact of auditors on bank fraud control in Southwest Nigeria. The population of this study include 22 Deposit Money Banks (DMBs) in Nigeria while data were source from auditors, control officers, operation managers and branch managers or heads of the six selected DMBs in Southwest Nigeria (First Bank of Nigeria Plc., United Bank for Africa Plc., Union Bank Plc., Zenith Bank Plc., Access Bank Plc. and Guaranteed Trust Bank Plc). Data used for this study were obtained using a well structured questionnaire from a sample size of 142 respondents selected from six (6) deposit money bank branches in Southwest Nigeria. The data was analyzed using appropriate descriptive and inferential statistics. The descriptive statistics involved Summary Statistics while regression analysis technique and ANOVA were used as an inferential statistics. Other diagnostics test

Impact of Auditors on Fraud Detection and Prevention in Deposit Money Banks (DMBs) in Nigeria

been carried out includes test for the significant of the estimated parameters using standard error test, T-test and probability test; test for significant of the fitted model using R- square and test for the goodness of fit of the model using F-test statistic.

Model Specification

The model for the study comprises explanatory variables which are Auditors' roles captured by Risk Assessment-RSKM, System Audit-SYSA and Verification of Financial Reports-VFR while, Fraud Control (FRDC) serve as the dependent variable. The model for the study is specified as follows:

$$FRDC = f(RSKM, SYSA, VFR)$$

$$FRDC = a_0 + b_1 RSKM + b_2 SYSA + b_3 VFR + \mu$$

Where:

FRDC = Fraud Control

RSKM = Risk Assessment

SYSA = System Audit

VFR = Verification of Financial Reports

a_0 = Constant Parameter

b_1, b_2, b_3 = Parameters to be estimated

μ = Error Term

RESULT AND DISCUSSIONS

Table 1: Presentation of Data Analysis

	FRDC	RSKM	SYSA	VFR
Mean	45.28571	45.17857	44.20626	42.93650
Median	46.00000	45.00000	43.33300	43.33300
Maximum	50.00000	50.00000	50.00000	50.00000
Minimum	36.00000	37.50000	33.33300	33.33300
Std. Dev.	3.473142	3.093702	3.611245	4.305556
Skewness	-0.681673	-0.214541	-0.418549	-0.120181
Kurtosis	3.481154	2.618656	3.801472	2.353250
Jarque-Bera	3.657888	0.576686	2.350407	0.833106
Probability	0.160583	0.749504	0.308756	0.659316

Source: Researcher's Computation

Table 1 shows the descriptive analysis results of all the activities regarding the roles of auditors in fraud control in Nigeria. The level of fraud control and the roles of auditors were captured by risk assessment, system audits and verification of financial reports. The result reveals that the average rate of fraud control, risk assessment, system audit and verification of financial reports are 45.29, 45.18, 44.21 and 42.94. This result implies that the average level of fraud control in banking industry is low and not encouraging. The risk assessment, system audit and verification of financial reports reveal that the auditors' roles need to be improved to enhance fraud control in banking industry in Nigeria. The maximum and minimum level of fraud control, risk assessment, system audit, verification of financial reports are; 50 and 36, 50 and 37.50, 50 and 33.33 and 50 and 33.33 respectively. The standard deviation values of 3.47, 3.09, 3.61 and 4.31 reveal the rate at which fraud controls, risk assessments, system audit and verification of financial reports have deviated from their respective and expected roles.

Also, it was discovered that skewness of fraud control, risk assessment, system audit and verification of financial reports are -0.68, -0.21, -0.42 and - .012 respectively. This result indicates that the financial variables under consideration are negatively skewed because their distributions have a long tail to the left. However, the kurtosis values 0.481, -0.381, 0.801 and -0.647 respectively measured the extent of peakness of the financial variables. The result reveals that fraud controls and system audit are leptokurtic

Impact of Auditors on Fraud Detection and Prevention in Deposit Money Banks (DMBs) in Nigeria

in nature because the kurtosis coefficient indexes are positive. On the other hand, risk assessments and verification of financial reports are platykurtic in nature because their coefficients of kurtosis are negative. The Jarque-Bera values reveal that the financial variables examined in this study are not normally distributed statistically.

Table 2: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.606	.655	4

Source: Researcher's Computation

The reliability of the instrument was tested using Cronbach's Alpha test. Cronbach's alpha test is used to investigate the internal consistencies of the research instrument. If the result reveals value between 0.50 and 1.0 for the identified variables then the reliability of the instrument in reasonable term is established to take acceptable decision and conclusion regarding the study under investigation. Thus, from the result, it was discovered that the Cronbach's Alpha statistics is 0.61. This value implies that the research instrument used in the study is 61 percent reliable and desirable in determining the impact of audit role, financial regulatory authorities and professional ethics on fraud control in banking industries in Nigeria.

Table 3: Fitted Model using Least Squares Method

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	21.34831	5.498828	3.882338	0.0091
RSKM	0.346672	0.077983	4.445817	0.0000
SYSA	0.129669	0.057619	2.250456	0.0056
VFR	0.182077	0.049109	3.707610	0.0003

Source: Researcher's Computation

From the fitted regression model, it was discovered that a positive linear relationship exists between risk assessment management, system audit, verification of financial reports and fraud control in banking industry in Nigeria. This shows that risk assessment management, system audit and verification of financial reports which captured the auditors' roles have a direct relationship with the fraud control in Nigerian banking industry. The result shows that risk assessment management, system audit and verification of financial reports adopted by the banking industry in Nigeria limit the fraudulent activities among the Nigerian banks by 35, 13 and 18 percent respectively. This result indicates that risk assessment management, system audit and verification of financial reports been carried out in the banking industry in Nigeria are not effective in tackling or controlling the incessant incidence of fraudulent activities. Thus, it implies that there is need for the auditors to be alive to their responsibilities such that financial statements are prepared in accordance with an identified financial reporting framework in such a way that the financial statements give a true and fair view of the financial results and state of affairs of the client entity so that banking fraud in Nigeria can be curtailed.

The statistical significance of the estimated parameters of the model was examined using the standard error test, t-test statistic and the probability value. In using standard error test, the rule of thumb is that half of the estimated parameter must be greater than the standard error value in absolute term to establish the statistical significance of the parameter. Therefore, it was discovered from this study that half of the coefficient of the variables or estimated parameters for risk assessment, system audit and verification of financial reports are 0.173, 0.065 and 0.091 respectively which are greater than the standard error values 0.078, 0.058 and 0.049. Thus, it implies that audit roles captured by risk assessment, system audit and verification of financial reports are statistically significant in determining the fraudulent act in banking industry in Nigeria. In using T-test statistic, the rule is that the estimated T-statistic value must be greater than or equal to the T-tabulated value at a given degree of freedom and level of significance that is, $T_{cal} \geq T_{tab}(df)$. Thus, the T-statistic values 4.446, 2.251 and 3.708 $>$ $T_{tab}(141) = 1.684$.

Impact of Auditors on Fraud Detection and Prevention in Deposit Money Banks (DMBs) in Nigeria

This implies the statistical significance of risk assessment, system audit and verification of financial reports in examining banking fraud in Nigeria. However, the same result was also discovered using the probability value of the estimated parameters. This is because the probability values 0.000, 0.006 and $0.000 < 0.05$ establish the statistical significance of risk assessment, system audit and verification of financial reports in curbing the incidence of fraud in Nigerian banking industry. The test for the theoretical significance of the estimated parameters was examined based on the sign of the estimated parameters. It was discovered from the analysis that risk assessment, system audit and verification of financial reports were positively signed. Thus, the result implies that audit roles captured by risk assessment, system audit and verification of financial reports have direct impact on fraudulent activities in banking industry in Nigeria. This result affirms a priori expectation that auditor's roles are vital to the control of fraudulent incidence in banking industry in Nigeria.

Table 4: Test for the Significance of the Model

Model Std.	R	R Square	Adjusted R Square	Error of the Estimate
1	.736a	.542	.483	3.29025

Source: Researchers' Computation,

The test for the significance of the model also known as the test for the coefficient of determination of the model was presented in table 4. It is the proportion of variation in the dependent variables that can be explained by the explanatory variables. This test was carried out using R-Square statistic. However, the R-Square value 0.54 implies that 54 percent variation in level of fraudulent act occurring in the banking industry in Nigeria can be explained by financial auditor roles captured by risk assessment, system audit and verification of financial reports. The result further reveals that the extent of the relationship that exists between audit roles and fraud control is 0.74. This implies that there is a strong correlation between the auditors' roles and fraudulent acts in banking industry. Thus, the need for an improvement of internal control system for effective service delivery; training and retraining of staff to acquire more relevant knowledge that can enhance better management thereby, leading to a drastic reduction in fraudulent acts in Nigerian banking industry.

Table 5: Test for the overall significance of the model

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	172.945	5	34.589	5.937	.000 ^b
Residual	209.736	136	5.826		
Total	382.681	141			

a. Dependent Variable: FRDC

b. Predictors: (Constant), RSKM, SYSA, VFR

Source: Researcher's Computation,

The test for the overall significance of the model is also known as the test for the goodness of fit of the model which was presented in table 4.5. The test was done using F- statistic and the probability of F- statistic. The result shows that the F-statistic value 5.937 is greater than the F-tabulated value 2.45 at 95 percent confidence level. Also, the probability of F-statistic $0.000 < 0.05$ the error margin allowed in the estimation of model. It was concluded based on this fact that the model is appropriate and adequate for determining the impact auditor roles captured by risk assessment, system audit and verification of financial reports on fraud control in Nigeria banking industry. Therefore, a viable internal control system through responsive auditor's role and guidelines are good, reliable and acceptable for determining the fraudulent activities in banking industry in Nigeria.

Table 6: Test for equality of mean among the variables

Method	Df	Value	Probability	
Anova F-statistic	(5, 562)	5.065579	0.0002	

Impact of Auditors on Fraud Detection and Prevention in Deposit Money Banks (DMBs) in Nigeria

Friedman's Test	(5,520)	25.401	0.000	
Cochran's Test	(5,520)	25.401	0.000	
F- Test	(5,520)	5.642	0.000	
Analysis of Variance				
Source of Variation	Df	Sum of Sq.	Mean Sq.	
Between	5 416	.5528	83.31056	
Within	562	4045.815	16.44640	
Total	567	4462.368	17.77836	

Source: Researcher's Computation

Table 6 presents the test for the equality of mean among the variables under investigation in this study. The test was carried out to show whether the impact of auditor's roles in curbing fraudulent activities in banking industry in Nigeria were the same or not. This test is done using Fstatistic, Friedman's Test and Cochran's Test. The probability values of Fstatistic = 0.000 < 0.05, Friedman's statistic = 0.000 < 0.05 and Cochran's statistic = 0.000 < 0.05 (0.05 = error margin) reveal that the contributions of risk assessment, system audit and verification of financial reports towards fraud control in Nigerian banking industry are not the same. Thus, as the activities are different, the impacts or the contributions are also different.

CONCLUSION AND RECOMMENDATIONS

Based on the findings of the study it was concluded that the roles of auditors in theory and practice on fraud control which is the integrated set of activities to prevent, detect, respond and monitor fraud in the financial world cannot be overemphasized even with the pervasiveness of fraud incidences in the contemporary times. Risk assessment, system audit and financial report verifications are carried out to determine the effectiveness and impact of auditors on fraud control in Nigerian banks which reveals that auditors' roles need to be improved to enhance fraud control in banking industry. The study recommended that auditors should increase the scope of their activities on the efficiency of banks internal control system, risk assessment and system audit as this will enhance the detection of fraudulent activities. Also, management of banks should ensure strict compliance with their respective internal control system.

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Impact of Audit Quality on Financial Performance of Quoted Cement Firms in Nigeria

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Abstract

This study examined the impact of audit quality on financial performance of quoted cement firms in Nigeria. The study is descriptive in nature and the correlational and ex-post facto designs were adopted in carrying out this research. Data were obtained basically from the published annual reports and accounts, and notes to the financial statements of the four firms that represent the sample of the study. The data collected were analysed and presented in tables. Multiple regression analysis using the SPSS Version 20.0 was employed in analyzing the data. The results of the findings show that auditor size and auditor independence have significant impacts on the financial performance of quoted cement firms in Nigeria. However, auditor independence has more influence than auditor size on financial performance. The study recommends that the management of quoted cement firms in Nigeria increase the remuneration of auditors in order to improve their financial performance and it also further recommends that management should employ the services of audit firms whose character and integrity is beyond question.

Keywords: Audit Quality, Financial Performance, Financial Statement, Auditor Independence, Quoted Cement Firm

INTRODUCTION

According to Matoke and Omwenga (2016) audit quality can be defined in two dimensions: first, detecting misstatements and errors in financial statement and second, reporting these material misstatements and errors. Audit quality is subject to many direct and indirect influences. In tandem with the stakeholder theory (Khan, 2006), perceptions of audit quality vary amongst stakeholders depending on their level of direct involvement in audits and on the perspective through which they assess audit quality. In recent times, a series of well-publicized cases of accounting improprieties in Nigeria has captured the attention of investors and regulators alike. The search for mechanisms to ensure reliable, high quality financial reporting has largely focused on the structure of audit quality (Adeyemi & Fagbemi, 2010). The financial statement audit is a monitoring mechanism that helps reduce information asymmetry and protect the interests of the various stakeholders by providing reasonable assurance that the management's financial statements are free from material misstatements. The societal role of auditors should be a key contribution to financial performance, in terms of reducing the risks of significant misstatements and by ensuring that the financial statements are elaborated according to preset rules and regulations. Lower risks on misstatements increase confidence in capital markets, which in turn lowers the cost of capital for firms (Heil, 2012; Watts & Zimmerman, 1986).

According to Oluwagbemiga 2010, an auditor has the duty for the avoidance, recognition, and reporting of fraud, other illegal acts, and errors. This has been shown in the decline of both small and big corporations' world over. Tobi et al. (2016) asserts that the usefulness of auditor independence is to improve the financial reporting quality by increasing the effectiveness and efficiency of the audit process and ensuring an auditor is not too familiar with the client to not jeopardize their integrity thus impairing their independent opinion. Quality auditing has a vital role in maintaining the confidence of users in the audited financial statements. According to Jackson et al. (2008), some of the factors that may influence auditor independence is providing non-audit services to the client and having relations with the client firm. Also, if the auditors overstay with a client as extended audit tenure, the independence may be affected. So, regulators organized the relationship between the auditor and the client by issuing some rules. The Sarbanes-Oxley (SOX) Act and the Securities & Exchange Commission (SEC) rules further

restrict the type of non-audit services that can be provided by auditors. The Public Company Accounting Oversight Board (PCAOB) has also issued additional independence rules related to the provision of certain tax services Arens et al. (2012). The SOX act requires that the lead and concurring audit partner rotate off the audit engagement after five years Arens et al. (2012). The prohibition of providing specific audit services to the client and audit partner rotation can maintain the auditor independence. Besides, the constant search for increasing firm profitability highlights the importance of enhancing firm financial performance as well.

The spate of audit failures in the world has brought a great deal of disappointment to investors and other corporate financial reporting stakeholders. Longevity of audit firm tenure has also been linked with fraudulent financial reporting (Adeyemi, Okpala & Dabor, 2012). If empirical studies are not carried out with respect to specific environmental factors the problem of poor audit quality may be exacerbated with likely grave consequences for the selected banks. Although, various researchers have carried out study on this area such as the following: Adeyemi and Fagbemi, (2010) Audit quality, corporate governance and firm characteristics in Nigeria; Musa and Shehu, (2014) in his study investigates the impact of audit quality on financial performance of quoted firms in Nigeria. Gholamreza and Samira, (2015) the relationship between auditing quality and the profitability in the companies accepted in Tehran's securities exchange market; Matoke and Omwenga, (2016) Audit quality and financial performance of companies listed in Nairobi Securities; Amahalu and Ezechukwu, (2017) ascertain the determinants of audit quality with a focus on selected Deposit Money Banks listed on the floor of Nigeria Stock Exchange from 2010-2015; Egbunike and Abiahu (2017) The effect of audit firm characteristics on financial performance of money deposit banks in Nigeria. Audit quality plays an important role in maintaining an efficient market environment; an independent quality audit underpins confidence in the credibility and integrity of financial statements which is essential for well functioning markets and enhanced financial performance.

External audits performed in accordance with high quality auditing standards can promote the implementation of accounting standards by reporting entities and help ensure that their financial statements are reliable, transparent and useful. Sound audits can help reinforce strong corporate governance, risk management and internal control at firms, thus contributing to financial performance (Internal Audits Board, 2011). The statutory audit can reinforce confidence because auditors are expected to provide an external, objective opinion on the preparation and presentation of financial statements. Auditors need to be independent in the opinions they express, while the work they have to do to form their opinions is highly dependent on and rooted in the real world and may become challenging in some business environments such as the cement industry. It is against this background that this research work is carried out. The purpose of this study therefore is to determine the impact of audit quality on the financial performance of quoted firms in Nigeria. There have been concerns about audit quality in the present environment, where severe failures have come to light, for example; Enron scandal of 2001; Parmalat in 2003; Cadbury Nigeria Plc in 2006 and Afribank Nigeria Plc in 2009 (Ajani, 2012; Miettinen, 2011). It has been found that the perceived reliability of audited financial information has declined. In contrast, the perceived relevance of audited financial information has increased. The effect of audit quality on financial performance has recently received attention from researchers in the western world. Studies have shown that audit quality has an impact on the financial performance of an organization (Beasley, 1996; Heil, 2012; Miettinen, 2011).

LITERATURE REVIEW

Conceptual Framework

Concept of Auditor Independence

According to De Angelo (1981), auditor's independence can be defined as the conditional probability that the auditor will disclose any misstatement in financial statements given that this misstatement was already discovered. Chia-Ah and Karlsson (2010), opines that the threats to independence are often very

significant and thus undermine the auditor's effectiveness in rendering the auditing services. Bamber and Lyer, (2007); Jackson et.al, (2008) assert that it becomes even more challenging when the auditor overstays with a client as extended audit tenures have been found to hamper auditor independence.

Theoretically, De Angelo (1981), analyzed the relationship between audit quality and auditor's size. Ebrahim (2001), observes that De Angelo (1981), argues that large auditors will have more clients and their total fees will be allocated among those clients. De Angelo (1981), argued that large auditors can contain the loss of a client and therefore, will provide higher quality of audit. Ebrahim (2001), states that the results of some empirical papers have provided additional support for the use of auditor size as a proxy for audit quality. Davidson (1993), used an indirect method to support the argument that size is a good proxy for audit quality. He argued that managers have incentives to manipulate the reported earnings to meet the analyst's forecasts. Therefore, if large auditing firms provide higher-quality audits than small auditing firms, we may expect that the forecast errors of big auditing firms' clients will be larger than those of small auditing firms' clients. Using data from Canadian firms, his results support that auditor size is a good proxy for auditor quality. Lennox (1999), looked at the two explanations of the hypothesized positive relationship between audit quality and auditor size; the reputation hypothesis suggested by De Angelo (1981), who argues that large auditors have more incentives to be accurate because they have more specific rents to lose if their reports are not accurate and the deep pockets hypothesis by Dye (1993), who argues that large auditors will be more accurate because they have greater wealth that is exposed to risk in case of any litigation. Lennox (1999), examined the relationship between audit quality and auditor size and found greater support for the deep pockets hypothesis.

Based on De Angelo's (1981), analytical results, Lidang (2004), states that many studies use auditor size, specifically Big 4 firms versus Non-Big 4 firms to differentiate audit quality. For example, Krishnan, 2003; Zhou and Elder, 2001; Bauwhede et.al, 2000; Becker et. al.,1998.

Woodland and Reynolds (2003), examined the association between indirect measures of audit quality and financial statement analysis using multivariate regression analysis. They found that audit fees is positively associated with financial statements but do not find evidence that auditor size, tenure or industry specialization are associated with audit quality in the directions predicted. Their results provide new evidence as to the current usefulness of these indirect measures in predicting audit quality. Zureigat (2010), examined the effect of financial structure among Jordanian listed firms on audit quality. Using a sample of 198 companies, his analysis of logistic regression shows a significant positive relationship between audit quality and financial structure. Nam (2011), examined the relationship between audit fees as a proxy for auditor independence and audit quality of firms in New Zealand. Employing three multiple regression models for a sample of New Zealand companies, his study discovered that the provision of non-audit services by the auditors of a firm comprises the auditor's independence, abnormal audit fee change rate is negatively associated with audit quality and auditor's independence of the previous year impacts on the audit fee that is negotiated in the current year.

Ettredge et.al, (2008), investigated client choice of industry auditors from among the Big 4 or 5 in an international setting. They investigated client-specific industry level and country-level factors. They found that international choice of home based Big 4 or 5 specialist auditors is positively associated with audit quality, capital intensity and membership in a regulated industry. Bouaziz (2012), examined the relationship between auditor size and financial performance on a sample of 26 Tunisian firms listed on the Tunis Stock Exchange. The result shows that auditor size has an important impact on the financial performance of firms in terms of return on assets and return on equity. Anderson and Verma (2012), examined the relationship between auditor size, auditor tenure and audit firm rotation using a probit model which they developed. The data they collected from 2,148 listed Asian companies shows that big audit firms provide high quality audit because big audit firms are more conservative than non-big audit firms. They also discovered that national level factors have a strong influence on audit quality. Auditor tenure is associated with impaired audit quality and audit firm rotation can help promote audit quality.

However, few studies have examined the relationship between measures of audit quality and those of financial performance in developing economies such as Nigeria. This study is expected to fill an existing

gap in knowledge by examining the relationship between audit quality and the performance of quoted cement firms in Nigeria.

Audit Quality

According to DeAngelo (1981), audit quality is defined as the competency and independence of auditors in detecting and reporting material misstatement. Zehri and Shabou (2011) asserted that high quality auditors are more likely to discover questionable accounting practices by clients and report material irregularities and misstatements compared with low quality auditors. Due to this, a higher audit quality is able to better constrain earnings management, and in turn enhance the quality of financial reports (Ching, Teh, San & Hoe, 2015). Previous research in the related literature has employed various measures as proxies of audit quality. Several studies have indicated that a higher quality of auditing mitigates accruals based earnings management (Okolie, 2014; Soliman and Ragab, 2014; Gerayli, Yanesari and Ma'atoofi, 2011; Becker, DeFond, Jambalvo, & Subramanyam, 1998). This study used audit firm size, audit fees, and audit partner as audit quality measures. Conceptually, the auditing quality can be measured through the three basic aspects of inputs, outputs and environmental factors. Except auditing standards, there are other inputs for the auditing quality. One such an input is the unique and prominent features of the auditor such as his or her experience, moral values and his propensities. One of the other important factors is the auditing process (Rahimi & Amini, 2015). This process includes auditing methodology, the amount of the effects of the applied auditing methods and the amount of access to the required auditing documents and evidences.

Audit Committee Size

Limited research has been undertaken to investigate the relationship between firm performance and the features of audit committee. Forker (1992) was the first paper to propose this relationship. The author suggests that the audit committee is as an effective monitoring mechanism to enhance the quality of corporate disclosure and reduce agency costs. Furthermore, Ho and Wong (2001) argue that the existence of an audit committee significantly influences the amount of corporate disclosure. In others empirical studies (Barakoet, 2006) conclude the predictable positive connection between audit committee size and level of voluntary disclosure.

Corporate Performance

There are a few studies that demonstrate that audit quality improves the financial performance of a company. Afza and Nasir (2014) mentioned that quality of external audit improves a firm's performance due to the perception of investors. They perceive that companies that are audited by big audit firms will disclose reliable, proper, and authentic financial reports, which strengthen the overall investors' confidence towards these companies. Furthermore, Jusoh, Ahmad and Omar (2013) claimed that high audit quality might reduce agency costs where auditors provide an indicator about credibility and integrity of financial reports, which could in turn lead to lower monitoring costs and result in better performance by the corporation.

Return on Capital Employed

According to Wallace (2012), Return on Capital Employed ("ROCE") is a measure of business effectiveness and capital efficiency. ROCE is a function of profitability, how much profit a business generates before interest on debt and tax (EBIT) and activity, how much a business has invested in operating assets to generate that level of profitability. In the 1920's Du Pont Corporation developed what is commonly known as Du Pont accounting and ROCE as a measure of business performance to enable it to compare the performance of its many different business units. The Du Pont accounting method is a powerful and relatively simple approach to determine the impact of management decisions on financial performance.

Return on Capital Employed and Return on Equity are so interlinked that both these terms will be considered. These Returns are, basically, simple and useful concepts; they have however been so manipulated (abused, some people would say) over the past few decades that they now more often confuse rather than illuminate the evaluation of company performance (Shoesmith, 2004). The concept of the Returns is intuitively valid and useful: what Return is being made on Capital Employed and on Equity? In particular it is important to know whether the company is earning more than its cost of capital. Simplistically, the Return on Capital Employed is the profit before interest and taxation (ie turnover less costs) as a percentage of the capital employed in the business (ie fixed assets and net current assets) irrespective of whether financed by shareholders equity or borrowings (Jim Shoesmith, 2004). It is a measure of the profit earned by the business irrespective of how that business is financed. Also simplistically, the Return on Equity is the profit after interest but before taxation (ie turnover less costs and less interest paid) as a percentage of shareholders equity (capital employed less borrowings). It therefore only differs from Return on Capital Employed as it takes account of the gearing achieved by borrowing.

Return on Assets (ROA)

Return on assets (ROA) is an indicator of how profitable a company is relative to its total assets. 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 (Gallo, 2016). Some investors add interest expense back into net income when performing this calculation because they'd like to use operating returns before cost of borrowing. ROA tells what earnings were generated from invested capital (assets). ROA for public companies can vary substantially and will be highly dependent on the industry. This is why when using ROA as a comparative measure, it is best to compare it against a company's previous ROA numbers or against a similar company's ROA. Remember that a company's total assets are the sum of its total liabilities and shareholder's equity. Both of these types of financing are used to fund the operations of the company. Since a company's assets are either funded by debt or equity, some analysts and investors disregard the cost of acquiring the asset by adding back interest expense in the formula for ROA. In other words, the impact of taking more debt is negated by adding back the cost of borrowing to the net income, and using the average assets in a given period as the denominator. Interest expense is added because the net income amount on the income statement excludes interest expense. An analyst that chooses to ignore the cost of debt will use this formula:

$$\text{ROA} = (\text{Net Income} + \text{Interest Expense}) / \text{Average Total Assets}$$

The ROA figure gives investors an idea of how effective the company is in converting the money it invests into net income. The higher the ROA number, the better, because the company is earning more money on less investment. Let's evaluate the ROA for three companies in the retail industry (Macy, Penney & Sears, 2017). ROA is most useful for comparing companies in the same industry, as different industries use assets differently. For example, the ROA for service-oriented firms, such as banks, will be significantly higher than the ROA for capital intensive companies, such as construction or utility companies. "ROA simply shows how effective your company is at using those assets to generate profit." This ratio is more useful in some industries than in others, partly because how much money your business has tied up in assets will depend on your industry.

Return on equity (ROE)

Return on equity (ROE), is a financial ratio that measures the return generated on stockholders'/shareholders' equity, the book or accounting value of stockholders'/shareholders' equity which reflects the accumulation over time of amounts received by the company from stock/share issues plus the profits/earnings retained by the company, i.e., not yet distributed in dividends (accounting value of shareholders' equity is also equal to a company's net assets, i.e., assets minus liabilities). Furthermore, the ROE can be decomposed to understand the fundamental drivers of value creation in a company. This is known as the DuPont decomposition and can be calculated as:

ROE = profit margin X asset turnover X gearing. $ROE = (\text{profit for the year} \div \text{sales}) \times (\text{sales} \div \text{assets}) \times (\text{assets} \div \text{shareholders' equity})$.

Empirical Framework

ShafieHussin and YusufHussain (2009) examined the relationship between audit firm tenure and auditor reporting quality in Malaysia. This study employs well-established going concern model of logistic regression. Their findings show that audit firm tenure is positively significant relationship with auditor reporting quality. Adeyemi and Fagbemi, (2010) state the audit quality, corporate governance and firm characteristics in Nigeria. Therefore, this study provides evidence on corporate governance, audit quality, and firm related attributes from a developing country, Nigeria. Logistic regression was used in investigating the questions that were raised in the study. Findings from the study show that ownership by non-executive director has the possibility of increasing the quality of auditing. Evidence also exist that size of the company and business leverage are important factors in audit quality for companies quoted on the Nigerian Stock Exchange. Zahid, Haider and Asif (2010)investigated the impact of prior year firm's performance on subsequent year firm's corporate governance mechanism. They used board size, CEO–Chairman combined structure and audit expenditure as a firm level corporate governance mechanism. The panel data of fifty two companies listed on Karachi Stock Exchange covering the period from 2006 to 2010 was used for this study. Hypotheses were tested by using fixed effect model and random effect model. Their results revealed that prior year firm's performance has positive relationship with board size but negative relationship with audit expenditure.

Theoretical Framework

Economies of Scale

Economies of scale describe a competitive advantage that large firms have over smaller ones. It argues that firm size is related to profitability as large firms have greater strategic diversification, a greater possibility of renegotiating with clients and suppliers, greater ability to face competition, and keeping prices above the competitive level. In line with this idea, a positive association between firm size and profitability is anticipated (Serrasqueiro and Nunes 2008).

Agency Theory

Demand for audit arises from information asymmetry and agency conflicts between corporate managers, outside investors, and intermediaries. From an Agency Theory perception, (Dang 2004) clarifies that auditing financial statements are an effective monitoring mechanism that assures stakeholders that financial statements are free of material misstatements. Agency Theory has been extensively exercised in literature to study the information asymmetry between principals (shareholders) and agent (management). The principal-agent association as illustrated in the agency theory is essential to understanding how the role of an auditor has developed. The essential premise of Agency Theory is that conflicts of interest arise in corporate relationships due to the divergence of the benefits of managers and shareholders. The Agency Theory presumes that the role of the auditor is to manage the association between the manager and the owners. It is essential that the manager and the owners have a clear understanding that the auditor does not have the responsibility for the accounting. However, the auditor is responsible for making sure that the audit is adequate (Andersson and Emander, 2005). Agency theory, therefore, is a handy economic theory of accountability, which assists in clarifying the improvement of audit quality.

Theory of Inspired Confidence

Limperg observed that when a society loses confidence in the effectiveness of the audit, this, in turn, destroys the usefulness of the auditing process. Limperg's Theory of Inspired Confidence addresses both the demand for and the supply of audit services. According to Limperg, the need for audit services is the direct consequence of the participation of outside stakeholders in the firm. These stakeholders demand accountability from the management, in return for their contribution to the firm. Thus, the Theory of

Inspired Confidence connects the community's needs for the reliability of financial information to the ability of audit techniques to meet these needs, and it stresses the development of the needs of the community and the methods of auditing in the course of time. Accordingly, changes in the needs of the society and changes in the auditing techniques result in changes in the auditor's function. There is lots of previous literature on the relationship between ownership structure, corporate governance and firm performance from developed capital markets. However, few pieces of research exist on the relationship between audit quality and the financial performance of firms from less developed capital markets. Accordingly, there is a necessity for more research on audit quality and its impact on the financial performance of firms operating in the Egyptian business environment. This work aims to fill in this existing gap. Results of related prior research efforts on the topic are mixed. Never the less, we predict our outcomes to be in line with the current Agency Theory, Economies of Scale Theory and Theory of Inspired Confidence.

METHODOLOGY

The study examines the influence of Audit Quality on Financial Performance of listed Cement Firms in Nigeria over a period of five (5) from 2015 to 2019, The basis for selecting this period is due to the global financial crisis in 2009 and several financial crises in Nigeria between this period which has led to the clamour for quality financial reporting among quoted firms in Nigeria. Correlational and Ex-post factor design was adopted for the study, the design for the study is appropriate because it assist in determining the influence of Audit Quality on Financial Performance of the selected firms. The study makes use of data from secondary sources through the sampled firm's annual reports and accounts. A total of four (4) cement firms out of the five (5) listed were studied as a result of unavailability of Data for Nigerian Cement Company. Multiple Regression technique was adopted as our tool of analysis as it was found appropriate for the data analysis.

Model Specification

A multiple regression equation is set up to investigate the hypothesized relationships between the dependent variable and the four independent variables in this study. The econometric form of the equation is given as:

$$FP = \beta_0 + \beta_1 (AI) + \beta_2 (AS) + \beta_3 (LE) + \epsilon$$

Where FP = Financial Performance (Dependent Variable)

AI = Auditor's Independence (Independent Variable)

AS = Auditor's Size (Independent Variable)

LE = Leverage (Control Variable)

ϵ = Error Term

Measurement of Variables

Financial performance; FP is measured using Net Profit Margin, FP is calculated as profit after tax divided by the sales for firm *i* at a given time *t*. Auditor independence; AI is measured using auditor's fees, that is, the sector average audit fees was taken and compared with the audit firm fee for a particular year. AI is coded 1 if the audit fee of a given firm is 1 than the sector average, otherwise AI is coded 0. Auditor Size; AS is measured using the Big 4 versus Non-Big 4 dichotomy. AS is coded 1 if the audit of the issued financial statements was performed by a Big 4 audit firm, otherwise, AS is coded 0. The Big 4 audit firms in Nigeria are; Akintola Williams Deloitte, Price Water House Coopers, Ernst and Young, and KPMG. Leverage; LEVR is measured as total debts divided by debt plus equity. Leverage will help to ensure that extraneous variables such as debt commitments and size or assets composition which are external to the purpose of this study are minimized, nullified or isolated.

RESULTS AND DISCUSSIONS

This session presents the results of the empirical study. It is concerned with the presentation, analysis and interpretation of data collected from the secondary resources. The session makes conclusion and Recommendations from the Findings of the study. For the purpose of this study, the data collected were coded and presented in tables. Multiple regression analysis; specifically, the Ordinary Least Square method (OLS) was used in testing the stated hypotheses. The descriptive statistics for each of the variables were determined to show the minimum, maximum, mean and standard deviation values. Descriptive statistics helps readers to understand the measures of central tendency and measures of variances associated with the variables of the study.

Table 1: Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation
NPM	20	.02	1.53	.3155	.34766
AUDSIZE	20	.00	1.00	.6000	.50262
AUDIND	20	.00	1.00	.6000	.50262
LEVR	20	.00	35.80	7.9775	10.67594

Source: Extract from SPSS printout result

Table 1 shows that the mean of net profit margin, auditor size, auditor industry and leverage are 0.3155, 0.6000, 0.6000 and 7.9775 respectively. A comparison of the mean responses with the maximum values for each of the variables indicates that the cement industry presently operates at a net profit margin of 32 percent, auditor size is at 60 percent, auditor independence is at 60 percent and leverage is at 7.9775. The value of leverage indicates that the results of the findings would have been distorted if leverage had not been controlled as a variable. One important observation is that while auditor size and auditor independence have values higher than that of its respective standard deviations, net profit margin has a mean value which is lower than the value of its standard deviation. It therefore implies that the level of auditor size and auditor independence in the cement industry is high, while net profit margin for the industry can still be improved upon.

Table 2: Correlation Matrix

The correlation matrix is used to determine the correlation between the dependent and independent variables of the study. The table below represents the correlation matrix for the sample observations.

Variable	NPM	AUDSIZE	AUDIND	LEVR
NPM	1			
AUDSIZE	-.023	1		
AUDIND	.519	-.458	1	
LEVR	-.323	.356	-.014	1

Source: Extract from SPSS printout result

Table 2 indicates that there is a positive correlation between net profit margin and auditor independence, while there is a negative correlation between net profit margin and auditor size. However, care should be taken when interpreting the result as this does not mean that auditor size has a negative relationship with net profit margin. It only means that the correlation or relationship between auditor size and financial performance is not as strong as that of auditor independence and financial performance. The correlation between the net profit margin and leverage is negative as should be expected since debt principal and interest repayments are bound to infringe on net profit margin. The correlation between auditor size and leverage is positive; this can be explained by the fact that firms audited by Big 4 audit firms are likely to

have credit worthiness and access to different forms of loans. The correlation between auditor independence and leverage is negative but not too significant as should be expected since the debt composition or debt size of a firm should not affect the independence of their auditors.

Table 3: Summary of Regression Result

Variables	Coefficient	t-values	P-values	Tolerance/VIF
Constant	-0.066	-0.445	0.662	
AUDSIZE	0.338	2.323	0.034	0.667/1.499
AUDIND	0.509	3.750	0.002	0.764/1.308
LEVR	-0.016	-2.607	0.019	0.845/1.184
R			0.727	
R ²			0.529	
Adj R ² F-Stat.			0.440	
F-Sig.			5.979	
Durbin-Watson			0.006	
			1.919	

Source: Extract from SPSS printout result

Financial Performance (FP) = -0.066 + .338(Auditor Size) + 0.509(Auditor Independence) - 0.016(Leverage) + 0.26013

Table 3 above shows the combined correlation of the independent variables and the dependent variable at 73 percent indicating a strong positive relationship. An R² of 0.529 indicates that 52.9 percent of the variation in net profit margin can be explained by variability in auditor size and auditor independence. In addition, the Fishers statistics of 5.979 which is significant at one percent indicates that the financial performance model is fit. Therefore, the results of this study can be relied upon. According to Durbin (1970), when the Durbin Watson statistic value is greater than 0.5 or 50 percent, independent observation is assumed. In other words, there is no auto correlation among the residuals of the study. The Durbin Watson statistic value of 1.919 therefore indicates that there is no autocorrelation among the residuals of this study. The hypothesized relationships were tested; properties of the casual paths, including standardized path co-efficients, t-values and p-values for the equation in the hypothesized model are presented in the table above. The value of the regression co-efficient for the intercept reports the particular financial performance denominator for cement firms in Nigeria, while the remaining co-efficient describe the impact of each independent variable on financial performance and the impact of the control variable on financial performance.

The tolerance values and the variance inflation factor (VIF) are two measures generally agreed by various authors as being good factors for determining multicollinearity between the independent variables of a study. If the variance inflation factors of all the independent variables are less than 10, multicollinearity does not exist and the model is said to fit. Another measure for determining multicollinearity is the tolerance values. A tolerance value of 1 or above signifies multicollinearity, while tolerance values of less than 1.00 in all the observed variables signifies the absence of multicollinearity (Cassey et.al., 1999; Neter et.al., 1996). The variance inflation factors of both independent variables and that of the control variable are consistently less than 10 which is the benchmark for determining multicollinearity (1.499<10, 1.308<10 and 1.184<10). In addition, the tolerance values are less than 1.00 which is another benchmark for determining multicollinearity (0.667<1.00, 0.764<1.00 and 0.8456<1.00). This shows the appropriateness of fitting the model of this study with two independent variables and the control variable. It also shows the complete absence of multicollinearity between the independent variables and the control variable. Thus, the results of this study can be applied with the assurance that it measures what it purports to measure, that is, the relationship between auditor size and financial performance, and auditor independence and financial performance.

Discussion of the Findings

The main objective of this study is to assess the influence of audit quality on the financial performance of quoted cement firms in Nigeria. Profitability is adjudged to be the best measure of financial performance, while auditor fees are generally accepted as a good measure of auditor independence. Auditor independence and auditor size make up the concept of audit quality in this study. When both concepts are correlated, changes in one concept leads to changes in the other that is changes in net profit margin should correspond with changes in audit quality. The findings of this study suggest that audit quality plays a vital role in determining financial performance. Marginal effect analysis is used to illustrate the marginal change in the dependent variable (financial performance), given a degree of change in a selected independent variable, holding all other variables constant. The two influencing factors derived from the multiple regression models are ranked below.

Table 4: Marginal Effects of Audit Quality Measures

Measure	Marginal Effects	Ranking
Auditor Independence	.509	1
Auditor Size	.338	2

Source: Extract from SPSS printout result

The marginal effects table shows that auditor independence has the strongest influence on financial performance. As the result shows, a degree of decrease in auditor independence carries a 50.9 percent probability that there will be a decrease in the influence of audit quality on financial performance. This result is consistent with a number of researches that regard auditor independence as the main determinant factor of audit quality and in return financial performance (woodland and Reynolds, 2003; Jeff et.al, 2012; Miettinen, 2011). However, this does not mean that auditor size does not have an influence on financial performance; it only shows that auditor independence is more of a determinant factor of financial performance than auditor size is. Finally, the study revealed that there are other extraneous variables which account for the financial performance of quoted cement firms to the tune of 47.1 percent. The researcher suggests that these other variables include auditor opinion, auditor specialization, auditor tenure, and leverage and auditor firm rotation.

CONCLUSION AND RECOMMENDATIONS

The study examined the relationship between audit quality and financial performance through the proxies of auditor size and net profit margin, and auditor independence and net profit margin of quoted cement firms in Nigeria. Series of concepts, theories and contrasting views of researchers were discussed and analysed. The constructs investigated in this study are all correlated because auditor size and auditor independence influence the financial performance of quoted cement firms in Nigeria. The most important construct by regression analysis co-efficients is auditor independence followed by auditor size. The findings showed that the impact of audit quality on financial performance is positive and significant and the greater the degree of an auditors independence, the greater the propensity of a firm making substantial net profit margins. It was also discovered that the impact of auditor size is also positive and significant, although, its impact is lesser that that of auditor independence. A positive relationship between auditor independence and financial performance implies that audit effort increases with the amount of audit fees paid and leads to more commitment and monitoring on the part of the of the auditors, thereby decreasing the propensity of an organization to incur losses through non-adherence to accounting principles and unnecessary waste of funds by management.

Audit fees do not compromise auditor independence, which normally would be thought to decrease an auditor's willingness to oppose management attempts to take advantage of this information asymmetries in the principal agent relationship. The impact of auditor size cannot be ignored because it is an important factor for determining audit quality. While it would be easy for firms to arm twist Non-Big 4 audit firms and get them to do their bidding even when it is unethical. It would be nearly impossible to get a Big 4

audit firm to go against the tenets of auditing practices because it has a reputation to protect. In light of the various findings of this study, the following measures are hereby recommended for cement firms as a means of enhancing audit quality and ultimately financial performance:

- i. Management of quoted cement firms in Nigeria should improve the financial performance of their firms by increasing the amount of audit fees paid to the audit firm of their respective organizations so as to ensure that all financial transactions are in order; give the users of the financial statements more trust and confidence in terms of the quality of audited reports.
- ii. The management of quoted cement firms should employ the services of one of the Big 4 audit firms and where this is not possible, management should go for an audit firm whose character and integrity is beyond question.

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Effect of Corporate Governance on Tax Aggressiveness of Quoted Manufacturing Firms in Nigeria

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Abstract

This study investigated the effect of corporate governance on tax aggressiveness among selected manufacturing firms in Nigeria. More specifically, corporate governance variables such as Board Size (BSIZE), Board Diversity (BDIV), Independent Directors (INDEP) and Proportion of Non-Executive Directors to Executive Directors (NEDED) and tax aggressiveness (effective tax rate: TAG) were employed. The study covered a period of twelve (12) years from 2005-2016; a total of 44 firms with financial statement covering the time period were selected using the random sampling technique. The expo-facto research design was employed to analyze already existing data obtained from the Annual Reports and Accounts of the firms, and the Nigerian Stock Exchange Fact Book. The data obtained were analyzed using the Ordinary Least Square technique with its Best Linear Unbiased Estimate (BLUE) Property. In addition, a regression model was developed to test the combined effects of corporate governance measures on tax aggressiveness of the selected manufacturing firms and the analysis was performed via STATA 13.0. Based on the analysis of data using the fixed effect regression, it was revealed that board size with a value of -0.016 has no significant impact on tax aggressiveness while board diversity with 0.815, independent director with 1.464 and proportion of non-executive directors to executive directors with -1.207 has a significant effect on tax aggressiveness on quoted manufacturing firms in Nigeria. Using the random effect regression model, a similar outcome was gotten. Based on the findings of the study, it was recommended among others that quoted manufacturing firms in Nigeria should pay less attention to the size of their board, but rather focus on the quality and integrity of the members of the board, gender diversity within the board composition should be encouraged as it helps decrease tax aggressiveness.

Keywords: Corporate Governance, Quoted Manufacturing Firms, Nigeria

INTRODUCTION

Corporate governance issue in recent times has received great attention and has since birthed a renewed interest in the relationship between corporate tax planning and corporate governance in Nigeria. This renewed interest stems from the fact that the government is concerned about firms' efforts toward minimizing tax burdens, often through the use of tax avoidance or tax evasion policies that border on being illegal or that which is conflicting to the disposition of tax laws in Nigeria. Ying (2015) believes that an effective governance structure may dissuade tax avoidance or evasion policies such that it may restrain corporate firms from engaging in aggressive tax minimization policies. Thus, tax aggressiveness or tax minimization policies to a very large extent, hinges upon the institutional arrangements in a particular economy and this has made the demand for more information on corporate governance and tax aggressiveness to be increasingly complex. Hairul, Ibrahim and Siti (2014) saw tax aggressiveness as an intentional reduction in the precise corporate tax liabilities of a firm. Martinez, Ribeiro and Funchal (2015), believe that tax aggressiveness give birth to certain terms in the accounting literature such as tax management, tax planning, tax sheltering and tax avoidance and are interchangeably used with tax aggressiveness. In as much as corporate tax aggressiveness is a source of revenue loss to the government and increased reputational risk, it is an alarming problem, not only to the government and firm but also to corporate governance (Hanlon & Heitzman, 2010; Khurana, & Moser, 2013; Richard, 2014).

Bertrand and Schoar (2003) believe that lack of tax governance-related information made shareholders value tax planning differently. It is generally expected that shareholders prefer tax aggressiveness since ordinarily paying less tax implies that the firm saves money for its shareholders but this may not be true in real sense as seen in the saga of Enron and World Com. Duke and Kankpang (2011) noted that lack of tax governance-related information may result to agency problem as the (board of directors) may not

align with the shareholders (investors), thereby making tax issues more and more complicated. Also, corporate tax aggressiveness may signal dishonesty being extended to the financial statements of such firms (Desai & Dharmapala, 2009). In other words, management may be dishonest to the shareholders. This results to agency problems as shareholders get skeptical about the services rendered by the management. Owing to the above background, there is therefore the need to evaluate the place of corporate governance in mitigating corporate tax aggressiveness so as to resolve the agency conflict between the board of directors and investors as a way of restoring their confidence. It was in this vein that this study was carried out to explore the effect of corporate governance on tax aggressiveness among publicly quoted firms in Nigeria.

According to Bebeji, Mohammed, and Tanko (2015), despite the provisions of the above mentioned code of corporate governance, the role played by board members in the recent collapse of some financial institutions has spurred series of arguments. Croson and Gneezy (2009) opined that board diversity can directly or indirectly impact an organization's tax aggressiveness. Laniset al (2011) showed that the inclusion of a higher proportion of outside members on the board of directors reduces the likelihood of tax aggressiveness. However, the relationship between the corporate governance measures and tax aggressiveness has been less investigated in the manufacturing sector in Nigeria. Most studies on tax aggressiveness were conducted in developed countries (Landry, Deslandes & Fortin, 2013; Khaoula & Ali, 2012; Khaoula, 2013; Laniset al., 2011; & Yeung, 2010) and the few studies in Nigeria were done using the financial sector (Osemeke, 2012; Bebeji, Mohammed & Tanko, 2015). Therefore, the need for the study becomes vital so as to ascertain which of the corporate governance measures have the tendency to moderate/reduce the probability of tax aggressiveness and agency conflicts in the manufacturing sector in Nigeria.

LITERATURE REVIEW

Conceptual Review

Concept of Tax Aggressiveness

Tax aggressiveness refers the effort of corporate entities to reduce tax payments using aggressive tax planning activities and tax avoidance (Chen et al., 2010). Frank et al. (2009) noted that tax aggressiveness is the manipulation corporate entities engage themselves in order to lower tax income due to a kind of tax planning that can be considered as tax management. This concept may have multiple conceptualizations, references and even different ways to measure, but most of them have the same meaning and the same purpose but differs in their repercussions on the companies' health. According to Bruce et al. (2007), tax aggressiveness can be defined as simple trigger tax management activities that corporate entities utilized for tax planning and have an arrival point for tax evasion. The belief is that tax aggressiveness reduces tax returns. Aggressive tax represents different handling activities to lower taxable income that can be legal or illegal. In this study, the researcher considered tax aggressiveness as a strategy employed by management of corporate organizations, a set of processes, practices, resources and choices whose objective is to maximize income after all corporate entities as well as their liabilities owed to the state and other stakeholders. The implementation of this kind of strategies is geared towards reducing the tax base which allows generation of high potential non-tax cost that arises from agency conflicts or tax-authority, such as penalties and rent extraction (Desai & Dharmapala (2006). In fact the most significant aim of tax aggressiveness as observed by Chen et.al (2010), is aimed at increasing the net income of companies which creates a positive signal to foreign investors. It is worthy to note that tax aggressiveness have similar meaning as tax planning, tax avoidance and tax shelters in that they meet the legal and ethical provisions established by the tax authorities. However the extreme level of tax aggressiveness is tax avoidance. Tax aggressiveness is characterized by an excessive use of tax avoidance's acts (Khurana & Moser, 2013). This study examined tax aggressiveness (TAG) as a proxy of corporate tax planning. Corporate TAG basically assesses the tax performance of firms. Thus, it is the best measure to evaluate the actual corporate tax burdens. Previous studies have used various methods for measuring corporate

TAGs, where the numerator was the measure of the company's tax liability and the denominator was the measure of its income. As for this study, current-based TAG is used. It is defined as a ratio of current income tax expense (total income tax expense minus deferred tax expense) divided by pretax income.

Overview of Corporate Governance

Corporate governance plays a fundamental role in monitoring different actors and harnessing on planning procedures in an organization. Corporate governance has a global vision of the activities of management, but the question of its performance had been several debates and disputes in time and in space, as a way to rehabilitate the informational efficiency (Boussaidi & Hamed, 2015). Corporate governance arises due to principal-agent problems. The problem between principal and agent initiate costs. Some researchers divide agency cost by two: monitoring cost and bonding cost. According to Chen, Chen, Cheng and Shevlin (2010), corporate governance reduces monitoring cost by creating a higher level of control and transparency within the organization. Corporate governance is the way or manner in which organizations are controlled and directed. There are several corporate governance codes among which are the Securities and Exchange Commission governance codes and Bank codes of corporate governance.

Board Size and Tax Aggressiveness

The board size is a fundamental component of the features of the board which permits coping with aggressive managerial manipulation (Dridi& Adel, 2016). The Nigerian code of corporate governance practices recommended specific number of directors that must compose the board. This number presents the best size that promotes quick decision-making in the organization. Similarly, the literature argued that large boards are generally perceived as being less effective in the exchange of ideas, promoting coalition between board members (Firth, Fung & Ruin, 2007) as well as impinging aggressive tax measures. In the same vein, Gonzalez and Garcia-Meca (2013) believed that excessive board size can be an obstacle to speed and efficiency in decision-making of organization owing to the factor that it may cause coordination and communication problems among members of the board. A study by Lanis and Richardson (2011) found a significant association between the number of board size and tax aggressiveness. Furthermore, Dimitropoulos and Asteriou (2010) study found a relationship between the board size and the informational power of the accounting outcomes. Consequently, Xie, Davidson and DaDalt (2003) found a negative association between board size and tax aggressiveness. Thus, the above position allowed the researcher to incorporate board size as a corporate governance measures in the study.

Empirical Studies

Quite a number of studies have examined corporate governance on tax aggressiveness, earnings manipulation and a host of other variables in developed and developing countries. However, there are few studies on the relationship between corporate governance and tax aggressiveness using the manufacturing sector in Nigeria. Agundu and Siyanbola (2017) investigated the relationship between tax aggressiveness and corporate social responsibility fluidity in Nigerian firms using data from 13 distinguished firms among Nigerian Stock Exchange (NSE) top 30. The analytical methods involved descriptive, correlation and regression statistics, with robust, fixed and random effects consideration. The results established that tax aggressiveness is significantly related with CSR focal components (environmental enhancement and community involvement). Mgbame, Chijoke-Mgbame, Yekini&Yekini (2017) assessed the effect of corporate social responsibility performance and tax aggressiveness in Nigeria during the period 2007-2013 Findings of the study revealed that there is a negative relationship between CSR performance and tax aggressiveness in Nigeria. The study however did not critically analyze the composition of top management that is responsible for making decisions with respect to CSR in the organization. Hence important features like what level of influence independent directors has, when it comes CSR decisions and its influence on tax aggressiveness was not analyzed. A significant relationship was also found between firm size and tax aggressiveness, though with mixed positive and negative results. In addition, the results revealed a negative and significant relationship between firm performance and tax aggressiveness,

and the extent of tax aggressiveness is reinforcing. Salawu and Adediji (2017) examined the impact of corporate governance on tax planning of non-financial quoted companies in Nigeria. The result showed that there is positive and significantly relationship between Effective Tax Rate (ETR) and firm value. Growth opportunities and capital intensity were found to have a positive and significant relationship with the firm value. Although the study evaluated the impact of important variables such as firm value, growth & capital that affects management's approach to tax decisions, it did not critically analyze the impact of top management structures like board size, independent directors, board diversity, etc and how the influence tax decisions. The study further recommended that firms need to institute more healthy tax planning practice and engage the services of professional tax consultants for higher firm value. Martinez et al., (2015) investigated the effects of the Sarbanes-Oxley Act (SOX) on the tax aggressiveness of Brazilian firms listed on the BM &FBovespa between 2004 and 2012. The Partial regression analysis model was used to analyse the data collected. In practical terms, the results evidenced that the implementation of more stringent internal controls does not inhibit aggressive tax practices of Brazilian firms. Thus, they concluded that despite the strong empirical evidence that better internal controls improve the quality of accounting results, these rules alone did not appear to have a significant effect in reducing the tax aggressiveness of the firms during the period studied.

Fakile and Uwuigbe (2013) examined the interactions between corporate governance and taxation in Nigeria and found that the intersection of taxation and corporate governance have received renewed attention in recent years as a result of the concern with tax shelters and managerial malfeasance. Also, their study found that the impact of tax systems on corporate ownership patterns, and how ownership patterns in turn constrain corporate taxation, appears to warrant further analysis. Aliyu (2012) investigated corporate governance and the financial performance of quoted cement companies in Nigeria. The multiple regression model was adopted in analyzing his data. Thus the result presented a positive association between performance variable and corporate governance surrogate of managerial shareholding and institutional shareholding. Board size, board composition and composition of audit committee have significant negative relationship with the financial performance of the sampled firms. Consequently, the study recommends, among others, that board should comprise of a mix of executive and non-executive majority of who shall be non-executive directors. Balakrishnan, Blouin and Guay (2012) examined whether tax aggressiveness of firms have less transparent information environments and the extent that this greater financial complexity cannot be adequately communicated to outside parties, such as investors and analysts, transparency problems can arise. Using variables of tax aggressiveness, information asymmetry, analyst forecast errors, and earnings quality, the study suggests that aggressive tax planning decreases corporate transparency. In addition, the study revealed that managers at tax aggressive firms attempt to mitigate these transparency problems by increasing the volume of tax-related disclosure. On the overall, the study found a trade-off between financial transparency and aggressive tax planning.

On the basis of empirical review, it was found that there are scanty empirical evidence on the relationship between corporate governance and tax aggressiveness, especially in developing country like Nigeria. Hence, the need of the study to investigate whether such scenario that holds in other developed countries may hold in Nigeria and to fill the gap in literature on the relationship between corporate governance measures of board diversity, size, independent directors and the proportion of independent directors to executive directors.

Theoretical Framework

Extant literature on corporate governance mechanisms has identified the stakeholder theory and agency theory as two prominent theories upon which corporate governance mechanisms can be underpinned. Thus the theoretical framework of this study is premised on the agency theory as propounded by Jensen and Meckling (1976). This is because the agency theory defines the problem of interest divergence that represents a crucial subject to all economic entities due to the separation of ownership and control.

Agency Theory

The agency theory emphasized the connection between providers of corporate finances and those entrusted to manage the affairs of the firm. According to Jensen and Meckling (1976), agency relationship in terms of a contract under which one or more persons (the principals) engage another person (the agent) to perform some service on their behalf which involves the delegation and concentration of control on the board of directors (agent). Positivist researchers have tended to focus on identifying circumstances in which the principal and agent are likely to have conflicting goals and then describe the governance mechanisms that limit the agent's self-serving behavior (Yeung, 2010). This stream has focused almost exclusively on the principal-agent connection existing at the level of the firm between shareholders and managers. For example, Jensen et al (1976), who fall under the positivist stream, propose agency theory to explain, inter alia, how a public corporation can exist given the assumption that managers are self-seeking individuals and a setting where those managers do not bear the full effects of their actions and decisions. The AGT also assumes that tax management is a firm's strategic choice that is defined by an employment contract (actual or implied) between shareholders and tax managers. Chen and Chu (2005) indicated the suboptimal level of employment contracts resulting from a firm's tax avoidance strategy for two reasons. First, managers should be assured with ex ante compensations for future efforts to reduce tax liabilities. Thus, the level of compensation is not tied with the level of managers' actual effort. Second, managers' attempt to reduce a firm's tax liabilities would compromise the integrity of its internal control systems. Thus, managers could create on purpose and take advantage of the opaque internal control function for their own personal gains at the expense of shareholders, thus making them tax aggressive.

Stakeholders Theory

The stakeholders' theory provides that the firm is a system of stakeholders operating within the larger system of the host society that provides the necessary legal and market infrastructure for the firm's activities (Khurana, & Moser, 2013). The purpose of the firm is to create wealth or value for its stakeholders by converting their stakes into goods and services. This view is supported by Blair (1995) who proposes that the goal of directors and management should be maximizing total wealth creation by the firm. The key to achieving this is to enhance the voice of and provide ownership-like incentives to those participants in the firm who contribute or control critical, specialized inputs (firm specific human capital) and to align the interests of these critical stakeholders with the interests of outside, passive shareholders.

Tax aggressiveness is an act aimed at minimizing tax liabilities in a planned manner. It is thus pertinent to know that the interests of stakeholders are not adequately protected as a firm becomes tax aggressive. Organizations tend to violate the codes of best practices that suggest that they be ethically and morally responsible to their stakeholders; thus they tend not to be socially responsible by minimizing their tax liabilities. For instance, tax aggressiveness affects the stake of the government directly and the public indirectly; as reduction in tax liabilities shrinks government revenue which were to be used in providing infrastructures for the country, which in turns brings about enhanced economic growth and development.

In summary, the agency relationship between providers of corporate finances and those entrusted to manage the affairs of the firm is thwarted by conflict. This problem stems from the fact that the principal agents desire to maximize shareholders wealth and the self-interest agent attempts to expropriate funds. Although the use of contracts partly solves this misalignment of interest; in a complex business environment, contracts covering all eventualities are not obtainable. Hence where contracts fail to achieve completeness, principles rely on internal and external governance mechanisms to monitor and control agents and this gives rise to further agency cost. The agency theory states that the control function of an organization is primarily exercised by board of directors. With regards to the board as a governance mechanism, the issues that appear prominent in the literature are; board size, board diversity, independent directors and executive and non-executive directors.

METHODOLOGY

Effect of Corporate Governance on Tax Aggressiveness of Quoted Manufacturing Firms in Nigeria

This study employed expo-facto research design. This design was adopted because it seeks to analyze already existing events where the researcher cannot manipulate the data. The data used were gotten from the annual reports and accounts of some selected manufacturing firms quoted on the floor of the Nigerian Stock Exchange. The population for this study consisted of all the manufacturing firms quoted on the floor of the Nigerian Stock Exchange (NSE) at November 11, 2016. These manufacturing firms are those categorized as Conglomerates, Consumer Goods, Industrial Goods and Construction materials, Textiles, and Building materials and Real Estates. There are seventy-three (73) manufacturing firms in this category that are quoted on the floor of the Nigerian Stock Exchange (NSE, 2016). Tax aggressiveness (TAG), Board Size (BSIZE), Board Diversity (BDIV), Independent Directors (INDEP), proportion of Non-executive Directors to Executive Directors (NEDED) were measured by their values as obtained from annual reports and the Nigerian Stock Exchange Fact Book. The data for the study are secondary data and were sourced from the annual reports of the manufacturing firms for the period 2005 to 2016. The data were analyzed using STATA 13.0 statistical software.

RESULTS AND DISCUSSION

Correlation Matrix

VARIABLES	TAG	BSIZE	BDIV	INDEP	NEDED	ROA
BSIZE	1.000					
BDIV	0.621	1.00				
TAG	0.317	0.23	1.000			
INDEP	0.449	-0.021	0.0061	1.000		
NEDED	-0.210	0.43	-0.318	-0.328	1.0000	
ROA	-0.194	-0.21	0.029	-0.341	-0.0127	1.000

Source: Secondary Data from STATA Output, 2017. Appendix I

In data analysis, the correlation matrix is used to test for the presence or absence of multicollinearity among variables. Multicollinearity means interdependence among independent variables in a regression model. It is an econometric problem that nullifies the result of the ordinary least square and leads to wrong statistical implications as well as misleading policy decisions in research. In order to examine the presence or absence of interdependence among the variables under investigation, a pair-wise correlation test was performed. The result showed that there is the association between each pair of the variables used. However, the correlation matrix showed that BSIZE, BDIV and INDEP were positively correlated to TAG while NEDED and ROA which are negatively related to TAG. In spite of the inverse correlation among the variables (i.e. positive and negative), none of the correlation coefficients exceeded 0.5. Therefore, the correlation among them is weak. The implication is that there is the absence of multicollinearity among the variables under investigation.

Regression Results

The regression result showed the signs, size and significance of the coefficients of the variables under investigation. The sign encompassed the nature of relationship between the dependent and independent variables. This relationship may be positive or negative as the case may be. Also, the size showed the effect of the independent variables on the dependent variable while the significance revealed how fundamental the independent variables as determinants of the dependent variables are. The significance of

Effect of Corporate Governance on Tax Aggressiveness of Quoted Manufacturing Firms in Nigeria

the independent variables as determinants of the dependent variable was measured by the standard error, t-statistics or the p-value.

Result of effect of regression

Variables of the Study	Fixed Effect Outcome
Board Size (BSIZE)	-0.01649 (0.51313)
Board Diversity (BDIV)	0.815983*** (0.21396)
Independent Directors (INDEP)	1.46489*** (0.42531)
Non-executive (Outsider) Directors (NEDED)	-1.20702*** (0.29929)
Return on Asset (ROA)	0.184688 (1.35981)
Constant (TAG)	15.23795*** (4.11121)
R-squared	0.47838

*Standard errors in parentheses ***, ** and * denote 1%, 5% and 10% level of significance respectively*

Source: Secondary Data from STATA Output, 2017. Appendix I

The results of the fixed effect regressions for the investigation of the effect of corporate governance and tax aggressiveness is presented in table 2 above. The dependent variable is tax aggressiveness (TAG) while the independent variables comprised of Board Size (BSIZE), Board Diversity (BDIV), Independent Directors (INDEP), Non-Executive (Outsider) Directors (NEDED) and Return on Asset (ROA). The result in table 2 showed that BSIZE and NEDED are negatively correlated to TAG, as seen in the coefficient of the variables -0.01649 and -1.20702 respectively while BDIV, INDEP and ROA are positively correlated to TAG as also revealed by the coefficient of the variables 0.815983, 1.46489 and 0.184688 respectively. However, BDIV, INDEP and NEDED are the variables that are statistically significant. This is revealed by the coefficients of the three variables with corresponding standard errors. The implication of the above is that the independent variables such as BDIV, INDEP and NEDED have significant effect on corporate tax aggressiveness measured by TAG of quoted manufacturing firms in Nigeria.

The extent of the effect of the variables is measured by the values of the coefficients of the variables in (see table 2). By size, the estimates of the coefficients revealed that an increase in Board Diversity (BDIV) and Independent Directors (INDEP) will respectively lead to 0.51313 and 0.42531 increase in the TAG. On the other hand, an increase in Non-executive (Outsider) directors (NEDED) will result to 0.29929 decreases in TAG. By implication, quoted manufacturing firms in Nigeria with greater proportion of non-executive directors tend to have low TAG while firms' with greater Board Diversity (BDIV) and large number of Independent Directors (INDEP) will have greater TAG. This suggests that these three corporate governance variables (BDIV, INDEP and NEDED) exert gargantuan effect on tax aggressiveness of quoted manufacturing firms in Nigeria.

CONCLUSION AND RECOMMENDATIONS

Based on the findings of the study, the study concluded that there exist a significant relationship between corporate governance measures and tax aggressiveness of quoted manufacturing firms in Nigeria. It is thus timely that regulatory bodies such as the Security and Exchange Commission (SEC) and Central Bank of Nigeria (CBN) established for the inclusion of more women and independent directors on the board as their presence on the board makes the firm less aggressive. Therefore, owing to the significant relationship between corporate governance measures on tax aggressiveness, the role played by corporate governance in mitigating against tax aggressiveness cannot be over emphasized. Based on the findings of the study, the following recommendations were proffered:

- i. That quoted manufacturing firms in Nigeria should pay less attention to the size of their board, but rather focus on the quality and integrity of the members of the board.

Effect of Corporate Governance on Tax Aggressiveness of Quoted Manufacturing Firms in Nigeria

- ii. That quoted manufacturing firms in Nigeria should give value to diversity in the board composition within the firm as diversity in the board decreases tax aggressiveness.

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Effect of Board Characteristics on Quality of Corporate Governance Disclosure Practices in Consumer Goods Firms in Nigeria

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Abstract

Corporate governance is the system through which the behavior of a company is monitored and controlled. The significance of corporate governance is that, in modern economies, large corporations are typically associated with a division of labor between the parties who provide the capital (shareholders) and the parties who manage the resources (management). Corporate governance is concerned with the system of directing and controlling companies, and it is the responsibility of Board of Directors to ensure compliance with the regulations set by organizations. The study examined board characteristics and quality of corporate governance disclosure practices in Nigeria consumer goods. The study covered 19 Nigeria Consumers Goods firms that are listed on the Nigeria Stock Exchange (NSE) as at 31 December, 2018. Financial information, governance information, strategic and non-financial information items as mandatory and for inclusion in the disclosure index were used to proxy corporate governance disclosures while board composition, block ownership, and ownership are the measures for board characteristics. The study adopts ex-post facto research design and covering the period of 2009 to 2018. Multiple ordinary least square were used with the aid of E-view 10 to determine the relationship between disclosure index and various board characteristics. From the findings, board composition, block ownership, and ownership concentration has a significant effect on corporate governance disclosures at 5% level of significance. Therefore, the study recommends that Nigeria consumers' goods should structure their Board characteristics well because it will help them in terms of good financial information disclosures, governance information disclosures, strategic information disclosures and non-financial information disclosures. The study is supported by stakeholder theory which assumed that managers are accountable to all stakeholders. Therefore, the disclosure of information in financial report should reflect transparency.

Keywords: Board Characteristics, Corporate Governance Disclosures, Stakeholders Theory.

INTRODUCTION

Collapse of many organizations around the world has necessitated regulators to propose laws of good conduct and financial security offering a series of recommendations perceived as best practices of governance which will help in safeguarding the investment of various investors in organizations. These laws were considered to be a standard in corporate governance. They help companies to reduce mismanagement, to remedy any deficiencies in governance mechanisms to prevent abuse of power and to manage risks. Compliance with these recommendations is the essential basis for evaluating the quality of the governance system, and therefore the protection of the reputation of the company. The concept of corporate Governance as a regulated practice emerged in Nigeria in November 2003 when the Nigerian code of Corporate Governance was initiated for public liability companies. The code which is binding on all firms was targeted at instilling basics of Corporate Governance as is found in global best practices. In 2008, a national committee was inaugurated by the Securities and Exchange Commission (SEC) to address the weaknesses posed by the 2003 code of Corporate Governance, improve mechanisms for enforceability and align the code with international best practices. The result of that committee was the code of corporate governance for public companies 2011 alternatively referred to as 'the code'.

Good corporate governance put into practice is important to guarantee the success of the organization as well as to create a healthy investment environment in an organization. However, the corporate governance codes for best practice were initiated in developed countries and only recently introduced in developing ones. Hence, its contribution towards enhancing organizational performance in a country particularly any sector of any economy is a subject to the extent to which the conditions for robust

governance practice are consistent with the existing values, past experiences and the needs of all parties involved in the financial reporting process. It is expected, therefore, to be some time before the impact of applying corporate governance can be measured in developing contexts as this needs to develop, and favourable attitudes and belief must be formed as well as efforts made to develop the human resource capabilities to apply corporate governance requirements for best practice (Hassan, 2013). It is a fundamental element in improving economic efficiency and growth as well as enhancing investor confidence (OECD, 2004). The BOD actions are subject to laws, regulations and shareholders in general meeting, and the role of shareholders in governance is to appoint the directors and auditors and to make sure that the governance structure is appropriate (Cadbury Committee Report, 1992). According to Ehsan, and Khaled, (2013) Corporate Governance disclosure is defined as the number of corporate governance related rules that a firm reports in their annual report and accounts. The quality of the corporate governance is a necessary condition to assure and maintain the confidence of stakeholders. In fact, they perceive the company of good governance quality as the less risky it is likely to contribute to the increase in its share price. Codes of conduct attach importance to the financial information quality provided by the firms. Transparency, fairness and accountability are the core values of corporate governance. Stemming from the desire to enhance access to more capital that is necessary to achieve economic development and globalise national economies, corporate governance practices have been brought in the spotlight in developing countries (Hassan, 2013).

Borokhovish, Parrino and Trapani (1996) argue that independent directors bear high reputation costs that encourage them to effectively monitor managers' actions, thus limiting their opportunistic behavior. Beasley (1996) suggests that independent directors play a crucial role in influencing disclosure decisions. Patelli and Prencipe (2007) argue that independent directors play an important monitoring role in encouraging firms to disclose more information to outside investors in the presence of a controlling shareholder. In such cases, they protect the interests of minority shareholders against potential egregious behavior by the controlling owner. Though studies exist on board characteristics and quality of corporate governance disclosure practices such as Omer and Andrew (2014), Luciana and Alfredo (2014), Carlos, Sabri and Amal (2013), Hassaan (2013), Ehsan and Khaled (2013), Jouini (2013), Ramli, Nizam and Mohd (2013), Hossain (2008), Lim, Matolsy and Chow (2007) but to the best of our knowledge, these studies were carryout mostly in developed nations were firms have good corporate governance code with less studies in developing nations. In Nigeria, studies conducted were done in banking sector such as Ajibola (2017), therefore; there is a need to carry out this study in a developing nation such as Nigeria most especially in the Nigeria Consumer Goods which have no academic articles that will advance the frontier of knowledge. Furthermore, this study used long accounting period from 2009 to 2018 which gives it adequate data for the analysis and generalization of the effect of board characteristics on the quality of corporate governance disclosure in Nigeria Consumer Goods unlike others that used relatively short period. Objectively, the study seeks to determine the effect of board characteristics on the extent of corporate governance disclosure in annual reports of Nigeria Consumer Goods firms. The Hypothesis that will be tested includes:

- Ho1:** Board composition has no significant effect on the corporate governance disclosure in annual reports of Nigeria Consumer Goods Firms.
- Ho2:** Block ownership has no significant effect on the corporate governance disclosure in annual reports of Nigeria Consumer Goods Firms.
- Ho3:** Ownership concentration has no significant effect on the corporate governance disclosure in annual reports of Nigeria Consumer Goods Firms.

LITERATURE REVIEW

Conceptual Framework

Corporate governance

Corporate governance is a system by which the activities of a company are directed and controlled in a lawful manner by those charged with the responsibility, in order to meet the needs and expectations of the

stakeholders. Monks and Minow (1995) defined Corporate Governance in terms of interactions between various players in the corporate environment and the processes used in achieving consensus in the allocation of corporate resources and in the determination of corporate direction to ensure improved performance. Cheung and Chan (2004) stated that corporate governance refers to the system through which the behavior of a company is monitored and controlled. The significance of corporate governance is that, in modern economies, large corporations are typically associated with a division of labor between the parties who provide the capital (shareholders) and the parties who manage the resources (management). Corporate governance is concerned with the system of directing and controlling companies, and it is the responsibility of Board of Directors (BOD) to ensure compliance with the regulations set by organizations (Cadbury Committee Report, 1992).

Corporate Governance (CG) according to Okereke, Sanni, Anyanwu and Ogunbiyi (2009) is a way of life that moulds and directs the roles, responsibilities and rights of management and Board of Directors (BoDs) of organizations / institutions with a view to achieving the corporate objectives of the organization and capturing the interests of various stakeholders. It provides decorum on the roles, responsibilities and rights of management and BoDs and the need to have respect for each other. It involves mainly disclosure, transparency, fairness, equity, and accountability. It is complying with the rules of the 'game'. That is, doing what the law, policy, procedures and methods specified in a very strict manner with the key elements of CG (transparency, accountability, trust, respect, fairness and honesty) at the background. Corporate governance can be helpful to resolve agency problems through regular system *via* monitoring and controlling the managers, in order to reach shareholders objectives (Jensen & Meckling, 1976; M. Jensen, 2001). Corporate governance provides a structure by which the objectives of the firms are arranged, and the means for achieving those goals and control performance are determined (OECD, 2004). So, corporate governance is the mechanism by which companies are directed and controlled (Cadbury, 1992).

Empirical Literature

Citrawati, Mohamad and Oluwatoyin (2016) investigated the relationship between corporate governance and earnings management with disclosure quality listed in Indonesian manufacturing companies. From the analysis of the study, results evident that a significant effect exist on disclosure quality as a result of the relationship between corporate governance mechanisms and earnings management. This study shows that disclosure quality and good corporate governance can reduce earnings management manipulation.

Albassam (2014) also studied the compliance level with disclosure of the governance provisions in Saudi listed firms; and also to determine the relationship between voluntary compliance with the Saudi Corporate Governance Index (SCGC) and firm financial performance. The study used board composite corporate governance index (compliance-index model) using mixed-methods research design with the balanced panel data of 80 Saudi listed firms from 2004 to 2010. This generated a total of 560 firm-year observations that were collected manually from the sampled firms' annual reports. First, the constructed Saudi Corporate Governance Index (SCGI) showed that the introduction of the SCGC has helped improve voluntary corporate governance disclosure among Saudi listed firms. Also, this study found that board size, audit firm size, the presence of a corporate governance committee, government ownership, institutional ownership and director ownership have a positive influence on the level of compliance with the SCGC. In contrast, the analysis showed that the proportion of independent directors and block ownership are negatively correlated with the level of voluntary corporate governance disclosure. Furthermore, compliance-index model suggest that good corporate governance practices, proxied by the SCGI, are positively related to return on assets (ROA), but have no significant relationship with firm value, as measured by Tobin's Q (Q-ratio). Similarly, the results from the equilibrium-variable model are by and large mixed. Whereas CEO duality, proportion of independent directors, board sub-committees and director ownership are positively related to ROA, board size is negatively associated with ROA. On the other hand, the proportion of independent directors, board size, frequency of board meetings and director ownership are positively related to firm value, while CEO duality and the presence of board sub-

Effect of Board Characteristics on Quality of Corporate Governance Disclosure Practices in Consumer Goods Firms in Nigeria

committees have no significant relationship with firm value. The results from the quantitative analysis are robust to controlling for a number of potential endogeneity problems. Finally, the findings obtained from the interview data generally suggest that the regulatory authorities and the CMA in particular need to further strengthen efforts to enhance the level of awareness and appreciation of good corporate governance practices among key internal and external stakeholders of corporate governance in Saudi Arabia.

Omer and Andrew (2014) investigated the impact of corporate characteristics and corporate governance upon the level and extent of corporate social and environmental disclosure in banks. A desk-based research method has been used and from the regression result, it was found that corporate characteristics affect disclosures in financial statement. Luciana and Alfredo (2014), undertook a study on the effects of the board's structural and compositional characteristics on the quality of accounting information of companies listed on the Brazilian Securities, Commodities, and Futures Exchange (Bolsa de Mercadorias e Futuros - BM&FBovespa). Characteristics were measure by size and independence of the board of directors and separation of the roles of chairman and executive director. Accounting information relevance and earnings informativeness were used as measures for the quality of accounting information. The sample included non-financial companies listed on the BM&FBovespa with annual stock market liquidity higher than 0.001, covering the period from 2008–2011. Data were collected directly from companies' annual reports. Data analysis was undertaken using the multiple regression technique for calculating the models of accounting information relevance and earnings informativeness. The results reveal that, for companies that trade stocks on the BM&FBovespa in the Brazilian market, the characteristics of board independence and separation of the roles of chairman and executive director positively influence the quality of reported accounting information, specifically regarding the relevance of equity. Earnings informativeness is positively affected by board independence and negatively affected by larger board size (more than nine members). The study shows that stronger governance structures have a positive effect on the quality of reported accounting information. Carlos, Sabri and Amal (2013) examined the effect of corporate governance practices on the extent of voluntary disclosure in France using a panel of 206 non-financial French listed firms during the period 2006–2009. The study found that voluntary disclosure in annual reports increases with managerial ownership, board and audit committee independence, board meeting frequency, and external audit quality. We also find that frequency of audit committee meetings and diligence of board and auditing are associated with decreased disclosure. Additional findings show that larger, more profitable, and less indebted firms have greater voluntary disclosure.

Hassaan (2013) ascertained the impact of corporate governance structures on the levels of compliance with mandatory IFRSs disclosure requirements by companies listed on the Amman Stock Exchange (ASE) using a disclosure index derived from mandatory IFRSs disclosure requirements for the fiscal year 2007. The study measures the levels of compliance by a sample of 75 non-financial companies listed on the ASE. Results provide evidence of the lack of influence of corporate governance best practices on the levels of compliance with mandatory IFRSs disclosure requirements as it is not yet part of the cultural values within the Jordanian context. Ehsan and Khaled (2013) examined the relation between corporate governance mechanisms and the disclosure level of corporate governance information in the Saudi Arabian's listed companies. The study used 97 financial reports and accounts of Saudi Arabian listed companies in 2006 and 2007. The study uses the content analysis approach to analyze the content of the reports. In addition, a multiple regression model is used to identify the determinants of corporate governance disclosure. In the regression model, corporate governance disclosure score is the dependent variable, while the firm characteristics (firm's profitability, liquidity, debt ratio and size) and corporate governance mechanisms (board independence, audit committee size) are the independent variables. The study found that board independence, audit committee size, profitability, liquidity and gearing are the main determinants of corporate governance disclosure in Saudi Arabia. The study did not find any statistically significant association between firm size and corporate governance disclosure.

Jouini (2013) explored the relationship between the system of governance and the quality of financial information for a sample of French companies listed in the SBF 250 for a period from 2004 to 2008. The Quality of financial information is approximated by discretionary accruals. Corporate governance is appreciated by a global index with 64 items and three sub-indices relating to the characteristics of the board, ownership structure and quality of the control system. The results show that the quality of financial information is positively related to the quality of the board and the quality of the ownership structure. The use of an overall governance index gives more significant results for the three models and affirms the positive relationship between the quality of governance system and the quality of financial reporting.

Ramli, Nizam and Mohd (2013) study the effects of corporate governance mechanisms on the quality of directors-related information (DRI) disclosure of Malaysian Top 100 companies, after controlling variables of firm-specific characteristics such as firm size and auditor size. Directors-related information disclosure was measured using scoring worksheet developed by Ramli (2001) to score the items in the corporate annual reports. Consistent with expectations, the Spearman correlation showed there are statistically proven the positive associations between board independence, board diversity managerial ownership and DRI disclosure at 5 percent level, with the exception of CEO duality. The result appears to suggest that there were positive impact of the CG mechanisms on the quality of DRI disclosure among Malaysian Top 100 largest companies. However, the regression model reported R² of 38.1 percent which means that almost 62 percent of those factors influencing the DI disclosure have not been captured by the model.

Hossain (2008) examined the compliance of mandatory corporate governance disclosure of the Indian banking companies. The study covered all the 38 banks in India that are listed on the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE), using 46 items of information as mandatory and for inclusion in the disclosure index, and run a linear regression model to examine the relationship between disclosure index and various corporate attributes. The findings revealed that a high level of compliance existed in the Indian banks and that the variables of size, ownership, board composition, and profitability, have significant impact in the corporate governance disclosure. Lim, Matolcsy and Chow (2007) examined the association between board composition and voluntary disclosure in annual reports in Australian firms. The study found that independent boards positively influence the overall level of voluntary disclosure in annual reports and more voluntarily provide key forward-looking and strategic information. Cheung, Connelly, Limpaphayom and Zhou (2007) study the degrees of corporate disclosure and transparency of publicly listed companies in Hong Kong and Thailand. The analysis uses the disclosure and transparency scores extracted from a survey instrument designed to rate disclosure practices of publicly listed companies by using the OECD Corporate Governance Principles as an implicit benchmark. Empirical results show that financial characteristics explain some of the variation in the degrees of corporate disclosure for firms in Hong Kong but not for firms in Thailand. Further, corporate governance characteristics, such as board size and board composition show more significant associations with the degrees of corporate disclosure in Thailand than in Hong Kong. The results are broadly consistent with the notion that good corporate governance leads to better corporate disclosure and transparency in less developed markets.

Theoretical Framework

Stakeholder Theory

Stakeholder theory emerged in the 1970s as a result of criticism of the shareholder model (Sternberg, 1997). According to Freeman (1984), stakeholders are individuals and groups who can affect, or are affected by, corporate activities. Solomon (2010, p.15) explains the theoretical basis of stakeholder theory as the companies which are large, and their impact on society so pervasive, that they should discharge accountability to many more sectors of society than solely their shareholders. Not only are stakeholders affected by companies, but they in turn affect companies in some way. Stakeholder theory assumes that managers are accountable to all stakeholders (Chen & Roberts, 2010).

Effect of Board Characteristics on Quality of Corporate Governance Disclosure Practices in Consumer Goods Firms in Nigeria

The number of assumptions underlying stakeholder theory is: First, corporations should be operated not only for the financial benefit of their owners, but also for the interests of the relevant broader society (Mitchell, Agle, & Wood, 1997; Chen and Roberts, 2010). Second, executive directors are equally accountable to all stakeholders, not only the firm's owners and creditors, but also other corporate stakeholders, such as employees, government, local community, customers and suppliers (Clarke, 1998). Third, stakeholder theory is strongly connected to notions of morality in business and corporate social responsibility (Letza, Sun, & Kirkbride, 2004; Westphal and Zajac, 2013). Although stakeholder theory has been widely embedded in governance codes (Aguilera & Cuervo-Cazurra, 2009), it has been criticised from two perspectives (Sternberg, 1997): firstly, the assumptions of stakeholder theory conflict with the central objective of the firm as seeking to maximise the wealth of shareholders; and it also conflicts with the agent-principal relationship, which suggests that managers are primarily accountable to shareholders. As such, stakeholder theory is arguably incompatible with the basic principles of corporate governance. Nevertheless, stakeholder theory remains a key corporate governance theory (Clarke, 1998; Solomon, 2010; Chen & Roberts, 2010).

METHODOLOGY

Ex-post facto research design is adopted in this study and the data for the study is obtained from the annual financial reports of Nigeria Consumer Goods firms listed on the Nigeria Stock Exchange during the period of 10 years from 2009-2018. Multiple Ordinary Least Square is used to determine the relationship between board characteristics and quality of corporate governance disclosure practices in Nigeria Consumer Goods.

$$CGD_{it} = \beta_0 + \beta_1 BC_{it} + \beta_2 BO_{it} + \beta_3 OC_{it} + e_{it}$$

Where:

CGD_{it} = Corporate governance disclosures (Corporate governance disclosures listed in the annual statement) of firm i at time t

BC_{it} = Board composition (number of board executive and non executive of the board) of firm i at time t

BO_{it} = Block ownership of firm i at time t

OC_{it} = Ownership concentration of firm i at time t

β_0 = constant

$\beta_1 - \beta_3$ = Coefficients of the explanatory variable

e_{it} = error term

RESULTS AND DISCUSSION

Descriptive statistics

	CGD	BC	BO	OC
Mean	64.45810	65.07944	1.977654	64.45810
Median	67.00000	66.67000	1.000000	67.00000
Maximum	86.00000	93.33000	5.000000	86.00000
Minimum	34.00000	0.000000	1.000000	34.00000
Std. Dev.	11.69376	15.77411	1.199041	11.69376
Skewness	-0.568458	-0.636982	0.964603	-0.568458
Kurtosis	3.306725	3.921562	2.770447	3.306725
Jarque-Bera	10.34216	18.43897	28.15171	10.34216
Probability	0.005678	0.000099	0.000001	0.005678
Sum	11538.00	11649.22	354.0000	11538.00

Effect of Board Characteristics on Quality of Corporate Governance Disclosure Practices in Consumer Goods Firms in Nigeria

Sum Sq. Dev.	24340.44	44290.40	255.9106	24340.44
Observations	179	179	179	179

Descriptive statistics in this study is the brief descriptive coefficients that summarize the data set used. It represents the entire population of the study. It covers the mean, median, maximum, minimum, standard deviation, skewness and kurtosis with 179 observations of the data used in the study.

Variance Inflation Factor Result

Variance Inflation Factors

Date: 08/14/20 Time: 10:56

Sample: 1 179

Included observations: 155

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
BC	0.000199	20.29948	1.017722
BO	0.030005	3.573239	1.012449
OC	0.000332	29.70679	1.023393
C	2.083800	45.04036	NA

Variance inflation factors (VIF) in this study explained the multicollinearity (correlation between predictors) that exists in a regression analysis. In table above, it shows how independent variables are correlated in explaining the dependent variable. All the VIF of the variables are within the acceptable range of 1 and 5, which signifies that the variables are moderately correlated.

Board Characteristics on the Extent of Corporate Governance Disclosure

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.000000	3	1.0000

* Cross-section test variance is invalid. Hausman statistic set to zero.

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
BC	0.000000	0.000000	-0.000000	NA
BO	-0.000000	0.000000	-0.000000	NA
OC	1.000000	1.000000	-0.000000	NA

Cross-section random effects test equation:

Dependent Variable: CGD

Method: Panel Least Squares

Effect of Board Characteristics on Quality of Corporate Governance Disclosure Practices in Consumer Goods Firms in Nigeria

Date: 08/14/20 Time: 11:01

Sample: 2009 2018

Periods included: 10

Cross-sections included: 19

Total panel (unbalanced) observations: 179

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.02E-12	1.00E-13	-10.16103	0.0000
BC	2.51E-16	7.33E-16	0.342986	0.7321
BO	-5.44E-14	1.24E-14	-4.378208	0.0000
OC	1.000000	1.39E-15	7.21E+14	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	1.000000	Mean dependent var	64.45810
Adjusted R-squared	1.000000	S.D. dependent var	11.69376
S.E. of regression	1.20E-13	Akaike info criterion	-56.54397
Sum squared resid	2.27E-24	Schwarz criterion	-56.15222
Log likelihood	5082.685	Hannan-Quinn criter.	-56.38512
F-statistic	8.00E+28	Durbin-Watson stat	0.797887
Prob(F-statistic)	0.000000		

The choice of either Fixed Effect or Random Effect is based on the computational convenience. Based on the Hausman test with P-value of 1.0000 fixed effect model is appropriate for the study.

Fixed Effect Regression

Dependent Variable: CGD

Method: Panel Least Squares

Date: 08/14/20 Time: 10:58

Sample: 2009 2018

Periods included: 10

Cross-sections included: 19

Total panel (unbalanced) observations: 179

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BC	-3.21E-15	1.06E-15	-3.036308	0.0028
BO	-4.36E-14	1.79E-14	-2.433853	0.0161
OC	1.000000	2.00E-15	5.00E+14	0.0000
C	-1.26E-12	1.45E-13	-8.740441	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	1.000000	Mean dependent var	64.45810
Adjusted R-squared	1.000000	S.D. dependent var	11.69376
S.E. of regression	1.74E-13	Akaike info criterion	-55.81252

Effect of Board Characteristics on Quality of Corporate Governance Disclosure Practices in Consumer Goods Firms in Nigeria

Sum squared resid	4.73E-24	Schwarz criterion	-55.42077
Log likelihood	5017.220	Hannan-Quinn criter.	-55.65367
F-statistic	3.85E+28	Durbin-Watson stat	0.752760
Prob(F-statistic)	0.000000		

The fixed effect regression model above reveals that a negative relationship exists between board composition and corporate governance disclosure as evident by the intercept of -3.21E-15. Also, negative relationship exists between board ownership and corporate governance disclosure as evident by the intercept of -4.36E-14. On the other hand, ownership concentration has a positive relationship with corporate governance disclosures with a coefficient of 1.000000. All the board characteristics are significant at 5% level. Board composition has a p-value of 0.0028. Furthermore, block ownership has a p-value of 0.0161 and ownership concentration p-value is 0.0000. The R² is 1.000000 which shows that the explanatory variables (board composition, block ownership, and ownership concentration) can explain dependent variable (corporate governance disclosures) to the extent of 100%. The model is fit because it has F-statistics of 0.000000.

CONCLUSION AND RECOMMENDATIONS

The study examined board characteristics and quality of corporate governance disclosure practices in Nigeria consumer goods. From the analysis of the multiple regression result, the study concludes that board composition, board ownership, and ownership concentration is significant at 5% level of significance. Meanwhile, board composition and block ownership have a negative relationship with corporate governance disclosures while ownership concentration, has a positive relationship with corporate governance disclosures. The findings of the regression is consistent with the study of Albassam (2014), Omer and Andrew (2014), Luciana and Alfredo (2014), Carlos, Sabri and Amal (2013), Ehsan and Khaled (2013), Jouini (2013), Ramli, Nizam and Mohd (2013), Hossain (2008), Lim, Matolesy and Chow (2007) that board characteristics has a significant effect on corporate governance disclosures.

The study is supported by stakeholder theory which assumed that managers are accountable to all stakeholders. Therefore, the disclosure of information in financial report should reflect transparency.

Therefore, the study recommends that Nigeria consumers' goods should structure their Board composition, block ownership and ownership concentration because it will help them in terms of good financial information disclosures, governance information disclosures, strategic information disclosures and non-financial information disclosures. Well structure of board characteristics means delegation of responsibilities to many stakeholders which will reduce misappropriation and mismanagement of funds of an organization. It will also reduce fraud in an organization.

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E-Revenue Generation and Local Government Development in Nigeria: Empirical Evidence from Nasarawa State

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Abstract

Local governments are faced with various challenges to source adequate funds for development drives and as such, E-Revenue generation has been introduced to boost internally Generated Revenue in Karu Local Government Council (LGC). This study investigated the impact of E- Revenue Internally Generated on the actual revenue collected by Local Government in Nasarawa State and to analyze the extent to which E-Revenue generation is linked to the development of the selected local Government. Two Research questions and Two Hypotheses were formulated for the study. The study period covered six (6) years and three (3) quarters, spanning from the first quarter of 2013 to the fourth quarter of 2019. the period for pre E- Generation covered thirteen (13) quarters, spanning from the first quarter of 2013 to the third of 2016 while the period for post E-Revenue Generated covered thirteen (13) quarters, spanning from the second quarter of 2016 to the second quarter of 2019. The data analysis was carried out using Trend analysis and simple least square regression method (SPSS version 17) were adopted for the study. Karu Local Government Council was purposefully selected for the study. Secondary data from the financial statement of the Council for the stated period were sourced from the office of the Auditor General for Local Government. The t-statistics analysis was employed in testing the hypotheses. Findings of the study that E-Revenue Generation has a positive significant effect on actual revenue collected in the Council and secondly that there is a significant relationship between revenue generated and developmental effort of the Local government. The study concluded that Tax revenue and Non Tax revenue electronically generated are vital ingredients in improving the development drives of councils in Nasarawa State. Some recommendations were therefore offered in this regard.

Keywords: Local Governments, Development, E-revenue Generation, Council.

INTRODUCTION

The Nigerian nation in the Sixties was made up of the central Government and constituent regional Governments. One of these regions as it then was could be compared to the present day ten or more states, put together. The wide geographical spread of the regions greatly impaired the effectiveness and efficiency of governance at the Local Area. There existed a large communication gap between the rural dwellers and the regional Government, existence of thick bureaucratic bottlenecks that militated against the development of the rural communities as well as an ineffective representation of the rural communities at the regional governments to mention but a few (Andrew, 1982). These challenges triggered the creation of states out of the Regions in the late 1960s. The states became the federating units of the federation, with smaller units called the Local Government Councils. The Local Government Councils were created in response to the yearnings of the people (particularly the rural dwellers), and also the need and burning desire by Government to get closer to the governed, with a view to delivering the dividends of good governance. According to Edogbanya et al (2013) the principal aims of creating Local government Councils in Nigeria include; to serve as the third tier of government through which appropriate services and developments are made in response to the wishes of local community through their representatives. The local government is equally to serve as an intermediary between government at the center and local communities. To mobilize and utilize both human and material resources by engaging the people at the local level in the government activities and to facilitate the exercise of democratic self – government closer to the grass root of the society and to exchange initiative and leadership potential

In recent times, with the advent of technologically driven information system and the proliferation of social media, the electorates and indeed the general public have become more politically and socially aware of the workings and responsibilities of the local Government system towards her citizens. To this

end, there has been an increased demand for accountability and stewardship by the electorates. Suppliers and contractors demand performance profiles to ascertain the liquidity and other financial measures, so as to assure themselves, of the capability of Government to meet their contractual and financial obligations. Often times also, the Government will indulge in borrowing from commercial and other financial institutions. These institutions as a practice would retrospectively dig into Government's performance with a view to projecting their future financial capacity before granting any facility. Electronic revenue collection in developing countries has gained increased prominence. According to Cobham (2010) the electronic tax system was introduced globally about 30 years ago. It started in 1986 as a little computer test program in which only five tax payers from Cincinnati, Raleigh Durham, and Phoenix agreed to participate. Since then, electronic tax system has become a common channel, serving various tax payers across the global yearly. Wasao, (2014) describes electronic tax system is an online system or channel where taxpayers are able to have access or permit to the platform through the use of internet, in other to have access to all the services provided by the tax authority such as the registration for a tax identification number, electronic tax filing of tax returns, the Electronic taxation system that was introduced in Nigeria in the year 2013 by the Federal Inland Revenue service (FIRS).

FIRS for instance is one of the financial and tax authorities in the world that conducts this Electronic tax payment system through the Business Process Improvement (BPI) and increases scope of electronic interface with various taxpayers so as to increase the efficiency and effectiveness of staff and services. According to Crede (2008) governments world-wide, have invested highly in electronic systems for the past two decades. Harold (2011) wrote that revenue collection system is the hub of every public administration system and the cornerstone of sound fiscal management. The researcher argued that there is a need to look into the structural and operational frameworks governing the national revenue authority, increase treasury control system of all revenue sources, increase legislative overview and credibility. Karu Local Government Council (LGC) is one of the thirteen LGCs in Nasarawa State created by law in 1992. Karu LG like any other LGC in Nasarawa State and Nigeria at large is confronted with paucity funds to carry out its core mandate. Dwindling revenue from Federal Allocations, the Council allocated funds continue to decline on monthly basis where it cannot pay full salaries to staff, talk more of provisions of basic social amenities to the people. This has led to deployment of innovative approaches by the application of Information and Communication Technology (ICT) in the entire process chain of Internally Generated Revenue (IGR) in Karu LGC.

An empirical study carried out by Ehule, O (2015) on the impact of internally generated revenue on the performance of a public sector, reveals that permits and rates have significant positive impact on performance. Edogbonya, D (2013) studied the impact of revenue generation on government developmental efforts. The study found out that internally generated revenue has positive relationship on government capital projects. The relationship between tax revenues and economic growth vis-à-vis performance has been extensively studied at the federal and state levels with empirical study on non tax revenues Ojo L (2014). Again, the few studies carried out on internal revenues and performance at the Local Government levels are centered on the relationship between tax revenues and performance by Musa D. (2016), again a study was out studies on non tax revenues which are equally an important aspect of internal revenue. empirical study on performance have dealt with payment of salaries and allowances of employees, which are considered as implied responsibilities to governments as prescribed by the 1999 constitution, (Ironkwe, U. 2016). There are no much studies on the link between E-Revenue Generation and the development of Local Government. The study therefore intends to harp in on the observed gap with a view to bridging it.

LITERATURE REVIEW

Concept of Taxation

Taxation like most topics or subject matter in management sciences is difficult to give a universal definition acceptable to everyone. Despite this fact however, some literature on taxation have attempted

to define it in such a way that it will at least give insight or a general picture of what it is all about. The international Encyclopedia of social sciences defines taxation as “A general concept or device used by government to extract money or other valuable things from people and organization by the use of law. Attamah (2004) Defined tax as a compulsory levy imposed on individuals and organizations by government. He concluded that tax is a good source of revenue to government, thereby bring about economic growth Udabah (2002) sees tax as a levy necessary to meet the cost of services and infrastructural development desired by the community which should be provided by the government. Primarily, he argued that taxation was initially introduced to raise revenue to meet government expenditure. From the definitions above among several of its kind, it could clearly be seen that taxation is therefore, one among other means of revenue generation of any government to meet the desires of the citizens. The purpose of taxation as stated by the French law is for the provision of the armed forces and administrative expenditures. Miller and Oats (2006) maintain “taxation is required to finance public expenditure. However, there are other sources of revenue generation for government these include but not limited to Fines and Charges, Foreign aides and grants, Loans etc.

E-Taxation

E-taxation is the process of collection and administration of tax procedure through an electronic medium. According to Che-Azmi and Kamarulzaman (2014) E-tax payment system is one of the ways through which governments globally make use of information and communication technologies to enhance the provision of public services and the circulation of public administration information to the society. Wasao (2014) describes electronic tax system as an online system or channel where taxpayers are able to have access or permit to the platform through the use of internet, in other to have access to all the services provided by the tax authority such as the registration for a tax identification number, electronic tax filing of tax returns. E-tax payment system was introduced in 1986 in the U.S.A. In Australia electronic tax payment was introduced in 1987. In 1993, Canada started the usage of electronic tax payment other developed countries of the world such as Malaysia and Netherlands introduced electronic payment of tax to their taxpayers in 2009. In Africa, Uganda introduced electronic tax payment system in 2009, while Egypt started in March 2013, so as to maintain a close proximity with the international trades towards automated payments systems, for e-government.

In Karu LGC E-Revenue payment system was introduced in 2015 in conjunction with an ICT firm (Byteworks Technology Solution Ltd) and Interswitch respectively. According to Okunowo, (2015). Electronic tax payment was introduced so as to increase revenue Generation and for easy accessibility as tax payers are able to pay taxes from different locations and at various time. Karu LGC has built a data base and platform where taxpayers data are housed, Harmonized Demand Notice are generated, payment are received and monitored as well generation of receipts. The main aim is to increase revenue generation as leakages are blocked and all revenue payment are made strictly via the platform from any bank of choice by taxpayers. In the authority of Abdulrazaq (2015) Elements of Electronic Tax Payment systems in Nigeria are:

- i. Taxpayers in Karu LGC can pay the following taxes online, e.g. Harmonized Demand Notice (HDN) for Sanitation Levy, Business Permit, Advert Display Permit, Liquor License, RSTV are computed, generated and pay online via the platform call Karu Local government Internal Central Revenue System (KICKS).
- ii. More so, tax payers can pay their taxes directly from their various banks account and this is achieved by Karu LGC in conjunction with Interswitch.
- iii. Tax receipts and certificates can now be easily applied for and processed online without having to visit the office of the tax authority
- iv. All business both formal and informal as well as properties are enumerated and issued with Karu Local government Number (KLIN) and Property Identification (PID) thereby making the process of documentation, retrieval and classification easy
- v. Electronic exchange of information between tax payers and Karu LGC Revenue Official.

vi. Charging of fines and fees for lateness:

The online system automatically calculates and updates the default list for enforcement of defaulters of revenue payment.

Empirical Literature

Lai (2008) examined the effect of e-filing on revenue generation in Malaysia; it revealed the extent to which tax revenue generation has contributed towards the economy's revenue and Gross Domestic Product and also the effect of tax evasion and tax avoidance on revenue generation in Malaysia. The study employed both primary and secondary sources of data. Using a survey research design, both descriptive and regression analysis were carried out on the data. Findings from the study revealed that taxation has a significant contribution on revenue generation, taxation has a significant contribution on Gross Domestic Product (GDP) and tax evasion and tax avoidance have a significant effect on revenue generation in Malaysia. Amabali (2009) studied the antecedents of paperless income tax filing by young professionals in India using Regression analysis. The antecedents of young Indian professionals depended on the perceived ease of the tax system, personal innovativeness in information technology, relative advantage, performance of filing service, and compatibility. Pippin and Tosun (2014) examined electronic tax filing in the United State of America. The study summarizes and analyses the demographic, socio-economic, and geographic factors affecting electronic tax filing (e-filing) in the United States for the years 1999, and 2004–2007 and the growth in e-filing between 1999 and 2007. Secondary data sourced from the IRS Statistics of Income ("SOI") Division and additional demographic and geographic information from the Bureau of Economic Analysis (BEA), the Bureau of Labor Statistics (BLS) and the census bureau were used; Analyses was carried out using regression, the rates of e-filing are noticed to be lower in rural communities with low population and with a lower share of females, Surprisingly, educational attainment is negatively correlated with e-filing rate and growth in e-filing.

Nasir (2015) examined implementing electronic tax fillings and payments in Malaysia; the main objective was to point out the benefits of maintaining a good e-tax system as opposed to a manual system. The study made use of secondary data from Malaysian Inland Revenue report from 2004 to 2011 using trend analysis to highlight the increase in tax returns since the adoption of an e-tax system in 2004. For the first two years, the number of taxpayers using the e –filing system remained far below expectation at about 5% and the tax authorities were still tackling the challenges posed by the new system such as timely and costly adaptation of the system, uncertainty and security problems, lack of technological exposure in the country etc. all of which had little or no impact on tax returns. 2006 to 2011 brought an increase in the users of the system from the disappointing 4% to an Encouraging 34% and 37% in 2012, over the same period tax returns increased from 14.5% of 52GDP to 15.3%. It also showed how compliance was increased and fewer hours used in collecting taxes. The conclusion of the study was that Electronic systems for filling and paying taxes, if implemented well and used by most taxpayers, benefit both tax payer and tax authorities and guarantees a better standard of living for all citizens.

Allahverd, Alagoz and Ortakapoz (2017) examined the effect of e-taxation system on tax revenue and cost in Turkey, the study used secondary data gotten from the Turkish revenue authority, the data were examined in two groups which are pre-electronic tax period of 1993-2004 and post-electronic tax period of 2005-2016. Mann-Whitney U Test was used to analyze the data. The research also provided information on the electronic transformation of the tax system and the Turkish Tax System. According to the empirical result of the research, the transition to the electronic tax system positively affected the tax revenues and reduced the cost per tax. Barati and Bakhshayesh (2015) examined electronic tax system and the challenges facing kermansah province tax payers in Iran. The researcher made use of primary data gotten from questionnaires administered to resident of kermansah province, analyses were carried out using Spearman correlation coefficient, variance analysis, superiority indexes, the agent exploring analysis, structural equations model, in which high sensitivity is used to check their compliance and review. Results show that: technical and infrastructural variables(95/0), social influence(90/0), the expected effort (51/0), legal issues(40/0), expected performance(32/0), information access (18/0) and

perceived risk(11/0) are factors of importance and more influence on the affecting factors for the adoption of electronic tax, respectively.

Theoretical Discussion

Technology Acceptance Model (TAM)

This theory was propounded by Fred Davis in 1989, the theory was later modified by Venkatesh and Bala, (2008). Its states that an individual intention towards using a new system is determined by perceived usefulness, and perceived ease of use (PEOU), the degree to which the user expects the target system to be free of effort and more so help to increase the degree of efficiency and effectiveness of performance. Accordingly the perceived ease of use also has a direct effect on predicting usage. TAM models are very useful within and across organizations setup for accessing the applications or technologies, or to make comparisons between user groups or applications. However, the limitation of TAM is when it is used outside of the work place Perceived usefulness (PU) – This refers to the extent to which an individual believes that using a specific system would enhance and improve job performance Perceived ease of use (PEOU) –This refers to the extent to which an individual believes that by using a specific system would be easy to use and free from using a lot of pressure or effort (Davis, 1989).

Theory of Innovation Translation

Theory of Innovation Translation was developed by Arthur Tatnall in 1990. It is an alternative view of theory of innovation diffusion, it is a theory of innovation in which instead of using an innovation in the form it is agreed upon or proposed, potential adopters translate into a form that suits their needs that is the potential users of the innovation decides to modify the innovation in a way that best fit its current system and not adopting the innovation the exact way it was proposed. In the case of this study the innovation at hand is E-Revenue Generation, while the actor is the Karu LGC, it is expected that Karu LGC adopt E-Revenue generation in Nasarawa State not in the way it was adopted in other nations of the world rather it should be adopted in a way that suit the level of economic and technological development in the Council.

METHODOLOGY

The study examined the links and connection between Electronic Revenue Generation and the actual revenue generation in the development of Local Government in Nasarawa State, Nigeria. The study adopted the ex-post facto design or causal comparative design. The population for the study consists of all the thirteen Local Government Councils in Nasarawa State as contained in part 1 of the first schedule of the constitution of the Federal Republic of Nigeria 1999 as amended. Secondary data were utilized for this work and sourced from the financial statement of the Council for the stated period were sourced from the office of the Nasarawa State Auditor General for Local Government. The data sourced were revenue paid to Karu LGC in form of Levies, Permits, License and Fine. The study period covered six (6) years and three (3) quarters, spanning from the first quarter of 2013 to the fourth quarter of 2019. The period for pre E- Generation covered thirteen (13) quarters, spanning from the first quarter of 2013 to the third of 2016 while the period for post E-Revenue Generated covered thirteen (13) quarters, spanning from the second quarter of 2016 to the second quarter of 2019.

The data analysis was carried out using Trend analysis and simple least square regression method (spss version17) were adopted for the study. Karu Local Government Council was purposefully selected for the study. Secondary data from the financial statement of the Council for the stated period were sourced from the office of the Auditor General for Local Government. The t-statistics analysis was employed in testing the hypotheses .In view of the research design, paired sample t-test otherwise known as Pre-Post Test was used as the data analysis technique. The appropriateness of this method can be justified from the fact that each variable was grouped into two observations (before E-Revenue Generation adoption and after E-Revenue Generation adoption). The predictor variable for this study is E-Revenue Generation and measured by the actual amounts of tax revenues and non-tax revenues generated by the council. The

criterion variable for the study is development of Local Government Council and measured by the movements in actual expenditure on road maintenance, staff salaries/wages, construction/renovation of Primary Health Care Centers/Primary Schools, drilling of Boreholes, etc by Karu LGC within the perions under investigation.

RESULT AND DISCUSSION

Table was used to present the data while the analysis was carried out using line and symbol graph, descriptive statistics of mean and standard deviation, paired sampled t-test. All these were achieved through E-view 9 and SPSS version 20.

Trend Analysis of the Variables

Trend Analysis of Actual Internal Revenue Generated Before the Advent of E-Revenue in Karu LGC

Table 1: Revenue generated from the Formal Sector, Tenement and Informal Sector in Karu LGC befor adoption of E-Revenue Generation

Periods	Formal Sector	Tenement	Informal Sector
Pre-E-Revenue	₦	₦	₦
Q1-2013	116, 507.4	175.8575	0.5878
Q2-2013	289, 081. 3	178.9823	2.7694
Q3-2013	2544492	170.6901	4.1601
Q4-2013	156.4812	185.0252	1.3993
Q1-2014	154.2939	192.1964	0.1667
Q2-2014	400.6694	180.6144	16.7834
Q3-2014	240.7724	207.0707	0.1395
Q4-2014	167.8149	222.802	2.5663
Q1-2015	174.1639	212.3853	0.7838
Q2-2015	556.2703	197.2551	0.2904
Q3-2015	273.129	211.3232	1.5191
Q4-2015	176.8439	201.2417	0.0565
Q1-2016	160.9244	193.3893	0.2486

Periods	Informal Sector	Tenement	Informal Sector
Post-E-Revenue	₦	₦	₦
Q2-2016	501.6561	64.9922	10.2796
Q3-2016	65.2876	56.399	0.2634
Q4-2016	265.3192	183.4499	0.2995
Q1-2017	166.0176	198.7343	0.228
Q2-2017	305.3955	197.7765	72.5931
Q3-2017	297.3369	207.214	24.1888
Q4-2017	164.7873	224.474	2.3935
Q1-2018	152.4191	221.3805	0.1106
Q2-2018	364.2424	246.3033	0.8258
Q3-2018	384.9345	250.5607	1.8449
Q4-2018	313.4608	254.1039	0.399
Q1-2019	203.6832	269.7938	0.318
Q2-2019	471.5832	266.7317	6.1663

Source: Office of the Auditor General for Local Government, Nasarawa State Quarterly Report from 2013 to 2019.

From the table above, the trend analysis of Informal Sector revenue before the advent of E-Revenue from 2013 to 2016 is presented. Overview of the trend showed that Informal Sector revenue trended up from the first quarter of 2013 to the third quarter before it declined from the last quarter of 2013 to the first quarter of 2014. It rose sharply in the second quarter of 2014, declined greatly in the third quarter before it rose again in the fourth quarter of 2014. In the same vein, from the first quarter of 2015 to the first quarter of 2016, Informal Sector revenue trended downward. The analysis further revealed a zigzag trend of Tenement revenue from the first quarter of 2013 to the second quarter of 2014, before a sudden sharp upward trend from the third quarter of 2014 to the fourth quarter of the same years. The outcome also showed a zigzag trend of Tenement revenue from the first quarter of 2014 to the first quarter of 2016. The table also revealed that there was an upward trend of company Informal Sector revenue from the base period, the first quarter of 2013, a downward trend from the second quarter to the first quarter 2014 before it rose sharply in the second quarter of 2014 and trended downward to the last quarter of 2014. It rose gently from the first quarter of 2015, before it trended up sharply from the second quarter of 2015 and decline greatly from the third quarter of the same year to the first quarter of 2016.

A cursory look at the trend analysis reveals that there was a sharp increase in the second and third quarters of 2016 in formal sector revenue after the introduction of E-Revenue generation, a sharp decrease in the fourth quarter before it maintained a parallel trend from the last quarter of 2016 to the first quarter of 2018. Averagely, it rose from the second quarter of 2018 to the third quarter before it trended downward to the first quarter of 2019 and finally rose in the second of the same year. The trend analysis revealed that Tenement revenue from the second quarter to the third quarter of 2016 trended downwards slightly, before it rose sharply from the fourth quarter of the same year to the second quarter of 2019. This reveals the efficiency of e-taxation in the generation of tenement revenue. This drastic increase could also be attributed to adoption of E-Revenue generation system. Lastly, the table reveals the trend analysis of informal sector revenue after the introduction of E-Revenue generation. Obviously, it could be clearly seen that informal sector revenue has maintained an unstable trend on the rise in karu LGC from the second quarter of 2016 to the second quarter of 2019.

Table 2. Summary of Projects executed before E-Revenue Generation period

S/N	Projects	Before E-revenue		After E-Revenue	
		No.	Period	No	Period
1	Street/Road Construction	-	1 st Qtr. 2013-1 st Qtr. 2016	5	2 nd Qtr. 2016-1 st . 2019
Q	PHCN	-	„	12	„
3	Blocks of Class room newly constructed and renovated.	-	„	15	„
4	School Desks	-	„	700	„
5	Drilled Motorized Boreholes	-	„	17	„
6	Public Toilet newly built	-	„	32	„
7	Reconstruction and expansion of office accommodation	-	„	4	„
8	Purchase Transformer	-	„	7	„
9	Constructions of concrete culvert	-	„	21	„
10	Staff Salary payment	20-50% payment	„	Full payment	„
	Total				

Source: Field Survey, 2020

Regression Result from all the Parameters

Dependent variable: Y

Variable	Coefficient	Std Err	T-Statistics	Prob
FSR	0.91905	0.013800	6.659685	0.0949
TTR	1.201855	0.058925	20.39650	0.0312
ISR	71.97584	3.547486	20.28925	0.0315

R-SQUARED (R2) 0.998927

Durbin Watson Statistics 2.443913

Recall that:

Y= Development in Karu LGC

FSR = Statutory Revenue Allocation

TTR= Excess Crude Revenue

ISR = Internally Generated Revenue

Discussion of Findings

From the regression result, the Durbin Watson (DW) of 2.443913 shows that there are no positive autocorrelation among all the variables. The coefficient of determination (R2) at 99% indicates a positive relationship between the dependent variables (the development effort of government) and the explanatory variables. This suggests that 99% of the changes in visible development in Karu Local government are explained by the changes in the FSR, TTR and ISR. The remaining 1% is explained by the variables not included in the model. With regards to Statutory FSR, a unit change induces 0.09 unit increase in visible development in Karu LGC. A unit change in TTR, induces 1.2 unit increase in the visible development on ground while a unit change in ISR, induces 71.9 unit increase in the visible development going on in all around Karu LGC.

CONCLUSION AND RECOMMENDATIONS

Literature affirmed that over the years tax compliance levels remain low and tax collections are below the targets set by most revenue collection authorities. The introduction of electronic tax systems in most countries across the globe, developing countries like Nigeria, still face the challenges of low tax compliance and tax administration. It was argued that E-Revenue generation systems are rapidly replacing paper-based tax reporting systems. Promising many advantages over the traditional method of hard copy tax filing, these systems promise faster processing, lower cost and increased efficiency. This was the basis on which this research work was conducted to examine the link or connect between E-Revenue generation adoption and actual revenue generation in Karu LGC on one hand, and to examine the effect of E-Revenue generation on the development of Karu LGC. Based on the outcome of the analysis carried out, it was concluded that; There is a very strong link or connect that exist between E-Revenue generation and the actual revenue generated in Karu LGC; and there is generally significant positive relationship between all the independent variables and the development efforts in all the sampled local governments as indicated by t-statistics deductively, most of the development efforts in the local governments are purely a function of all these important variables. Hence all the null hypotheses are thus rejected while the alternative stands accepted.

The following recommendations were made in line with the findings of the study:

- i. All other Local Government Chairmen in Nasarawa State should immediately adopt E-Revenue generation system so as to further maximize the expected positive impact of the initiative.
- ii. To ease accessibility by taxpayers, mobile version of electronic tax portal should be created. This will no doubt increase the adoption rate by tax payers as mobile phones are being increasingly used.

- iii. The Legislative Arm of Karu LGC should as a matter of urgency legislate on E-Revenue generation system making is mandatory to every administration to continue to implement it and improve it.

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Impact of Government Expenditure on Nigeria's Economic Growth

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Abstract

Continuous and impartial economic growth is a major objective of government expenditure policy and as such, it is obligatory of any government to allocate public spending across different sectors of the economy. Over the years some scholars contend that increase in government expenditures do not promote economic growth while some contend that government expenditure do promote economic growth. This study examined the impact of government expenditure on economic growth in Nigeria. The major objective was to investigate the extent of the impact of recurrent expenditure and capital expenditure on the Nigerian economy. The study adopted ex-post facto research design using descriptive and inferential research design. It used annual time series data extracted from the Central Bank of Nigeria statistical bulletin for the year 1981 to 2018. For the data analyses, the study used descriptive statistics and correlation matrix and employed the multiple regression techniques of the ordinary least squares (OLS) where gross domestic product (GDP) (dependent variable) is responsive to recurrent expenditure, and capital expenditure (independent variable). The results revealed that government expenditure (recurrent and capital expenditure) have significant impact on the economic growth in Nigeria. Particularly, government recurrent expenditure has positive and significant effect on the economic growth in Nigerian. The government capital expenditure has a non-positive effect on economic growth in Nigeria. The study therefore concludes that government expenditure has significant impact on the economic growth in Nigeria. The study recommended that Government should increase her budgetary allocation to capital projects and an effective utilization of such funds is also advocated and all areas of wastages should be blocked, government should pay more attention to the economic services sectors by compelling non-governmental financial institutions like commercial banks to supplement government efforts at financing agriculture through the disbursement of loans at low interest rate at the appropriate time in order to avoid the diversion of such loans.

Keywords: Government Expenditure, Recurrent expenditure, Capital expenditure, Economic Growth.

INTRODUCTION

Government expenditure refers to the purchase of goods and services, which include public consumption and public investment, and transfer payments consisting of income transfers (pensions, social benefits) and capital transfer. Many political philosophers like Hobbes and Locke considered the hypothetical disadvantages of life without government (Miles, 2003). Where market failures and other socially unwarranted vices are predominant, government has the impetus to exercise greater controls and discretion over their economies. They do this through periodic planning for the allocation of resources and productive spending in critical areas of need. Thus, government expenditure has become an important factor for self-sustaining productivity improvements and long-term growth. Continuous and equitable economic growth is clearly a predominant objective of government expenditure policy. It is therefore incumbent on government to allocate public spending across various sectors of an economy in order to maximize prospects of achieving its growth and development objectives. Government Expenditure are expenses which any government incurs for its own maintenance, for the good of society and the economy, and for assistance to external bodies and other countries, Anyanwu, 1993 refers to the expenditure of government on governmental bodies and on various segments of the economy. Government spending or expenditure includes all government consumption, investment, and transfer payments, the acquisition of goods and services by government for current use, to directly satisfy the individual or collective needs of the community which is classed as government final consumption expenditure.

A good pattern of government expenditure encourages economic growth, favors the provision of employment and good roads, and ensures increase in salaries of civil servants. Government expenditure pattern of any developing country should be geared towards this international standard of goodness. Government expenditure as argued by various scholars has significant effects on economic growth. Whenever the rate of government spending on health and education for instance increases, the outcome is higher rate of economic growth. Also, government spending on infrastructures such as road projects, transportation, agriculture, etc. attracts more investments and increases the

profits of firms and incomes of individuals thereby accelerating economic growth. The government's investment in physical and social infrastructures, health care facilities, and educational institutions has significant effects on economic growth for it provides a suitable climate for investments in a country. However, some scholars contend that increase in government expenditures do not promote economic growth rather, it slows down the overall performance of the economy. The question which arises therefore is how does government expenditure impacts the economic growth in Nigeria? This paper aims at investigating the impact of government expenditure (recurrent expenditure and capital expenditure) on economic growth in Nigeria from 1981 – 2018. In Nigeria, like in most developing countries, the role of government in economic development can be categorized into stabilization, resource reallocation and income distribution. Therefore the government intervenes in the economy using fiscal and monetary policies. Specifically, fiscal policy refers to the manipulation of government revenue and expenditure towards influencing the workings of the economic system. Government revenue sources include different forms of taxes, rents, profits and sales of natural resources, etc. The expenditure include government spending on defense, education, health as well as subsidies. For budgetary purposes, government revenues sometimes absorb government expenditure in a situation referred to as a balanced budget while in some other instances the revenue falls short of the expenditure and this is referred to as the deficit budget. Yet in some instances, the revenue exceeds the expenditure and this is referred to as a surplus budget. In Nigeria, given the superiority of oil revenue in the total government revenue, government expenditure traces the volatility in oil prices. When oil price rise government revenue and expenditure also rises, and when price fall, so does revenue and the expenditure.

LITERATURE REVIEW

Conceptual Framework

Concept of Government Expenditure

Government expenditures are the costs that are usually incurred by the government for the provision and maintenance of itself as an institution, the economy and society. Anyafo (1996) describes expenditure as an actual payment or the creation of an obligation to make a future payment for some benefit, items or service received. Hales (1994) defines expenditure as payment, or promise of future payment and the obligation incurred thereunder, for goods and services delivered. Attamah (1999) writes that the traditional function of government expenditure is the maintenance of the bureaucratic structure (i.e. the civil service) and defense. Today, governments perform a variety of economic functions. According to him during the industrial revolution, poverty was increasing at an alarming rate, and as an offshoot of the increasing suffering of the laborers, Karl Marx and his followers agitated for a communist revolution. In reaction to this growing suffering, the governments of many countries started to increase their presence in the economic arena by acting as a redistributive agent to lessen the burden of the poor. Government expenditures usually tend to increase with time as the economy becomes large and more developed or as a result of increase in its scope of activities. Ogboru (2010) identified recurrent and capital budget as one of the major types of budget in an economy. It is sometimes referred to as revenue budget and it covers recurrent items or expenditure. The capital budget has to do with expenditures necessary to procure capital assets. According to Taiwo (2012), government's spending is a fiscal instrument which serves a useful role in the process of controlling inflation, unemployment, depression, balance of payment equilibrium and foreign exchange rate stability. In the period of depression and unemployment, government spending causes aggregate demand to rise and production and supply of goods and services follow the same direction. As a result of the increase in the supply of goods and services couple with a rise in the aggregate demand exerts a downward pressure on unemployment and depression. In Nigeria, the federal government's expenditures are broadly divided into recurrent and capital expenditure. The recurrent expenditure consist of government expenditure on administration such as wages, salaries, interest on loans, maintenances etc. whereas the capital expenditure are on projects like roads, airport, health, education, electricity generation, telecommunication, water etc.

Capital expenditures are investments with multiplier effects on the economy in terms of public benefits. In most cases government intervention has brought stability in income and employment in the economy. According to Barro and Grilli (1994), Government spending (or government expenditure) includes all government consumption and investment but excludes transfer payments made by a state. Government expenditure can be for the acquisition of goods and services for current use to directly satisfy individual or collective needs of the members of the

community or it can be for acquisition of goods and services intended to create future benefits such as infrastructure investment and the expenditures can represent transfers of money, such as social salaries and cost of administration. Current expenditure is recurring spending or, in other words, spending on items that are consumed and only last a limited period of time. They are items that are used up in the process of providing a good or service. In the case of the government, current expenditure would include wages and salaries and expenditure on consumables - stationery, drugs for health service, bandages and so on. By contrast, capital expenditure is spending on assets. It is the purchase of items that will last and will be used time and time again in the provision of a good or service. In the case of the government, examples would be the building of a new hospital, the purchase of new computer equipment or networks, building new roads and so on. The breakdown between these two types of spending is very important. While capital expenditure has a lasting impact on the economy and helps provide a more efficient, productive economy. Current expenditure, however, doesn't have such a lasting impact. Once the money is spent, it is gone and the effect on the economy is simply a short-term one. Public expenditure is therefore an important tool that brings about egalitarian society through the provision of welfare facilities (Ogba, 1999). Public expenditure is functionally classified into four (4) categories in Nigeria: administration, economic services, social and community services, and transfers with capital and recurrent expenditure consumptions for each class (CBN, 2011).

Concept of Economic Growth

Muritala and Taiwo (2011) defined a country economic growth as a long term rise in capacity to supply increasing diverse economic goods to its population, this growth capacity is based on advancing technology and the institutional and ideological adjustment that is demand. In other words, economic growth refers to increase in a country's potential Gross Domestic Product (GDP), although this differs depending on how national product has been measured. According to Ogundipe and Oluwatobi (2010), economic growth must be sustained for a developing economy to break the circle of poverty. Economic growth can be defined as the steady process by which the productive capacity of the economy is increased over time to bring about rising levels of national output and income (Todaro and Smith, 2005). However, it is pertinent to note that growth is concerned solely with quantitative and measurable attributes (Ogboru, 2006). Furthermore, Lipsey and Chrystal (2007) regarded economic growth as the engine for generating long-term increase in the overall standard of living. This justifies why every economy aims at achieving economic growth annually. Economic growth is also defined as the increase in the market value of the goods and services produced by an economy over time. It is conventionally measured as a percent rate of increase in real gross domestic product (GDP). Jhinghan (2011) stated that economic growth is the quantitative sustained increase in a country's per capita output or income, accompanied by expansion in its labor force, consumption, capital and volume of trade. While economic development is economic growth plus change. An economy can grow but may not develop. However, it is difficult to imagine economic development without economic growth. Though they differ in concept, they are sometimes used interchangeably.

Empirical Review

Mohsen and Nafise (2016) investigated the causal relationship between government expenditure and GDP for MENA region countries. They used panel unit root tests and panel co-integration analysis for the period 1970-2010. The results showed a strong causality from economic growth to government expenditure in these countries. However, government spending does not have any significant effects on GDP. Uguru (2016) empirically examined the relationship between public debt and government expenditure in Nigeria from 1980 to 2013. The data used was purely secondary data sourced from Central Bank of Nigeria Statistical Bulletin for various years. The study employed the ordinary least square regression technique and found that there is a significant relationship between public debt and government expenditure in Nigeria. Ebong, Ogwumike, Udongwo and Ayodele (2016) assessed the impact of government capital expenditures on economic growth in Nigeria. A multiple regression model based on a modified endogenous growth framework was utilized to capture the interrelationships. Drawing on error correction and integration specifications, an OLS technique was used to analyze the annual time series. They found that the disaggregated expenditures do not crowd out private investment. Udoffia and Godson (2016) investigated the impact of federal government expenditure on the Nigerian economy using the OLS estimation technique and found that federal government capital and recurrent expenditure have a positive effect on real GDP. Odhiambo (2015) studied the dynamic causal relationship between government expenditure and economic growth, using data from

South Africa, the apparently most advanced economy in Africa. The study employed auto-regressive distributed lag model (ARDL)-bounds testing approach to examine this linkage. The study found that, although both government expenditure and economic growth Granger-cause each other in the short run but in the long run, it is economic growth that Granger-causes government expenditure. Emori, Duke and Nneji (2015) investigated the impact of government expenditure on the Nigerian economy using ADF unit root test and OLS regression test. They found that public expenditure had a significant effect on the Nigerian economy.

Gukat (2015), analyzed the relationship between government expenditure on human capital and economic growth in Nigeria. Using the error correction mechanism the study found that public expenditure on human capital has a positive and significant impact on economic growth in Nigeria. Also, Ohwofasa, Obeh, and Atumah (2012) and Chude and Chude (2013) have investigated the relationship between government expenditure in the education sector and economic growth in Nigeria with similar findings. Aninkan and Akinsanya (2014) studied the joint effects of capital and recurrent expenditures of government on the economic growth of Nigeria from 1980-2011, using the ordinary least square method for estimating multiple regression models. The regression results showed that both capital and recurrent expenditures impacted positively on economic growth during the period of study. The recurrent expenditure has a stronger and more accelerating effect on growth than capital expenditure. Agbonkhese and Asekome (2014) studied the impact of public expenditure on the growth of the Nigerian economy from 1981 to 2011. They employed Ordinary Least Square (OLS) method of econometric technique and found that although there is a positive relationship between the dependent and independent variables, the adjustment of economic growth or gross domestic product was a fair one which made it difficult to reject the null hypothesis which according to them implies that government over the years appears to be bad managers of resources and have failed to play their role in the process of economic growth and development. Edame (2014) critically analyzed the trends of public expenditure on infrastructure and economic growth in Nigeria, from 1970 to 2010. The study examined the trend in public expenditure on infrastructure in Nigeria between 1970 and 2010, and compared the trend in public expenditure between the various regimes in Nigeria between 1970 and 2010. Oyinlola and Akinnibosun (2013) examined the relationship between public expenditure and economic growth in Nigeria during the period 1970-2009. The study used components of public expenditure such as recurrent expenditure, capital expenditure, administrative expenses, community and social service and transfer. The result also showed the presence of a counteracting relationship between the variables in the system thus, suggesting that a long term relationship exists between them.

Okoro (2013) investigated the impact of government spending on the Nigerian economic growth for the period of 32 years (1980-2011). Employing the ordinary least square multiple regression analysis of co-integration technique, the researcher discovered that there exists a long-run equilibrium relationship between government spending and economic growth in Nigeria. Mutiu and Olusijibomi (2013) studied the relationship between public expenditure and economic growth in Nigeria from 1970 to 2009. The study used Gregory-Hansen structural breaks co-integration technique on a disaggregated public expenditure level and found that economic growth and development are the main objectives of government expenditure. Saheed (2012) examined the impact of government capital expenditure on exchange rate in Nigeria, using disaggregated approach. The findings of the study indicated that the government's capital expenditure, especially government spending on social and community services has a statistically significant impact on exchange rate in Nigeria, while capital expenditures on administration, economic services and transfer are not statistically significant in respect to their impact on exchange rate. In studying the effect of the composition of public expenditure on growth in Nigeria using the vector error correction approach (VEC), Onotaniyohwo et al (2012) found that the expenditure on transfers had a significant but negative impact on growth while the expenditure on economic and social-community services had a significant and positive impact on growth. Taiwo and Agbatogun (2011) studied government expenditure as a sine qua non for economic growth and development in Nigeria from 1980 – 2009. Using Johansen Co-integration, unit root test and error correction model, it was discovered that total capital expenditure, inflation rate, degree of openness and current government revenue are significant variables to improve growth in Nigeria. Abu and Abdullahi (2010) examined government expenditure and economic growth in Nigeria from 1970 to 2008. Employing ordinary least squares (OLS) regression technique, they found that government capital and recurrent expenditure have negative and non-significant effect on economic growth of Nigeria. Mitchell (2005) studied the impact of government spending on

economic growth in America. Using economic theory and empirical, the researcher concludes that a large and growing government is not conducive to better economic performance. Indeed, reducing the size of government would lead to higher incomes and improve America's competitiveness.

Theoretical Framework

Adolph Wagner's Theory of Increasing State Activities

The earliest of all theories of government growth is Wagner's Law of Increasing State Activity. This theory posits a relationship linking industrialization, urbanization and education to the expansion of the public sector (Bird, 1971). The activities of the different tiers of government (federal, state and local) increase both intensively and extensively arising from increasing demand for public utilities. Wagner advanced the theory of rising public expenditure by analyzing trend in the growth of government expenditure and in the size of government expenditure. Wagner's law postulates three focal bases for the increase in state expenditure. Firstly, during industrialization process, public sector activity will replace private sector activity and state functions like administrative and protective functions will increase. Secondly, governments needed to provide cultural and welfare services like education, public health, old age pension or retirement insurance, food subsidy, natural disaster aid, environmental protection programs and other welfare functions. Thirdly, increased industrialization will bring out technological change and large firms that tend to monopolize economic activities. Governments will have to offset these effects by providing social goods through budgetary means. Wagner further pointed out that public spending is an endogenous factor, which is determined by the growth of national income. Hence, it is national income that causes public expenditure. The Wagner's Law tends to be a long-run phenomenon: the longer the time-series, the better the economic interpretations and statistical inferences. It was noted that these trends were to be realized after fifty to hundred years of modern industrial society. So it is the economic growth that determines government size. The theory explains that increases in public goods are a product of increased demands by organized industrial workers, coming at the costs of growth in the private sector (Wagner, 1958). The government sector tends to grow faster than the economy.

Musgrave's Theory of Public Expenditure Growth

The Musgrave's theory of public expenditure and growth explained that, at low level of per capita income, the demand for public services tend to be very low, arguing that such income is devoted to satisfying primary needs and it is only when the per capita income starts to rise above these level of low income that the demand for services provided by the public sector such as education, health, and transports starts to rise, thereby forcing government to increase expenditure on them. The theory observed that with high per capita income typical in the developed nations, the rate of public spending falls as most basic wants are being satisfied. Therefore the theory suggested in connection to Wagner that as progressive nations become more industrialized, the share of public sector in the national economy grows continually (Musgrave, 1988). Iyoha stated five stages of expenditure growth; "Traditional society, preconditions for take-off, the take-off; the drive to maturity and the eye of high mass consumption." What determines the accepted expenditure-growth depends critically on the assumption of the type of economy, i.e. whether it is a free market economy, a mixed economy or a command economy (Iyoha, 2002).

Wiseman-Peacock Hypothesis

Peacock and Wiseman (1967) suggested that the growth in public expenditure does not occur in the same way that Wagner theorized. Peacock and Wiseman choose the political propositions instead of the organic state where it is deemed that government like to spend money, people do not like increasing taxation and the population voting for ever-increasing social services. In another thesis put forth by Peacock and Wiseman in 1961, they studied public expenditure in the UK. It explained the reason of increasing public expenditure from the social-political perspective. It argues that Government expenditure will increase as income increases but because the leaders want re-election into political offices, additional infrastructures must be provided in order to convince the electorate that their interests are being catered for by the people voted into power. However, the citizens of the country are less willing to pay tax. The resistance of the care of the government in form of increased spending to avoid social crises in the

economy. The resistance to pay tax by the people will make the state to have low revenue hence the cost of providing more facilities is borne by the government, making government expenditure to increase rapidly.

Classical Economists Theory

Classical economists believed that government intervention brings more harm than good to an economy and that the private sector through the forces of supply and demand should carry out most of the economic activities. According to the classical dichotomy, an increase in the total amount of money leads to a proportionate increase in all money prices, with no change in the allocation of resources or the level of GDP, which is known as money neutrality. The classical economy have a clear message that except for certain unavoidable responsibilities like national defense, the administration of justice and provision of certain socially necessary institutions such as educational institutions that private interest might neglect, the government ought to stay out of economic sphere. Laissez-faire became the motto and the policy was to leave the economy alone out of the government control (Akor, 2010).

The Keynesian Theory

This theory favored government intervention to correct market failures. In 1936, John Maynard Keynes (1883-1946) "General Theory of Employment, Interest and Money" criticized the classical economists for putting too much emphasis on the long run. According to Keynes, "we are all dead in the long run". Keynes believed depression needed government intervention as a short term cure. Increasing saving will not help but spending. Government should increase public spending giving individuals, purchasing power and producers would produce more, creating more employment. This is the multiplier effect that shows causality from public expenditure to national income. In the Keynesian macroeconomics, increase in government expenditure has an expansionary effect on income and employment through the multiplier effects on aggregate demand. On the other side, government expenditure crowds out private investment as a result of increase in the rate of interest and this slows down economic growth and reduces the rate of capital accumulation in the long run. Keynes (1936) regarded government expenditure as an exogenous variable that contributes positively to economic growth. Hence, an increase in government expenditure would likely lead to increase in employment, profitability and output through the multiplier effects on aggregate demand. With the introduction of government expenditure (G) by Keynes, the national income determination model is expanded which becomes; $AD=C+I+G$. Where, AD represents aggregate demand which equals the sum of consumption (C), Investment (I), and government expenditure. The government expenditure has direct and positive impact on the GDP. An increase in government expenditure will boost aggregate demand, resulting in higher level of national income. All things being equal, an increase in government spending has an expansionary effect on output and income while a decrease has contractionary effect on output and income. From the Keynesian thought, public expenditure can contribute positively to economic growth. Hence, an increase in the government consumption is likely to lead to an increase in employment, profitability and investment through multiplier effects on aggregate demand. As a result, government expenditure augments the aggregate demand, which provokes an increased output depending on expenditure multiplier. The Keynesian analysis of government expenditure formed the bases for this research.

METHODOLOGY

The study focused on time series data for three economic variables for the period from 1981 to 2018. This study concentrated on the following variables; dependent variable, economic growth measured by the nominal GDP and independent variables which is government expenditure as recurrent and capital expenditure. This study used secondary data which was collected from the Central Bank of Nigeria Statistical Bulletin. The Ex-post-facto research design was adopted for this study using both descriptive and inferential research design. Based on the objectives of the study, this research adopted the Keynesian model. The Keynesian model believes that increase in government spending should promote economic growth. The study employed a multiple regression model and applied Ordinary Least Squares estimation technique because of its trait as a best linear unbiased estimator. The research technique has been employed and found to be suitable in similar researches like Abu and Abdullahi (2010) and Okoro (2013). An econometric model was developed to examine the nexus or linkage between recurrent and capital expenditure and gross domestic product.

$$GDP = f(REC, CEP)$$

The transformation of the above model into a regression function is given below:

$$GDP_{it} = \beta_0 + \beta_1 (REC)_{it} + \beta_2 (CEP)_{it} + e_{it} \dots \dots \dots (1)$$

Where,

GDP = Gross Domestic Products (dependent variable)

REC = Recurrent Expenditure (independent variable)

CEP = Capital Expenditure (independent variable)

β_0 = Constant term

β_1 = Coefficient of the parameter estimates

e = Error Term

The emphasis of the study is to test whether recurrent expenditure (REC) and capital expenditure (CEP) has a positive and significant impact on gross domestic products (GDP).

4. RESULT AND DISCUSSION

Table 1: Descriptive Statistic

	GDP	REC	CEP
Mean	27569.37	1286.977	426.2259
Median	6102.422	455.6312	289.3337
Maximum	127762.5	5675.186	1682.099
Minimum	144.8312	4.750800	4.100100
Std. Dev.	37734.90	1637.927	441.8904
Skewness	1.279906	1.119582	0.901350
Kurtosis	3.322978	2.981852	2.989323
Jarque-Bera	10.54017	7.939124	5.145582
Probability	0.005143	0.018882	0.076322
Sum	1047636.	48905.14	16196.59
Sum Sq. Dev.	5.27E+10	99263783	7224884.
Observations	38	38	38

Source: Author's computation using E-views 10

From the above table, it is seen that REC has a mean of 1286.977, a standard deviation of 1637.927 which means REC can vary from its mean by 1637.927. CEP has a mean of 426.2259, a standard deviation of 441.8904 which means CEP can vary from its mean by 441.8904. GDP has a mean of 27569.37, a standard deviation of 37734.90 which means GDP can vary from its mean by 37734.90.

Table 2: Correlation matrix

	GDP	REC	CEP
GDP	1	0.99116880...	0.88544026...
REC	0.99116880...	1	0.91798708...
CEP	0.88544026...	0.91798708...	1

Table 2 above shows the correlation matrix of the variables used in this study. It is said that there are positive correlations among the variables. GDP is positively correlated with REC and CEP.

Testing of Hypotheses and Interpretation

A summary of the results of the Ordinary Least Square (OLS) regression is presented in Table 2 below:

Hypothesis One

H^0 : there is no significant relationship between recurrent and capital expenditure and GDP

Table :2

Dependent Variable: GDP				
Method: Least Squares				
Date: 09/14/20 Time: 15:33				
Sample: 1981 2018				
Included observations: 38				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
REC	26.19783	1.120579	23.37883	0.0000
CEP	-13.96562	3.796890	-3.678173	0.0008
R-squared	0.986158	Mean dependent var		27569.37
Adjusted R-squared	0.985773	S.D. dependent var		37734.90
S.E. of regression	4500.834	Akaike info criterion		19.71311
Sum squared resid	7.29E+08	Schwarz criterion		19.79930
Log likelihood	-372.5491	Hannan-Quinn criter.		19.74377
Durbin-Watson stat	1.162845			

Source: Author's computation using E-views 10

The result shows that the recurrent expenditure and capital expenditure both have positive significant relationship with GDP. As show in table 2.above, In terms of the fitness of the study model, the coefficient of multiple determinations indicates that R^2 is approximately 0.986 while adjusted R^2 is 0.985 of the variations in GDP (dependent Variable) are explained by the influence of recurrent and capital expenditure. The test of overall significance of regression implies testing the null hypothesis. The overall significance of the regression is tested using ordinary least square methods. In this study the calculated F probabilities has a value of 0.0000 for recurrent expenditure and 0.0008 for capital expenditure which is significant at 0.05. It is therefore, concluded that linear relationship exist between the dependent and the independent variables of the model. Base on this finding, the postulations which state that capital expenditure has no positive effect on GDP as it has a coefficient of -13.96562 while recurrent expenditure has a positive coefficient of 26.19783. The evidence established that the independent explanatory variables have individual impact economic growth. Therefore the null hypothesis is false. Government expenditure has positive and significant influence on economic growth in Nigeria.

CONCLUSION AND RECOMMENDATIONS

This study investigated the impact of the government's expenditure on economic growth in Nigeria. The regression results show that government recurrent expenditure have positive linear relationship with the economic growth in Nigeria, with a coefficient value of 26.19783, t-statistic value of 23.37883 and associated probability value of $0.0000 < 0.05$ that have a significant positive effect on the growth of Nigerian economy. The government capital expenditure have a negative coefficient value of -13.96562; t-statistic value of -3.678173 and associated probability value of 0.0008 that have a significant positive effect on economic growth in Nigeria. From the empirical analysis, given the period under study, one can safely conclude that increase in government recurrent expenditure has a positive and significant impact on the economic growth in Nigeria, and government capital expenditure has significant impact on the economic growth in Nigeria and an increase in the sending on capital expenditure will lead to a positive impact on the economy. Based on the findings of the study, this study, however, recommends that;

- Government should increase her budgetary allocation to capital projects and an effective utilization of such funds is also advocated and all areas of wastages should be blocked.
- Government should pay more attention to the economic services sectors by compelling non-governmental financial institutions like commercial banks to supplement government efforts at

- financing agriculture through the disbursement of loans at low interest rate at the appropriate time in order to avoid the diversion of such loans.
- iii. The Independent Corrupt Practices and other Related Offences Commission and the Economic and Financial Crimes Commission should be reformed and strengthened in order to promote transparency in the conduct of government spending.
 - iv. The Nigerian government should also adopt a public medium term expenditure framework to ensure predictable and sustainable public expenditure at all levels of government.

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Effect of Accounting Information and Communication System on Financial Reporting Quality: A Review of Theories and Empirical Works

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Abstract

The alignment of Business and information technology is still an important concern of both business and technological managers. The vast directions of accounting information system on financial reporting quality presents the most important relations between the challenges and technological responses in pointing out the way for future research in order to improve the alignment between adopted technology and organization performance, in this particular case the support of management information systems to accounting and management. The main objective of this study is to review the theoretical and empirical literature on the effect of accounting information system on reporting quality and to ascertain research gaps from past studies. The study concluded that past studies on the effect of accounting information and communication system on reporting quality are limited but have yielded positive results; while some studies documented accounting information system improves financial performance, others suggested accounting information system aids management strategy. Furthermore most studies were carried out in advance economies, where advanced computerized accounting information system techniques have been in practice.

Keywords: Information Technology, Accounting Information system, Data Quality, Financial Performance.

INTRODUCTION

As part of management information systems, accounting information and communication systems represent one of the most important systems in the economic unit and vary among organizations in terms of the application of accounting information systems and the consciousness of their importance. Many organizations automate and integrate their business operations by accounting information system (Hla and Teru, 2015). Accounting information system is a manual or computer-based system that increases the control and enhances the synergy in an organization, to assign the quantitative value of the past, present, and future economic events. Data collections, data maintenance, data information accounting systems and knowledge management, data/security control and information generation are key functions performed by an accounting information and communication system. An information system seeks to take advantage of the surrounding circumstances in order to improve the quality and quantity of information and to enhance delivery mechanism to users, thereby providing various users with different forms of useful information to meet their various needs (Alzoubi, 2012). Despite the continuous production of accounting information as required by law, financial and accounting regulations aimed at improving financial performance, there is a persistent misuse of resources and poor accountability (Bukonya, 2014). Reliability, relevance, accuracy, timeliness, and clarity are true measures of perceived quality of accounting information in that order. For financial information to serve its intended objective, it should be of good quality to ensure good decision- making. Identifying management commitment to efficient Accounting Information and quality reporting systems has been widely recognized as the most important factor for the achievement of Business success (Iskandar, 2015). Implementing accounting information systems in Nigeria usually require intensive resources, often with an unsatisfactory result after spending millions of naira, and most businesses are forced to abandon the project. Even if the system was delivered on time and within budget, it does not guarantee that it will be used or preferred by the user, and might not achieve the expected benefits and the end of the whole process the system becomes staled.

The role of accounting information system is significant because it derives its necessity from the level of contribution in improving the value chain of business organizations, and provides various resources and optimally allocates them under risk conditions and the uncertainty surrounding the business environment. Other qualitative characteristics of accounting information can also be maintained if there is a sound internal control system in an organization (Toposh, 2014). Internal controls

procedures are set up to protect assets, ensure reliable accounting reports, promote efficiency and encourage adherence to company policies as essential to achieve objective such as the efficient and orderly conduct of accounting transactions, safeguarding the assets in adherence to management policy, prevention and detection of error, prevention and detection of fraud and ensuring accuracy, completeness, reliability and timely preparation of accounting data. An accounting information and communication system that is accurate, flexible to suit environmental changes, timely, provide administration the necessary information to plan and control economic activities and an effective feedback mechanism is effective and efficient (Hafnawi, 2001). Well-designed accounting information and communication system simplifies getting information to interested users by an authorized access. Also, auditors can use the data to assess a company's internal controls, financial condition and the compliance with the Sarbanes-Oxley act. An automated accounting information and communication system issues instructions and procedures for collecting, storing, retrieving and processing data that is coded into accounting information and communication system software having a structured database. Having a pool of data in one place facilitates record keeping, reporting, analysis, auditing and decision-making activities of an economic unit.

LITERATURE REVIEW

Conceptual Clarifications

Accounting information system

Accounting information system and financial reporting quality concepts need to be clarified especially on the study. This will not only sharpen the direction of this study but will also provide a framework upon which the study findings will be validated. Romney and Steinbart (2012), and Gel, (2010) defined an accounting information system as a collection of parts and sub systems that are connected with each other and with the surrounding environment and operate as a single overlap relationship between each other and between the system that combines, where each part depends on the other in achieving the goals sought by the comprehensive system of accounting, in order to provide data and information to decision makers. It then means, accounting information systems collect, record, store and handles data to provide information to decision-makers via advanced technology or simple system or in between of the two. In order for accounting information to achieve its desired goals, it should have the following basic properties (Ahmad, 2006); it should be: Appropriate, Credible, Timely, Understandable, Important, and possess financial data quality

Concept of Information System

Idris, (2005) defined the information system as a system which includes a set of elements and reactants components of the relevant reciprocity that work together to collect, operate, store, distribute necessary information for the decision- making process in the organization. Information system is a system consisting of a set of parts and procedure interacting with each other in order to collect, process, and store the appropriate data, and deliver the appropriate information in the appropriate time and place and accuracy suitable for the process of decision-making in the organization and in a form which contributes to achieve its objectives. Miller, (2002) acknowledged the concept of accounting information quality as a new model to achieve tremendous benefits that indicate the need of administration to communicate with shareholders to understand their needs and serve them fast and in the best possible way. Such characteristics aim to help administrators when developing accounting standards and assist accountants in the preparation of financial statements in assessing the accounting information that results from the application of alternative accounting methods and distinguish between what is a necessary clarification and what is not according to the users of accounting information.

Quality of Accounting Information and Financial Performance

The key components of effective financial management include: access to relevant information; use of that information to enhance management standards; and assurance that the information is accurate, relevant and secure (Barrett, 2004). Accounting information systems maintain and produce the data (for example, financial statements containing information about accounts and their balances) used by

organizations to plan, evaluate, and diagnose operations and financial position (Peters et al, 2001). Therefore, the aim of the regulators should be to make an accounting system that offer maximal benefits at lowest possible cost. According to Goitom, (2003), the better the quality of accounting information, the greater the possibility for a business success and this is possibly because accounting can be viewed as an information measurement and communication system to serve macro and micro-economic activities. Investment decisions made in a vacuum are gambles; useful decisions are made depending on useful information (Sserwanga, 2003). Sometimes decision makers may be fed with irrelevant and useless information than they can use, they may overlook information on serious problems (Stoner, Freeman, and Gilbert, 1995).

A financial report that does not reflect economic reality will result in poor decision-making. It is therefore necessary for public enterprises' managers, the supervision authority and the government as controllers to appreciate the need for quality accounting information in order to minimize waste. The objective of accounting is to provide information that is useful to making rational decisions. Usefulness is characterized by relevance and reliability. It should be noted that the restoration of financial discipline in local governments through enhanced reporting standards and practices would be an important step leading to improvements in the quality of municipal governance and in the quality of citizens lives (Temple, 2002). It was noted further that quality reporting is a critical part of the performance management effort. It improves communication with internal and external stakeholders, leads to better decision-making and ultimately improves performance (Bisnow, 2004)

Accounting Information System and Data Quality

The output of accounting information system (AIS) depends on the quality of data, garbage in garbage out is the result of poor data quality, and therefore data quality is important to AIS (XU, 2003). The processes of data collection, storage, and utilization must work properly in order to achieve high data quality (Lee and strong 2003). According to (Xu 2009), inaccurate and incomplete data may damage a firm's competitive ability. These studies also agreed that input control and competent employees are important to data quality of accounting information system.

Accounting and Management Information system (MIS)

Most businesses use a large amount of non-financial information. Their marketing departments for example, are interested in the style or packaging of competitor products. Personnel departments keep health and employment records of employees. With the wide spread of computers and computer applications today, many of these varied information needs are being organized into what is called Management Information System (MIS). According to Esiefa (2005) he stated that the management information systems consist of interconnected subsystems that provide the information needed to run a business. The accounting information system is the most important subsystem because it plays the primary role of managing the flow of economic data to all parts of the business and to interested parties outside the business. Accounting is the financial nub of the management information system; it gives both management and outsiders a complete view of the business organization. Some organizations have many operational activities, but how to express the achievement of the operation requires qualification of the operational activities and accounting services as a tool for quantifying (management) activities and the result is the accounting information. Simply put, accounting information isto use the language to reflect the operational achievements but why is accounting information so important? Mainly it has too close relation with all. As economic cells of the society, all enterprises or organizations are associated with people which rely on accounting information. For instance, Graham (1990) stated that "an investor has to take decision based on accounting information; enterprises (management) has to take operational and other decisions according to accounting information, banks have to take decisions on loans base on accounting information". "This is because the society and economy are in alienable from accounting information". This is the reason for the need of accuracy and reliability of accounting information.

Users of accounting information

Accounting information is used more than commonly realized. Here are some question according to Graham (1990) a company (bank) might face in its everyday activities, that's involving accounting information;

- i. In applying for loan: - How should the financial statement for the bank be computed? How is the interest on the loan computed?
- ii. In making an investment: - Is this a good company to invest in? What is the risk? Is the company in a good cash position?
- iii In going to school: - How much money will it take to get through the next school year? Will there be enough money for rent, food and transportation next month?
- iv. In taking a job: - Is the company financially sound? Are they the most profitable? What are the company's benefit plan and retirement program?

There are just few of many important uses of accounting information. As a member of various groups in management and society, the student of business and financial accounting will be doing accounting daily as an aid in making difficult decisions. The users of accounting can be divided into three (3) groups according to Needles (1976), they are; Those who manage a business (Management), those outside a business enterprise who have direct financial interest in the business; and those persons, groups or agencies that have an indirect financial interest in the business. The management decision and analysis in financial condition and results of operation focuses on the financial statements as a whole rather than on the summary of operations and call for discussion of at least three (3) aspects of the organization, these are the liquidity, capital resources and results of operations. Needles (1976) stated than within each area of discussion, Favorable and unfavorable trends and the identification of significant events or uncertainties are to be emphasized.

One thing to note is that, the group of people in a business has overall responsibility for achieving the company's goals. Business enterprises have many goals. According to Richard (1982) these goals include "providing quality goods and services at low cost, creating new and improved products, increasing the number of jobs available, improving the environment and accomplishing many other social tasks. In order to achieve these goal (profitability and liquidity). Liquidity means having enough funds in hand to pay debts when fall due. Management at all levels is responsible for a company's successful operation. In a small business, the greatest responsibility is often with the owner who also manages the company's operation. In a large corporation, the company's goal will be assigned to many people from the board of directors and officers of the firm to the management, departmental heads and supervisors. Managers must constantly decide what to do, how to do it, and whether the result matches the original plans. Successful managers consistently make the right decision on the basis of timely and valid information. Many of these decisions are based on the flow of accounting data as one of the most important uses of accounting information, and a major function of accounting is to provide management with relevant and useful information.

Empirical Discussion

Khaled and Abdulqawi (2015), analyzed the role of accounting information systems and the effect of their use in improving the value chain of the business organizations using a study tool (questionnaire) based on the theoretical framework and previous studies. Using the appropriate statistical analysis tools for the study data (arithmetic mean, standard deviation, and testing of T-test One Sample) the research found a deficiency in the level of the availability of the basic components of accounting systems and the level of the quality of accounting information required to improve the value chain of business organizations in public shareholding industrial companies in the Kingdom of Bahrain in general, and recommended the need to work on improving the level of the basic components of accounting systems to improve the quality of accounting information, in order to improve the value chain of public shareholding industrial companies in the Kingdom of Bahrain; specifically in regards to the existence of clear and specific work procedures in the accounting system, the level of the effectiveness of internal control measures, clear definition of responsibilities and authority, and management's attention in training and continuing education programs for employees.

Iskandar (2015) conducted deductive analysis which supported the phenomenon. He sought evidence through empirical facts and analysis of factors affecting the success of the application of Accounting Information System with a purpose to find solutions for problems related to the quality of accounting information systems of State-Owned Enterprises (SOEs). The study concluded that the quality of accounting information system is affected by management commitment and user competence. Thus, for an improved management commitment and user competence, emphasis should be placed on the linking theories to organizational culture.

Henry, Adeniran and Olawale (2014) examined the extent to which Accounting Information Management has enhanced the profitability of Nigerian banks. The study model specified, accounting information on Liquidity, credit quality, cash flow, wage rate, exchange rate and Inflation rate as the Jointly Pre-determined variables while, Profitability as the determined variable. The work involves the use of Ordinary Least Square (OLS) Regression technique to fit a realistic model into the collected time data, and several model's validity techniques such as Coefficient of determination (R^2), Multiple Correlation coefficient (r), Durbin-Watson, Akaike info Criterion (AIC), Schwarz Criterion (SWC) and F-statistic were employed to validate this model. The model was also tested for Stationary using Unit Root test and Augmented Dickey Fuller (ADF). The result revealed that accounting information had impacted significantly on the growth of Profitability in Nigerian banking industry observed in the R^2 of 80.24%, Correlation coefficient of 0.90, Durbin-Watson of 1.76, AIC of 7.48, SWC of 7.87 and F-result of 43.13 with significance value of 0.000034. Also, the Stationary test carried out for the model shows that there is a short run relationship at First Difference between Profitability and all the explanatory variables considered in this research. Hence, the availability of sufficient accounting information has positively impacted on the Profitability of Nigerian banking industry and the implication of this is that pragmatic policy options need to be taken in the banking industry to effectively manage credit quality, cash flow among other explanatory variables to enhance banking industry performance in the country.

Tazik and Mohamed (2014) examine the Impact of Accounting Information System Effectiveness and Foreign Ownership Structure on Audit Report Quality. Data was obtained through structured questionnaire survey administrated on senior accountants from companies listed on Bursa Malaysia and secondary data was collected from participants' financial annual reports in 2011. A multiple regression analysis was used in this study, modeling audit reporting quality as a function of explanatory variables. The results indicate that foreign ownership structure (FOS) is a strong moderator for the relationship between accounting information system effectiveness (AISE) and audit report quality (ARQ). Further, a significant negative relationship is found between AISE and FOS with ARQ. Overall, the findings in this study provide some evidence supporting the resource based theory, which identify AISE as a resource that could improve timeliness of corporate reporting.

Theoretical framework

The theoretical framework of this study forms the bedrock of the study as it viewed past studies necessary to draw objective conclusions of the study. According to the American Institute of Certified Public Accountants (1970) which defined accounting as the art of recording, classifying and summarizing in a significant manner and in terms of money, transactions and events which are in part at least of a financial character and interpreting the result. Some of the theories underpinning accounting information system on financial reporting quality include: Contingency theory, Innovation Diffusion Theory, Theory of Reasoned Action and Its Derivatives in User Acceptance, Innovation Diffusion Theory, Theory of Planned Operational Control, Socio-Technical Systems Theory of Information Technology Acceptance, and Activity Theory.

Contingency Theory

Contingency theory suggests that an accounting information system should be designed in a flexible manner so as to consider the environment and organizational structure confronting an organization (Nzomo, 2013). Gordon and Miller (1976) 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.

Innovation Diffusion Theory

Diffusion innovation theory predicts the process by which is perceived to be new by a unit of adoption is communicated through certain channels amongst members of a system over time. According to Shy (1997), diffusion theory posits five characteristics of innovations that affect their diffusion: trialability (the opportunity to try an innovation before committing to use it), relative advantage (the extent to which a technology offers improvements over currently available tools), compatibility (its consistency with social practices and norms among its users), complexity (its ease of use or learning), and observability (the extent to which the technology's outputs and its gains are clear to see).

Theory of Reasoned Action and Its Derivatives in User Acceptance

Theory of Reasoned Action (TRA) defines relationships between beliefs, attitudes norms, intentions, and behavior. According to this theory, an organizational behavior (e.g., use or rejection of technology) is determined by one's intention to perform the behavior, and this intention is influenced jointly by the organizational attitude and subjective norm, defined as "the organization's perception that most businesses/clients who are important to it think it should or should not perform the behavior in question" (Zozak, 2005). According to TRA, attitude towards a behavior is determined by beliefs about the consequences of the behavior and the affective evaluation of those consequences. Belief is defined, by Zozak (2005), as the organizational subjective probability that performing a given behavior will result in a given consequence. Affective evaluation is "an implicit evaluative" to the consequence; thus the attitude construct in TRA is general in nature and is not anchored to any given belief set. This approach represents an information processing view of attitude formation and change which states that external stimuli influence only through changes in the organization's belief structure (Zozak, 2005).

Theory of Planned Operational Control

According to Model (1996), the Theory of Planned Operational Control (TPOC) is a descendant of the theory of reasoned action (TRA) and adds a third antecedent of intention, perceived operational control, to the TRA model. Perceived operational control is determined by the availability of skills, resources, and opportunities, as well as the perceived importance of those skills, resources, and opportunities to achieve outcomes. The Theory of Planned Operational Control (TPOC) holds that attitudes, subjective norms, and perceived operational control are direct determined of intentions, which in turn influence accounting operations

Socio-Technical Systems Theory of Information Technology Acceptance

The socio-technical systems perspective has become influential in the analysis of the organizational impact of information technology. The theory views any organization as an open system of interdependent sub-units transforming inputs to desired outputs. The gainful employment of any technology hinges on the ability and willingness of users to employ it for worthwhile tasks (i.e., those deemed central to the organization's goals). Socio-technical systems theory has given birth to a framework for technology design that emphasizes holistic job satisfaction (rather than just task performance) and user participation throughout the development process. Thus, socio-technical theorists recommend the analysis of all stakeholders, not just the direct users of a technology, the formation of planning groups to oversee the design, the performance of prototyping exercises, and the analysis of likely impact the technology will have on the organization. In studying technology acceptance, socio-technical theorists conceptualize acceptance in terms of two competing forces: control and enhancement. Control factors are those that impose rules or structures upon the users, thereby removing autonomy (control over their own actions) from them. Among the control issues raised with respect to technology design are: access, reliability, confidentiality, monitoring, pacing, stress, social contact. Low or high presence of certain factors (e.g., low reliability, high pacing) with the introduction of a new technology is likely to reduce the user's perception of control and thus increase the risk of resistance (Connor, 1997). Enhancement factors include sense of mastery, growth of knowledge, discretion, ability to act informally, requirement for certain skills, and enabling worker cooperation. A technology that is designed to support such factors is likely to increase user acceptance in an organization.

METHODOLOGY

The effect of AIS implementation on financial reporting quality has been studied by several researchers using different analytical methods. This paper is an empirical study on the effect of accounting information and communication system on financial reporting quality. It employs the secondary source of information by making use of available relevant literature on accounting information systems with respect to enhancing financial reporting quality.

RESULT AND DISCUSSION

Most businesses use a large amount of non-financial information. Their marketing departments for example, are interested in the style or packaging of competitor products. Personnel departments keep health and employment records of employees. With the wide spread of computers and computer applications today, many of these varied computerized accounting information needs are being organized into what is called Management Information System (MIS). According to Esiefa (2005) he stated that the management information systems consist of interconnected subsystems that provide the information needed to run a business” The accounting information system is the most important subsystem because it plays the primary role of managing the flow of economic data to all parts of the business and to all interested parties outside the business.

Accounting is the financial nub of the management information system; it gives both management and outsiders a complete view of the business organization. Some organizations have many operational activities, but how to express the achievement of the operation requires qualification of the operational activities and accounting services as a tool for quantifying such activities and the result is the accounting information. Simply put, accounting information is to use the language to reflect the operational achievements but why is accounting information so important? Mainly it has too much close relation with all. As economic cells of the society, all enterprises or organizations are associated with people who rely on accounting information that enhance financial reporting quality. For instance, Graham (1990) stated that an investor has to take decision based on accounting information; enterprises (management) has to take operational and other decisions according to accounting information, banks have to take decisions on loans base on accounting information. This is because the society and economy are in alienable from accounting information”. This is the reason for the need of accuracy and reliability of accounting information and communication.

CONCLUSION AND RECOMMENDATION

Based on the findings of this study, it has been deduced that Accounting setting standards/policies have evolve over the years to guarantee business performance in Nigeria. The vast directions of accounting policies and information on financial reporting quality presents the most important relations between the challenges and technological responses in pointing out the way for future research in order to improve the alignment between adopted technology and organization performance. Like many other aspects of education, accounting education is of paramount importance and it embodies the task of instructing accountants systematically. The instructions given in this regard will educate accountants and help them realize the skills and expertise that should qualify them to improve organization performance in the competitive market. In addition, accounting education polishes accountants and widens their understanding of accounting practices that positively influence organization or management performance.

There is some opportunity in increasing the percentage of using accounting information in strategic decision making in service industries. Therefore, service industries should use accounting information always for increasing the accuracy of their decisions. The study also recommends that service organization should increase the uses of accounting information in marketing decisions to increase the sales volume and to take better marketing strategy. The study recommends that service organizations should increase the use of accounting information also in service decisions. Service organizations should increase the use of accounting information in human resource related decisions for increasing the accuracy and effectiveness of the decisions.

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Impact of Audit Trails on the Financial Audit of Nigerian Banking Sector

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Abstract

Every human endeavour attracts foot-prints in the sands of time. These foot-prints can be positive or negative, beneficial or detrimental in the nearest future. This is synonymous with the workings of audit trails. This study examines the impact of Audit Trails on the Financial Audit of Banking Sector. A causal research design was adopted with reliance on primary and secondary data obtained from published and unpublished literatures to explain the relationships between the variables. A simple random sampling technique was used in the selection of Audit Firms of twenty (23) Commercial Banks in Nigeria to confirm the veracity of the subject. Data collected were analyzed by descriptive statistics and presented through frequency distributions and percentages using the Likert scale. The chi-square contingency procedure was used to test the hypothesis. The findings revealed that Audit Trails have significant positive impact on the financial audit of the banking sector. It further reveals that Audit Trails of the Financial Audit of Banking Sector has impact on fraud detection; disaster recovery; assist in the recovery of lost transactions and have impact on regulatory compliance. The study affirms that Audit Trails are not only used as tools in determining the validity of an accounting entry, source of funds or trade, but protect businesses from liability during legal battles, help monitor data for security breaches, ensures that proper protocols are followed and demonstrate compliance.

Keywords: Audit Trials, Financial Transactions. BankingSector, Financial Audit.

INTRODUCTION

Every audit is carried out on the basis of managing the “who, what, and when of business transactions”. Having an accounting audit trail for every transaction combats errors in financial reporting by reducing the risks that come with both missing or incomplete data and fraud. Full transparency makes it easy for auditors or examiners to confirm that information is accurate and complete, and aid the team in identifying areas for potential process improvement. An audit trail is a step-by-step record by which accounting or trade data can be traced to its source. It provides basic information to backtrack through the entire trail of events to its origin, usually the original creation of the record. This may include user activities, access to data, login attempts, administrator activities, or automated system activities. Audit trails are used to verify and track many types of transactions including accounting or banking transactions. An audit trail is most often utilized when the accuracy of an item needs to be verified. Audit trails can be useful tools when determining the validity of an accounting entry, source of funds or trade. At its most basic level, every business needs an audit trail of its financial transactions, which includes accounts receivable, accounts payable, invoices and purchase orders. In other words, audit trails comprise what was once referred to as the “paper trail” of business. Having a detailed audit trail can protect a business from liability during legal battles, help monitor data for security breaches, ensures that proper protocols are followed and demonstrate compliance.

LITERATURE REVIEW

Conceptual Framework

Auditing, Types and Objectives

Auditing refers to the periodic examination of accounts, documents, and vouchers in a corporate world. It is nothing but an inspection of all the financial and statutory records relating to the company’s financial position. Auditing takes place in both the corporate and public sectors and it recognizes all the possible pieces of evidence that evaluates and formulates the opinion base on communication they carry out. It is

nothing but an analysis of the current system, reports, and process of the organization. Types of auditing include but not limited to: Construction audit, Tax audit, Investigative audit, Financial audit, Information system audit/Information Technology (IT) Audit, Compliance audit and Operational audit

The main objective of the auditing is to provide a suggestion on financial reports and statements. For this, the auditor needs to analyze all the financial statements to check the financial position of the entity. Auditing does not cover all the errors and frauds that happened with the help of financial reports provided. Objective of auditing includes: Analyzing the internal system; Checking the authenticity and validity of transactions; Examining arithmetical accuracy of books of accounts, casting, balancing; Finalizing the current value of assets and liabilities and Inspecting the variance between capital and revenue type of transactions. It also includes: Finding and preventing errors; Finding and preventing of frauds and Unusual stock valuation.

Audit Trails

An audit trail is a step-by-step record by which accounting or trade data can be traced to its source. Audit Trail is defined as a chronological sequence of records that contain evidence about a business process. An audit trail (also called audit log) is a security-relevant chronological record, set of records, and/or destination and source of records that provide documentary evidence of the sequence of activities that have affected at any time a specific operation, procedure, or event. Audit trails are the manual or electronic records that chronologically catalog events or procedures to provide support documentation and history that is used to authenticate security and operational actions, or mitigate challenges. Audit trail records will contain details that include date, time, and user information associated with the transaction.

Financial Audit

All public companies undergo a financial audit as part of their reporting responsibilities. Financial audits are conducted to provide an opinion whether financial statements (the information being verified) are stated in accordance with specified criteria. In providing an opinion whether financial statements are fairly stated in accordance with accounting standards, the auditor gathers evidence to determine whether the statements contain material errors or other misstatements. Financial audit's purpose is to evaluate whether an organization is adhering to standard accounting practices. Information Technology (IT) plays an important role in the general process of the financial audit of banking sector, industry- or regulation-specific audit logs and trails. An audit trail provides a tool to maintain information and system integrity.

Banking Sector

The banking sector is an industry and a section of the economy devoted to the holding of financial assets for others and investing those financial assets as a leveraged way to create more wealth. The sector also includes the regulation of banking activities by government agencies, insurance, mortgages, investor services, and credit cards.

Different Schools of Thoughts about Audit Trails

Organizations support compliance, security and operations. Different laws make audit records an important element in defending against security breaches, supporting compliance reporting, and ultimately passing numerous kinds of internal and external audits. There are many definitions of an audit trail, and all of them give an idea of what it is about. An audit trail consists of records that document every step in a business transaction. This may include initiating documents, processes, authorization and approvals. It also means invoices for payments issued or sales contracts documenting revenue. Payroll and other human resource records prove correct treatment of employees. Start-ups and businesses must pay close attention to maintaining such records. A complete audit trail proves to investors or lenders and users the validity of information on the financial statements, and meets government record keeping requirements for tax purposes. It is a system that traces the detailed transactions relating to any item in an accounting record. It is a record of the changes that have been made to a database or file. Each record in an audit trail

includes information about who created the record, with what system, on what date and at what time. A data log captures the records that make up an audit trail, and audit trail reports assemble these records so that analysts can scrutinize them. Audit trail reports serve business purposes such as lost transaction recovery, fraud detection, disaster recovery and regulatory compliance.

It is a general principle that well-managed audit trails are key indicators of good internal business controls. Audit trails have transitioned from manual to automated electronic logs that make historical information more accurate, readily accessible, and usable. Successful audit trails demand a top down commitment by upper management, affected departments, and information technology (IT) personnel. The more quickly an abnormal change or addition to information is “red-flagged,” the better the response to mitigate against negative influences such as cyber-threats, security breaches, data corruption, or misuse of information. Audit trails, or rather the process of following an audit trail, are found in many different areas of finance. With any financial accounting system, it’s imperative to be able to understand and control changes within a company’s financial system. This is critical not only from a regulatory perspective, but also for risk management and fraud prevention. Numerous industries use versions of an audit trail to provide a historical record of progression based on a sequence of events. These records provide proof of compliance and operational integrity. Audit trails can also identify areas of non-compliance by providing information for audit investigations. Whether it is logging the design changes of a product build, keeping the record of financial transactions for an e-commerce site, communication transactions, healthcare activity, and financial audit of banking sector or legitimizing the outcome of an election, an audit trail validates actions and outcomes.

Tools for analyzing Audit Trails

The multiple number of events included in an audit trail calls for automating the collection of audit trail information. Tools that have trend analysis and detections for unusual use can lead to breaches. Red-flag warnings for unauthorized log-ins (whether successful or not) provide attack detection. Functions that follow defined user activities can identify misuse to prevent the theft or corruption of valuable data. Identifying application or system failures is also a key aspect for continuous operations and to prevent unscheduled outages or downtime. Audit trail reviews vary by organization and may take place quarterly or annually during a security audit. Audit trails provide the means to backtrack a vast array of problems associated with information security, access, and system optimization. The balance between system protection and operational performance should be maintained at industry appropriate levels.

Empirical Literature

An audit trail provides basic information to backtrack through the entire trail of events to its origin, usually the original creation of the record. This may include user activities, access to data, login attempts, administrator activities, or automated system activities. Audit records contain element defined by the company. Some audit trails look more closely at actions within certain applications to chronicle more than a simple system or application launch. These logs can pinpoint elements such as specific changes to a database or information contained therein, and can also detect improper web-browsing or email use. Audit trails maintain a record of system activity. They leave a series of records of computer events about an operating system, applications and even user activities. This ensures that system resources have not been harmed by hackers, insiders, disgruntled employees, and technical problems that may arise. An audit trail is made up of business's financial transactions and it is important because it helps prevent fraud. Many information technology (IT) departments have more than one audit trail that can be system-application or event-defined. Highlighting abnormal activities or use deemed "out of the ordinary" can initiate an investigation. An accurate and well-defined audit trail provides the evidence to find answers and solve issues.

Information Technology (IT) Audit Trails are constructed to address numerous activities that make up an event or series of events that can be investigated to find areas of concern. Problem activities include security breaches from hackers, in-house or out-of-house authentication problems, unauthorized usage, unusual levels of activity, or system failures. Records include the automated events scheduled through the operating system (OS), network access, application events, and manual activities of the various users.

The need to support compliance, security, and operations is found in most (if not all) industries. The laws that both mandate and regulate the use of electronic records make audit records an important element in defending against security breaches, supporting compliance reporting, and ultimately passing numerous kinds of internal and external audits. Industries that have provisions to track information integrity include government agencies who maintain sensitive, confidential information, and any company that uses electronic records containing confidential information such as the Banking Sector. Audit trails are commonly managed by Auditors and backend staff within the information technology (IT) department, such as a security manager or network administrator. A key point to keep in mind is that any user, whether a manager, employee, end-user, legal staff, an accountant, or others who touch an electronic record, will be included in the audit trail of the record. This user may be a human who makes an update to a record or accesses a system, or it may be a system that automatically makes update/changes such as restarting a computer.

Theoretical Discussion

The ability to follow records back to their origin provides numerous benefits, including transparency and a defense of records for compliance, record integrity and accuracy, system protection from misuse or harm, and security of sensitive or vital information. These are achieved through the four critical areas namely Users, reconstruction of events, Intrusion Detection and other problem identification. A user is anyone who has access to the system. Implementing audit trails promotes appropriate user behavior, which can prevent the introduction of viruses, improper use of information, and unauthorized use or modifications. In addition, the user knows that their actions are automatically recorded and tied to their unique identity. When an investigation is warranted or triggered, the first step to remediate a problem is knowing the "when," the "how," and the "what" of the event. Visibility into this information can aid in problem detection and prevent future occurrences of things such as hacking, system failures, outages or corruption of information. Audit trails aid in identifying suspicious behavior or actions. Unauthorized access is a serious problem for most systems. Many regulations now have mandates for the security of information and maintaining confidentiality. Protection also extends to intellectual property, designs, personnel information and financial records. Through real-time monitoring, you can use automated audit logs to identify problems that indicate system implementation issues, operational issues, unusual or suspicious activities, or system and operation errors. The audit trail provides a "baseline" for analysis or an audit when initiating an investigation. The purpose or importance of an audit trail takes many forms depending on the organization: A company may use the audit trail for reconciliation, historical reports, future budget planning, tax, or other audit compliance, crime investigation, and/or risk management.

METHODOLOGY

In carrying out this study, both primary and secondary data was employed. The secondary data is derived from library documents, publications and Internet, and other relevant materials. The primary data are obtained through questionnaires and interviews. The study incorporates both sources of data to enhance a balance between the research observations and available literature on the matter under consideration. Interview was adopted in order to increase the depth of the study as well as obtain sensitive and salient information about the issue under review, which could not be obtained through questionnaire. In short, the interview provided an opportunity for meeting with some of the respondents (External Auditors and the Bank Officials) and discussions helped the researcher to obtain other pertinent information, which greatly assisted in the findings herein. The choice of the description survey research design was made

based on the fact that in the study, the researcher was interested on the state of affairs already existing in the field and no variable was to be manipulated. The study population was twenty-three (23) Commercial Banks in Nigeria and their corresponding seven (7) External/Independent Auditors.

Qualitative data collected was analyzed by descriptive statistics and presented through frequency distributions and percentages using the likert scale on a scale of 5-1. The chi-square contingency procedure was used to test the hypothesis. The variables are extracted from the questionnaires and the stipulated level of significance value of five (5) per cent (0.05) was selected. The decision is that if $X^2_{cal} > X^2_{tab}$, reject H_0 and Accept H_1 . The sample size of 60 respondents was taken from the twenty three (23) Commercial Banks and their seven (7) Independent Auditors in Nigeria. The sample size was calculated using 95% confidence interval.

$$n = \frac{N}{1 + N(e)^2}$$

Where:

N=Population

n=Sample size

$$e = (0.05)^2$$

$$n = \frac{60}{1 + [60(0.0025)]} \quad \text{Sample size}=60$$

The data collected in this study was analyzed statistically by the use of frequency tables and percentage and Chi Square method.

$$X^2 = \sum \frac{(o - e)^2}{e}$$

Where X^2 = Chi - Square

fo = Frequency Observed

fe = Frequency Expected.

The hypothesis formulated is tested by means of the X^2 – Chi - Square. As a decision rule, if the computed value of X^2 (Chi–Square) is greater than the critical value of X^2 (Chi–Square) at 5% level of significance, the null hypothesis (H_0) is rejected, while the alternative hypothesis (H_1) is accepted. The reverse is however the case if the computed value of X^2 (Chi-Square) is greater than the critical value at the chosen level of significance. Analysis of the questionnaires and interviews in line with the impact of Audit Trails on the Financial Audit of Banking Sector reveal the following responses

Likert scale	Frequency	Percentage	Valid Percent	Cumulative Percent
STRONGLY AGREE	37	61.6	61.6	61.6
AGREE	10	16.7	16.7	78.3
DISAGREE	9	15.0	15.0	93.3
STRONGLY DISAGREE	4	6.7	6.7	100.0
TOTAL		100.0	100.0	

RESULT AND DISCUSSION

Test of Hypothesis 1 - Question 1 and 2

H01: Audit Trails of the Financial Audit of Banking Sector has no fraud detection.

Table 2

RESPONSES	STRONGY AGREED	AGREED	STRONGLY DISAGREED	DISAGREED	TOTAL
QI	22	17	10	11	60
QII	38	11	8	3	60
TOTAL	60	28	18	14	120

$$X^2 = \frac{\sum (o - e)^2}{e}$$

Table 3

O	E	O-E	(O-E)2	(O-E)2/E
22	30	-8	16	0.533
17	14	3	9	0.6429
10	9	1	1	0.111
11	7	4	16	2.286
38	30	8	64	2.133
11	14	-3	9	0.6429
8	9	-1	1	0.111
3	7	-4	16	2.286
X2				= 8.7458

The hypothesis formulated is tested by means of the Chi-square.

The chi-square is 8.7458, which shows that the chi square calculated is greater than the chi-square tabulated (3.84). A decision rule is hereby applied. Therefore, "Audit Trails of the Financial Audit of Banking Sector has impact on fraud detection as well as effect on disaster recovery"

Test of Hypothesis 2 - Question 3 and 4:

H02: Audit Trails on the Financial Audit of Banking Sector does not recover lost transactions.

Table 4

RESPONSES	STRONGY AGREED	AGREED	STRONGLY DISAGREED	DISAGREED	TOTAL
Q III	23	18	8	11	60
Q IV	37	10	9	4	60
TOTAL	60	28	17	15	120

$$X^2 = \frac{\sum (o - e)^2}{e}$$

Table 5

O	E	O-E	(O-E)2	(O-E)2/E
23	30.0	-7	49	1.63
18	14.0	4	16	1.14
8	8.5	0.5	1	0.11
11	7.5	4.5	20.25	2.70
37	30.0	7	49	1.63
10	14.0	-4	16	1.14
9	8.5	1	1	0.12
4	7.5	-3.5	12.25	1.63

$$X^2 = \underline{10.1}$$

The hypothesis formulated is tested by means of the Chi-square.

The chi-square is 10.10, which shows that the chi-square calculated is greater than the chi-square tabulated (3.84). We herein apply the decision rule. Hence, Audit Trails on the Financial Audit of Banking Sector assist in the recovery of lost transactions and have impact on regulatory compliance

Discussion and Findings

An audit trail is a useful aid in uncovering fraud in a banking organization. It provides a critical component in fraud detection. Strict adherence to the creation of an audit trail provides information proving the legitimacy of transactions. In addition to recording the metadata behind each individual transaction at the time it was created, an audit trail also records data about transactions that users have edited. All banking transactions (receipts and payments) must have a supporting document such as purchase orders, approved invoices, initiating documents and approvals/authorizations. A bank reconciliation, performed by someone other than the cheque writers and signatories, comprises part of an audit trail. Thus, the audit trail report exposes an individual who accesses the system to alter transactions after other users entered them accurately. The presence of an audit trail requirement not only helps detect fraud, but serves to prevent it. Employees who know that management monitors and tracks their work see less opportunity for fraudulent activity. Audit logs provide objective evidence to support the action an organization takes when it uncovers fraud. If a disaster makes all the transactions for an entire day unavailable, an audit trail report for the day makes it possible to reconstruct corrupt or damaged files. If audit trail logs have been preserved and backed up over a period of time, an audit trail report can recreate an organization's transactions for the entire period. Reconstruction can be a tedious, time-consuming process and may require special software, but if there is no alternative for recovering transactional information, the process is worth the investment.

A carefully crafted blend of procedures, policies, and workflows, internal controls are designed to improve compliance, ensure accuracy in financial statements, and reduce risk. When they are clearly written, provide reasonable contingencies for potential challenges (e.g., computer system problems, human error, process improvement opportunities), and allow for necessary adjustments as circumstances warrant, internal controls can make every aspect of procurement, compliance, and financial reporting, including audit logs, much simpler. Audit Trails provide security-related objectives, individual accountability, reconstruction of events, intrusion detection, and problem analysis, summarized as: Prevention of fraud; Stress-free audits; Better positioned to secure investment and/or loan; Error correction and time-saving; Avoiding regulation compliance infractions. Most organizations are subject to regulations. The Banking and Finance sector in Nigeria is regulated primarily by the Banks and Other Financial Institutions Act (BOFIA), Central Bank of Nigeria Act; the Companies and Allied Matters Act (CAMA); the Nigerian Deposit Insurance Corporation Act (NDICA); the Foreign Exchange (Monitoring and Miscellaneous Provisions) Act; the Financial Reporting Council of Nigeria Act; there is the Regulatory Framework for the Use of Unstructured Supplementary Service Data (USSD) in the Nigerian Financial System; the Revised Standards on Nigeria Uniform Bank Account Number (NUBAN) Scheme for Banks and Other Financial Institutions; Cybersecurity. The CBN also issued a letter to all banks and Payment Service Providers (PSPs) on the Issuance of Risk-Based Cyber-Security Framework and Guidelines for Deposit Money Banks and Payment Service Providers for the DMBs and PSPs to protect and strengthen their cyber security against sophisticated cyber threats. These cyber security threats such as phishing attacks, ransomware, have increased alarmingly due to the use of information technology to expedite transactions. It sets out the minimum cybersecurity to be used by the DMBs and the PSPs to include a cybersecurity strategy/framework, cybersecurity risk management system, and cyber resilience assessment, creation of a cybersecurity profile, metrics, monitoring & reporting processes. This is all to protect confidentiality and prevent financial loss or reputational damage. The issuance of Corporate Governance and Internal Control Codes (the Codes). The Anti-Money laundering Act in conjunction with

the Nigerian Financial Intelligence Unit (NFIU) issue periodic thresh-hold limits and Suspicious Transaction Reports (STPs. The CBN Anti-Money Laundering and Combating the Financing of Terrorism (Administrative Sanctions) Regulations (the "Regulation") is the collaboration effort of the CBN and the Office of the Attorney General of the Federation for an administrative sanctions regime for financial institutions under the supervision of the CBN. The Regulation outlines forty eight (48) actions required for anti-money laundering and combating the financing of terrorism (AML/CFT) for banks and other financial institutions and as well as the administrative sanctions for default. An audit trail report demonstrates compliance with these regulations and helps a company fulfill its record-keeping requirements for compliance purposes and secure the robust financial system.

CONCLUSION AND RECOMMENDATIONS

The audit trail is an important concept, and has very practical implications. It is a widely researched topic, but in practice many Information Technology (IT) setups lack sufficient audit trail capabilities, mainly because the risks are not immediately obvious, and partly because it is a technically challenging task. Audit trails have transitioned from manual to automated electronic logs that make this historical information more accurate, readily accessible, and usable. Successful audit trails demand a top down commitment by upper management, affected departments, and information technology (IT) personnel. If one knows nothing about a transaction except the day that someone entered it, an audit trail report can help you find the transaction. By reviewing the audit logs for that day and matching them to the transactions one already knows about. It can eliminate the known transactions and find the lost one. The type of accounting software in use determines the steps one takes to find lost transactions. Some applications can search by amount, by transaction number or by the user who entered the transaction. The study recommends that every Organization needs Audit trails. They all need secure and immutable records of where and when a transaction was performed accurately and truthfully. Organizations mostly need these audit trails to comply with industry requirements or government regulations. However, a well-kept audit trail can also help organizations understand the state of their business both past and present. A good audit trail system will enables organizations to, Be compliant with the law or standards, gives a big picture of the business, troubleshoot issues and cutt down the development costs and time-to-market of the applications.

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