

## **Impact of Working Capital Management on Profitability of Quoted Manufacturing Firms in Nigeria**

**KORVE, Verem Stephanie**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: [Stephaniekorve@gmail.com](mailto:Stephaniekorve@gmail.com), Phone No: +234 8141810323

### **Abstract**

*This study investigates the effect of working capital management on profitability of quoted firms in Nigeria. The study uses 110 firms on Nigerian stock market over a period of 11 years from 2010 to 2020. The statistical approach is Ordinary least squares (OLS) model was employed to address econometric issues and to improve the accuracy of the regression coefficients. The empirical results show positive and significant effects of the working capital management, which measured by cash Ratio and two components of the Cash Ratio including inventory turnover in days, and trade payable turnover in days on the firm's profitability measured Cash ratio. The study assures that there is significant Effect of Working Capital Management on Profitability of quoted firms in Nigeria. Given the  $R^2$  value of 0.024352 of the regression analysis as well as the adjusted  $R^2$  value of 0.003261, which is less than 0.05, there is enough evidence to reject the null hypothesis. This result implies that the overall regression is positive and statistically significant at 5% level of significance, given that the  $R^2$  value is 0.024352 less than 0.05.*

Keywords: Working Capital, Profitability, Quoted Firms, inventory, Trade payable

### **INTRODUCTION**

Working capital is defined as the organizations short term current assets and current liabilities. Net working capital means the excess of current assets over current liabilities and it is the reflection of the firm's ability to meet its short term financial obligations. This further affirms by Dougall (1948) as cited in the work of Anh H.H., Thanh P., and Hang T., NN (2020) stating that current assets less current liabilities were known as working capital. The working capital management (WCM) relates to managing current liabilities and current assets to ensure that the firm can remain in a position to pay short-term obligations and meet its operating expenses. This is otherwise referred to firm's liquidity position. Anhe'tal (2020) emphasized the significant role of the WCM because it affects directly the profitability and liquidation of the firm. Therefore, Ricci and Vito (2000) recognized the key target of the WCM is to control the short-term financing resource to make the compatibility between the profitability and the risk of the companies. The risk associated with companies are the risk of liquidity made available through cash receivable, cash conversion cycle, return on investment, return on asset and so on. Profitability reveals the ability to make a profit from all activities of a firm. It shows the efficiency of using all available resources of a firm to make a profit. According to Horward and Upton (1953), "profitability is the ability of a given investment to earn a return from its use". Profitability is divided into two categories including book value (accounting-based measurement) and market value (marketing-base measurement). Book value is the indicator revealed the firm profitability in the past, such as Return on Asset (ROA) Rahman and Saima, (2018). This study therefore aims to assess the impact of working capital management and how it affects the profitability of manufacturing firms in Nigeria. A number of firms were chosen from the Nigerian Stock Exchange for a period of 10 years and tested to see how their profitability is affected.

Working capital management has been an issue to firms not only on certain sectors but all firms that have a business object of profitability. In recent times, profitability form core problems in some Nigerian listed corporate organizations, according to Oluboyede (2007) as cited in Akinyomi (2021). Situations exist where some promising investments with high rate of return and eventually turn firms into distressed because of inadequacy of working capital. Although the effects of working capital management on quoted firms profitability have been a focus of substantial amount of empirical research for many years. This

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study intends to measure the relationship of these variables, thus; Cash Ratio (CR), Cash Conversion Cycle (CCC), Inventory (INV) and Trade Payable (TP) to determine their relationship. From the foregoing therefore, the basic hypothesis underlying this study is stated thus;

**H<sub>0</sub>:** Working Capital has no significant impact on firms profitability

### **LITERATURE REVIEW**

#### **Conceptual Framework**

##### **Return on Assets (ROA)**

Among the items of profitability ratios in the financial statements, this ratio is most often discussed, because it is an indication of company success in making profits. ROA is an index to measure the company's ability to generate profits in the past and present which will be used to project for the future. Assets are overall company properties realized from the capital or from foreign direct investment that has been converted into company assets used for sustainability.

##### **Cash Conversion Cycle (CCC)**

This is the popular and most comprehensive measure of working capital management the optimal level of CCC vis-a-vis profitability differs from firm to firm. The empirical literature indicates that firms that are efficient with WCM recorded increased profitability and vice versa. Therefore improvement in working capital management increases profitability.

##### **Cash and Bank Balances**

Cash is a major component of current asset and cash involves and all other liquid securities which can be converted into cash easily. Effective Cash Management goes a long way in keeping the working capital cycle in order and also enhance the business to manage its operating cycle. Also, business efficiency is determined base by the free flow of cash to the firm and how the firm generate the cash. Also, effective utilization of such cash ensures business to garner trade discounts and boost the cash conversion cycle, which is a major commitment to describe the working capital cycle of any business (Altaf & Shah, 2017)

##### **Cash Receivables**

The shorter the accounts receivable turnover in days (ARD), the less the firm's working capital is used by the customers. It helps firms to be proactive in settling all payments and to widen the investment opportunities in other projects to make a profit. Almost previous empirical studies tested and concluded that the ARD had a negative effect on the profitability as Deloof (2003); Lazaridis and Tryfonidis (2006); Sharma and Kumar (2011); Vural, Sokmen, and Cenenak (2012)

##### **Empirical Review**

Many studies have evaluated the relationship between working capital management and profitability in various parts of the world and the findings are quite divergent. A majority of the studies established an inverse relationship between working capital management and profitability of firms. AkinyomiOladele and TasieChukwumerije (2011) conducted a study involving cases of working capital management problem in some Nigerian corporate firms. Data for the study were from the secondary sources, extracted from the audited annual reports of the selected firms for the five years covering 2006 to 2010 financial years. Preliminary analysis was conducted using descriptive analysis of mean and standard deviation, meanwhile the main analysis was carried out using correlation coefficient. The findings from the review of related literature and data analysis revealed that there is a negative correlation between working capital management and profitability of the firms using cash conversion cycle and average profitability as measures of working capital management and profitability respectively. It was recommended to the management of the firms to strive to reduce their cash conversion cycles so as to enhance profitability and improve shareholders value.

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Olaniyan, Olufemi Samuel Adegboyo, and Dominic (2020) in their study that examined the impact of working capital management on profitability in manufacturing firms in Nigeria between the period of 1988 and 2019. The study disaggregated capital management into trade receivables, inventory, cash and bank balances and trade payables in line with the theories reviewed. The data were secondary sourced, based on the missed level of stationarity of the variables as revealed by the unit root test, the study made use of auto-regressive distributed lag (ARDL) technique to analyze the data. The bound test revealed that; there was presence of co-integration (long-run relationship) among the dependent and all the explanatory variables. The study estimated the ARDLECM. The result further showed the cash and bank balances (CBB), trade payables (TAP) and Trade Receivables (TAR) had a positive and significant impact on profitability of manufacturing firms in Nigeria which is a clear indication that working capital management has positive and significant impact on company profitability in Nigeria both in short and long-run. The findings of the study are in tandem with Keynesian Liquidity preference theory. The study recommends that financial managers increase their working capital and ensure that it is properly managed in order to enhance sales revenue, thus increase their working capital and ensure that it is properly managed in order to enhance sales revenue, thus strengthening firm profitability. OmoAregbeyen (2011) empirically investigates the effect of working capital management on the profitability of a sample of 48 large manufacturing firms quoted on the Nigerian stock exchange (NSE) for the period 1993 to 2005. Profitability was measured by gross operating profit (GOI), Net Operating Income (NOI) and return on assets likewise working capital management was measured by the average collection period (ACP), Average Pay Period, inventory turnover days (ITID) and comprehensively by the cash conversion cycle. (CCC). The results indicate that the firms have been inefficient with working capital management and caused significant reductions in profitability. The paper concludes that improving the efficiency of working capital management is essential and recommends that manufacturing firms in Nigeria should shorten the ACP, APP, ITID and reduce their CCC's.

AnhHuu, HuongThanh and Hang (2020) studied the impact of working capital management on firms profitability. The research sample includes 119 non-financial listed companies on Vietnam stock market over a period of 9years from 2010 to 2018. Two statistical approaches include ordinary least squares(OLS) and fixed effects model (FEM) are employed to address econometric issues and to improve the accuracy of the regression coefficients. The empirical results show the negative and significant impacts of the working capital management, which measured by cash conversion cycle (CCC) and three components of the CCC including accounts receivable turnover in days (ARD), inventory turnover in days (INVD) and accounts payable turnover in days (APD) on the firms profitability measured by return on assets (ROA) and Tobin's Q. it implies that firms can increase profitability by keeping the optimization of the working capital management measured by the CCC, which includes shortening the time to collect money from clients, accelerating inventory flow and hold the low payment time to creditors. Besides, the profitability of firms was impacted by the sale growth rate, firm size, leverage and age. Therefore the paper provides a new insight to managers on how to improve the firms profitability with working capital management.

Kwadwo and Amankona (2020) analyses the link between working capital management and profitability of firms in developing economies. A balanced panel consisting of eleven (11) manufacturing firms listed on the Ghana stock exchange covering the period of 2011-2017 was used. The link between working capital management and profitability was examined using dynamic panel regression (Arellano-Bond Estimation) technique. The study revealed that there is a significant positive linear relationship between working capital management and firms profitability. The findings also reveal the existence of a concave quadratic relationship between working capital management and firms' profitability. There is an optimal level at which working capital management maximizes firms profitability, therefore managers need to ensure that they operate within the limits of the optimal level by implementing an effective and efficient working capital management policy. The study concludes that the practice of an aggressive working capital management policy maximizes a firms profitability. Sunnykumar and Prasadand (2017) studied Working capital management that is concerned with the problems that arise in attempting to manage

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current assets and current liabilities. The objective of the study is to investigate the relationship between working capital management and the corporate profitability, and liquidity of Indian manufacturing firms for a period of 2009-10 to 2014-15. It aims to analyze the effect of working capital management on liquidity and profitability in the manufacturing firms of India. The variables that are affecting the liquidity and profitability of the firm are identified from the manufacturing firms listed in the database of Centre for Monitoring Indian Economy (CMIE). A total of 1654 companies are selected for analysis. The Researcher uses secondary data from annual audit financial position of the manufacturing firms listed by CMIE. Descriptive analysis, correlation analysis and regression analysis are carried out for a given significance level. Based on the outcome of the analysis a model is built. Descriptive analysis shows the maxima, minima, mean and standard deviation of variables considered. The data are analyzed using SPSS Software. From regression analysis it is found that Size, Cash to current asset ratio, Creditors turnover ratio, Debtors turnover ratio, Inventory turnover ratio, and Asset turnover ratio are significant for all industries.

SenthilmaniThuvarakan (2013) made a research on working capital management. Companies which are effectively using their working capital components are likely to have competitive advantage over their competitors. The research investigates the relationship between the working capital components and corporate profitability in different industries. 60 manufacturing companies, 20 construction companies and 17 telecommunication companies listed on the London stock exchange is used covering the period of 2006-2011. The dependent variable, profitability is measured using gross operating income. The independent variables are receivable days, Payable days, inventory days, cash conversion cycle, debt, and size of the firm. Pearson's correlation and regression analysis was utilized to explore the relationship between the profitability and the working capital components. The results show that there is no significant relationship between the working capital components and profitability. There is a negative relationship between gearing and profitability in manufacturing firms. Sorin and Antonad (2020) investigated the relationship between working capital and firm profitability for a sample of 719 Polish listed firms over the period of 2007–2016. The scarcity of empirical evidence for emerging economies and the importance of working capital efficiency motivated their research on the working capital financial performance relationship. The paper adopts a quantitative approach using different panel data techniques (ordinary least squares, fixed effects, and panel-corrected standard errors models). The empirical results report an inverted U-shape relationship between working capital level and firm profitability, meaning that working capital has a positive effect on the profitability of Polish firms to a break-even point (optimum level). After the break-even point, working capital starts to negatively affect firm profitability. The study brings theoretical and practical contributions. It extends and complements the literature on the field by highlighting new evidence on the non-linear interrelation between working capital management (WCM) and corporate performance in Poland. From the practitioners' perspective, the results highlight the importance of WCM for firm profitability.

### **Theoretical Framework**

#### **Trade-off model**

This theoretical model was propounded by Myers In the year 1984 applied when firms express their optimal reason for holding cash by comparing the marginal cost and benefits of holding cash. It involves offsetting the costs of debt against the benefits of debt.

#### **Keynesian Liquidity Preference theory**

Keynesian theory is underpinning working capital management which was pronounced by economist John Keynes in 1936. The theory postulated that as other things are kept constant, investors prefer liquid investments to illiquid ones and there is always demand for premium on investments that have longer maturity periods.

**Aggressive Theory**

This theory is demonstrated where the firm plans to embark on high risk by using short term funds to finance current and fixed assets which earn low interests rates. Therefore, the essence of working capital is to be constantly buoyant to undertake calculated high risk investment with a high return to be able to fund short and long term investment opportunities. This is in line with the aggressive Theory

**METHODOLOGY**

The study is ex post facto research that includes manufacturing firms that are listed in the Stock Exchange. The time frame covers a 10 year period from 2011 to 2020. This is because of the fact that all manufacturing firms listed on the Nigerian Stock Exchange will have available financial record. The population of the study consists of all the quoted manufacturing firms in the Nigerian Stock exchange or stock exchange group.

**Models Specification**

This study adopts Keynesian liquidity preference theory as its theoretical framework and as such Specifies its model in line with the theory.

$$Y = WC \dots\dots\dots (1)$$

Y means company profitability and WC means working capital In line with the theories and literature reviewed, this study will disaggregate the working capital into Cash Ratio (CR), Cash Conversion Cycle (CCC), Inventory (INVEN). Trade Payable (TP)

As such this study specifies its model below;

$$Y = f(CCC, INVEN, T-Payable)\dots\dots\dots (2)$$

$$CR: \beta_0 + \beta_1 CCC + \beta_2 SR + \beta_3 INV + \beta_4 TP + \epsilon_{it} \dots\dots\dots (3)$$

Where:

- $\beta_0$  = The autonomous parameter estimate (Intercept or constant term)
- $\beta_0 - \beta_4$  = Parameter Coefficient of Working Capital Management
- CR = Cash Ratio
- SR = Inventory
- CCC = Cash Conversion Cycle
- RP = Trade Payable
- $\epsilon_{it}$  = Stochastic Error Term

**RESULT AND DISCUSSION**

**Table 1: Descriptive Statistics**

Date: 03/19/22  
 Time: 15:15  
 Sample: 2010 2020

	CASH_R	CCC	INVEN	T_PAYABLE
Mean	14.38404	-52.11906	4.689556	201.6568
Median	7.580300	3.526800	3.783450	154.1534
Maximum	68.75490	230.9986	32.25860	1513.351
Minimum	0.609100	-1345.760	1.617300	12.34570
Std. Dev.	16.19330	239.5694	3.451443	188.6683
Skewness	1.741731	-3.214857	5.123492	3.777990
Kurtosis	5.380774	16.77054	39.05027	23.88442

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Jarque-Bera	81.59524	1058.607	6437.852	2260.738
Probability	0.000000	0.000000	0.000000	0.000000
Sum	1582.244	-5733.097	515.8512	22182.25
Sum Sq. Dev.	28582.32	6255889.	1298.458	3879936.
				110
Observations	110	110	110	

**Researcher Computation (Eview 9)**

Descriptive analysis is primarily used to describe the sample. To test the impact of working capital management on the profitability of listed manufacturing companies in the Nigerian Exchange Group, inferential statistic- correlation and panel regression analysis is used. The descriptive statistics table below displays the interpretation of the study statistical summary of analysis. This range from mean, median, maximum, minimum, deviations values of the study variables. The explanatory concern of this study focuses on the skewness, Kurtosis, Jarque-Bera and the probability statistical values of the study. Knowing thickness, and flatness of the distribution of the series, is to have measures of normality using Kurtoises and Skewnes. Skewnes measures the asymmetry of the series and normal skewnes is said to be '0 skew', that is, distribution is asymmetry around its mean value. But if the value is high, it is negatively skew. The variables measurement is as such that Cash Conversion Cycle (CCC) has a long –right tail (positive) skew and leptokurtic because of value 8.33 greater than 3 Inventory (INVEN) has a long-right tail ( positive) and leptokurtic with the value of 4.83 greater than 3 While T-payable mirrors normal skewness and platykurtic due to the value of 1.88 less than 3. Again, Jaque-Bera; the test statistics that measures the difference of the skewnes and Kurtoises of the series with those from the normal distribution. While probability is the probability that Jaque-Bera statistics exceeds (absolute values), the observed value leading to the acceptance or rejection of the null hypothesis of a normal distribution.

**Table 2: Correlation Matrix**

Covariance Analysis: Ordinary  
 Date: 03/21/22 Time: 13:14  
 Sample: 1 110  
 Included observations: 110

Correlation t-Statistic	CASH_R	CCC	INVEN	T_PAYABL E
Probability				
CASH_R	1.000000			
	-----			
	-----			
CCC	0.040943	1.000000		
	0.425848	-----		
	0.6711	-----		
INVEN	0.033250	-0.271340	1.000000	
	0.345731	-2.929764	-----	
	0.7302	0.0041	-----	
T_PAYABLE	-0.108292	-0.827905	0.327274	1.000000
	-1.132064	-15.34023	3.599352	-----
	0.2601	0.0000	0.0005	-----

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The Pearson correlation coefficient ( $r$ ) is employed to establish the measures of associations between the variables. Table two shows the Pearson correlation coefficient ( $r$ ) and the respective probabilities of the relationship between Working Capital variables (CCC, INVEN and TP) and Firm's Profitability variables (Cash Ratio). The results show that the coefficient of the correlation between CCC and CR stood at 0.040943 which is positive and strong. This implies that an increase in CCC would lead to a substantial increase in CR. This is supported by its p-value which is 0.6711 stating that the correlation is not significant at 5%. The coefficient of the correlation between CCC and INVEN stood at -0.271340, which is equally negative but strong. This implies that an increase in CCC would lead to a substantial decrease in INVEN. Furthermore, the coefficient of the correlation between CCC and TP stands at -0.108292, which is negative. This implies that an increase in CCC would lead to a minimal increase in TP.

**Table 3: Regression Analysis**

Dependent Variable: CASH\_R

Method: Panel Least Squares

Date: 03/19/22 Time: 15:40

Sample: 2010 2020

Periods included: 11

Cross-sections included: 10

Total panel (balanced) observations: 110

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	22.66989	12.37863	1.831372	0.0699
CCC	-0.000683	0.008884	-0.076848	0.9389
INVEN	4.190823	3.536101	1.185154	0.2386
T_PAYABLE	-2.851168	2.444183	-1.166512	0.2460
R-squared	0.024352	Mean dependent var		14.38404
Adjusted R-squared	-0.003261	S.D. dependent var		16.19330
S.E. of regression	16.21968	Akaike info criterion		8.446014
Sum squared resid	27886.28	Schwarz criterion		8.544213
Log likelihood	-460.5308	Hannan-Quinn criter.		8.485844
F-statistic	0.881907	Durbin-Watson stat		0.246723
Prob(F-statistic)	0.453037			

The regression run above shows the probability value that determine the significance relationship between the independent variables and that of the dependent variable. The probability of Cash Conversion Cycle (CCC) is 0.9389 which is higher than 0.05. It therefore, displayed insignificant independent variable on the dependent variable which is Cash Ratio. The determinant of trade Inventory (INVEN) to ascertain the significant relationship with the dependent variable display the Probability value of 0.2386, showing that it does not significantly determine the cash ratio in an important way. In the case of trade payable (T-payable) as an independent variable with a probability value of 0.2460 did not represent the dependent variable in a significant relationship. Hence the probability value fall above 0.05 level of significant.

$R^2$  and adjusted  $R^2$  are about the same interpretation of result. However, the fact is that adjusted  $R^2$  is more acceptable than  $R^2$ . In other words, the more the value of adjusted  $R^2$ , the more fit the model is. Otherwise looking at the value of adjusted  $R^2$  one can determine the goodness of the model.  $R^2$  independent variables cumulatively are 0.024352, it means 024% determinant and adjusted  $R^2$  is 0.003261 that determine the mean of 003% level of fitness or not. A researcher can equally interprets the result using durbin-watson statistical measurement to determine the auto correlation whether it is less than

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2, it is positive but greater than 2 refers to negative and if it is absolute 2, it means no autocorrelation in the statistics. In panel 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.

**Decision Rule:** The decision rule for accepting or rejecting the null hypothesis for any of these tests will be based on the R square Value and the Adjusted R square. If the value is less than 5% it implies that the regressor in question is statistically significant at 5% level; and if the value is more than 5% or 0.05 (that is, if Value > 0.05), it is categorized as not significant at that level. This implies that the level of significance for the study is at 5% (for the two-tailed test). Thus, the decision rule for accepting or rejecting the null hypothesis is based on both the Probability Values.

### **Test of Hypotheses**

H<sub>0</sub>: Working Capital does not have significant effect on Firms Profitability of quoted firms in Nigeria. Given the R<sup>2</sup> value of 0.024352 of the regression analysis as well as the adjusted R<sup>2</sup> value of 0.003261, which is less than 0.05, there is enough evidence to reject the null hypothesis of the study. This result implies that the overall regression is positive and statistically significant at 5% level of significance, given that the R<sup>2</sup> value is 0.024352 less than 0.05.

### **Discussion of Findings**

The statistical approaches include Ordinary least squares (OLS) model employed to address econometric issues and to improve the accuracy of the regression coefficients. The empirical results show the negative and significant effect of the working capital management, which measured by cash ratio and three components of the Cash ratio including CCC, inventory turnover in days (INVEN, and Trade payable turnover in days T-payables on the firm's profitability. It implies that firms can increase profitability by keeping the optimization of the working capital management measured by the Cash ratio, which includes shortening the time to collect money from clients, accelerating inventory turnover and hold the low payment time to creditors. Besides, the profitability of firms was impacted by the flow of cash ratio through sale growth rate, leverage. As such the study provides additional insight to firms on how to improve the firm's profitability with working capital management.

### **CONCLUSION AND RECOMMENDATIONS**

This study examines the effect of Working Capital Management on firm's profitability of 110 observable quoted firms in the Nigerian Exchange Group for 11 year period from 2010 to 2020. Research results show the negative and significant effects of the variables (measured by the Cash ratio and three components of the CCC which are CCC, INVEN, and TP) on the firm's profitability. Creating a reasonable working capital policy will enable businesses to increase the profitability and create value for investors. It shows that the optimization of the Cash ratio, which includes (1) shortening the time to collect money from clients, (2) accelerating inventory flow and (3) reducing the payment time to creditors will help increase the firm's profitability.

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## **Implementing International Public Sector Accounting Standards in Nigeria: Issues and Challenges**

**OSHIOLE, Blessing Victor**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: oshiolevictor@yahoo.com, Phone No: +234 803775466

### **Abstract**

*In recent times the issue of International Public Sector Accounting Standards (IPSAS) has been of interest to scholars as far as financial reporting in the public sector is concerned. IPSAS have been embraced by many jurisdictions given its numerous benefits in the area of transparency and accountability. However, the transition to IPSAS has been a challenge, and the trend must be reversed. Therefore, the aim of this study is to contribute to the scholarly debate on the implementation of IPSAS so that the different Countries adopting it could gain some insight into factors relating to the transition, to improve strategic decisions based on evidence from established body of knowledge and empirical analysis. The research objective is to investigate the factors that contribute to the slow implementation of IPSAS in Nigeria. A research question is pursued to achieve the objective. The research question is what are the factors that affect the implementation of IPSAS in Nigeria? An attempt is made to answer the research question based on cross-sectional survey design. Stratified random sampling statistics is employed for the study. A sample of two hundred and thirty-two (232) respondents drawn from the accounting and auditing cadres in the public sector are used to conduct this study. This study employs descriptive statistics for analysis. Findings from this study show that political buy-in of all the government functionaries as a collective decision is a significant factor for the slow implementation of IPSAS in Nigeria. The implication of this finding is that the benefits of IPSAS which are necessary for good governance may remain untapped if the situation is unchecked. Therefore, this study recommends the need to apply moral suasion among the government functionaries to achieve the implementation, and harness the benefits of IPSAS for improvement in public financial management in Nigeria. This study is useful to various stakeholders such as foreign direct investors for decision making.*

Keywords: Accountability, International Public Sector Accounting Standards, Implementation, Public financial management, Transparency

### **INTRODUCTION**

The traditional approach to public sector accounting is based on cash accounting under the Generally Accepted Accounting Principles (GAAP) which was copied from the private sector. The GAAP was originally meant for the private sector. It is convenient for accounting and cheap because in government, the primary objective of the financial statements has been for an individual Accounting Officer to be held to account and responsible for the way in which funds allocated in the budget have been utilized based on cash accounting. Unfortunately, the GAAP system has been criticized for poor transparency and accountability. The GAAP has failed in the public sector because the public and private sectors are different in objectives, goals, and expectation. Hence, the need for review was apparent and urgent to improve public financial resources management. The pressure to review the GAAP was more in the wake of the European Financial crisis which later became global because it was argued that the sometimes inapplicable GAAP accounting practices of the private sector being used in the public sector contributed to the event and somewhat belated response to the financial crisis and ever since, Scholars have been concerned about accounting change in government (Sanderson 2009; IFAC, 2007).

Scholars have continued to call for an efficient approach to public governance in line with the New Public Management reforms (Babatunde, and Dandago, 2014; Ball, and Pflugrath, 2012). Omolehinwa (2012) argues that there is need to account for peoples' money. The need for an accounting change resulted into the introduction of International Public Sector Accounting Standards (IPSAS) by the International Federation of Accountants (IFAC). IPSAS are accounting standards issued in sets by IPSASB. "IPSAS are high-quality global accrual-based accounting standards which enable governments to produce high-quality financial information that leads to better decision making and builds accountability and trust with citizens" (IFAC, 2017). IPSASB (2015) explains that the standards are for use by public sector entities excluding

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Government business enterprises worldwide. These standards are for the preparation of financial statements. The objective of IPSAS is to improve government financial resources decision making based on an improved general purpose financial reporting by public sector entities, to enhance transparency and accountability in public governance. International Public Sector Accounting Standards Board (IPSASB) which is a Committee of IFAC is responsible for issuing IPSAS. IPSAS blocks the tolerance of double standards in government services because it is about the transparency of operations. It is a solution to the predominant corrupt practices in countries across the globe. Also, the primary financial resource suppliers to developing nations such as the World Bank, the Asian Development Bank, and the United Nations have endorsed IPSAS for use in accounting for the financial assistance they offer. Chan (2005) explains that the reports on the accounting and auditing gap assessment, prepared by the World Bank for the South Asian countries indicate that all South Asian countries (Bangladesh, Bhutan, India, Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka) are making a transition towards IPSAS.

Despite the benefits, the implementation of this unique accounting change in government has been problematic because many governments are reluctant to accept the IPSAS reform but rather prefer to stick to the prior system of financial reporting. Notwithstanding, IFAC continues to propagate IPSAS adoption but despite the efforts the journey to implementation is still slow around the World although many countries adopted it but implementation has been an issue (IFAC, 2014). Adhemar (2006) argues that the IPSAS benefits are undermined by the fact that few governments have adopted the standards that are broadly consistent with IPSAS. For instance, IFAC (2017) finds that Anguilla and the Cayman Islands are the only Caribbean countries that have fully implemented IPSAS many of the other Countries started the process while many more countries are facing some challenges with IPSAS implementation despite the numerous benefits. Also IFAC (2017) finds that implementation of IPSAS in the OECD countries have been very slow. The study also argues that while the direct adoption of international accounting standards, such as International Public Sector Accounting Standards (IPSAS) by national governments remains very low, almost 28% of the standard-setters use IPSAS as primary or explicit references for developing the international standards. According to IFAC (2017) why the direct adoption of international accounting standards by national governments remains very low was due to some factors such as cultural, technical and required expertise. In line with the trend in globalisation, Nigeria considered the IFAC expectation and a significant decision was made by the Nigerian government when the International Public Sector Accounting Standards (IPSAS) was adopted in 2010, as the latest initiative in public sector reforms in Nigeria. This decision was predicated on the need to improve good governance as a catalyst to promote accountability and transparency in the management of public sector finances in the country. The adoption was supported by the enactment of the Financial Reporting Council of Nigeria Act, No.6, 2011. The Act empowers the Council to ensure the implementation of IPSAS in the best interest of Nigerians.

It is a good thing to adopt IPSAS but its implementation is a more serious and rigorous matter. Unfortunately, since the adoption of IPSAS, Nigeria is behind in the implementation. While the Country is wasting time on implementing the cash IPSAS, they were replaced with accrual IPSASs in 2013, and yet Nigeria has not implemented any of them ever since, contrary to expectation. In view of the slow implementation of IPSAS, the Federation Account Allocation Committee (FAAC) of Nigeria at the meeting of 13<sup>th</sup> June 2011 established a Sub-Committee to work out modalities for the implementation of IPSAS in Nigeria. It was expected that IPSAS cash basis would be applied to public sector financial reporting in 2012. The application was scheduled to start in 2012 being the year set as the deadline for the issue of first published IPSAS-compliant financial statements, but it failed. The Federal, State and Local Government Councils in Nigeria are to commence implementation of cash IPSAS by 2014 and accrual IPSASs by 2016, alas Nigeria has failed to meet the targeted dates despite the efforts of the Federal government since IPSAS adoption in 2010. The incessant failure to implement IPSAS is quite an irony because the same Country has implemented the International Financial Reporting Standards for its private sector organisations without much delay which shows an element of a double standard attitude of some government institutions charged with the responsibility. For example, the Financial Reporting Council of Nigeria which is a government

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apparatus enforced the implementation of IFRS successfully in the private sector of the same Country, but this is not the case with IPSAS which is a puzzle to be resolved as to factors responsible.

The frequent changes in implementation date have been viewed with mixed feelings among the practitioners and scholars in Nigeria. According to Ofoegbu (2014), several attempts have been made in the past towards improved financial reporting system in Nigeria, but they all failed. The study argues that existing financial reporting practice was based on laws and regulations such as Audit Ordinance Act No. 38, 1956 and Finance (Control and Management) Act No.33, 1958 all of which do not accord with the cash IPSAS. This study is unique in many ways, first it is on a contemporary issue in public governance. Second it is an attempt to cover some missing gap in the literature in the area of dearth of similar study in developing economies like Nigeria. Third, its methodological approach is in line with the trend in research design, as a contribution to the existing body of knowledge. Fourth, the findings are of significance to various stakeholders in different ways. Fifth, the recommendation emanating from the research findings are worthy of actualization in the best interest of citizens. The slow implementation of IPSAS since it was adopted in Nigeria in 2010 may imply non-conformity with the trend in globalisation. It also portrays noncompliance with IFAC public sector reform strategy as it relates to IPSAS. IPSAS reform is about transparency and accountability in the management of public resources. This problem of slow implementation can cause the nation to be less attractive to foreign direct investment because of poor transparency in the affairs of government, lack of comparison of financial reports of home and foreign operations due to different reporting format. Donor agencies and other funding agencies may not be attracted to Nigeria since it is slow in complying with the new public management reforms as established by the IFAC which is the global umbrella body of accountancy, to the detriment of a nation with poor transparency perception index. Transparency International (2016) corruption perception index ranks Nigeria 136th out of 176 countries surveyed. Also United Nations economic commission for Africa (2015) finds that there are illicit monies with some Nigerians.

Some factors have been identified by scholars to have contributed to the slow implementation of IPSAS. These factors have been identified to include cultural, expertise, political-buy- in and accountability. For instance, the literature has identified political buy-in of top government at the different levels of governance as an issue of concern in the implementation of IPSASs (Atuilik, Adafula, and Asare, 2016; Tikik, 2010 and Tickell, 2010). Ijeoma and Oghoghomeh (2014), Aboagye (nd). Nurunnabi (2012) joined the debate on the implementation of IPSASs and argue that there is the problem of Sociological factors. Omolehinwa and Naiyeju (2015) and Hamisi (2012) identifies the cost of implementation as a problem. Accountability is a factor affecting the implementation of IPSAS (Alshujairi, (2014). The aim is to contribute to the scholarly debate on IPSAS implementation so that the different Countries adopting it could gain some insight into factors relating to the transition, to improve strategic decisions for successful implementation of IPSAS.

## **LITERATURE REVIEW**

### **Conceptual Clarification**

#### **International Public Sector Accounting Standards**

Countries of the world over the years have defined and set the standards of financial reporting in their individual territories. However, globalisation has brought about ever increasing collaboration, international trade and commerce among the countries hence, there is grave need for increased uniformity in the standards guiding financial statements so that such statement would remain comprehensible and convene the same information to users across the world. The need for the development of unified accounting standards has been the primary driver of IPSAS for public sector financial reporting (Heald, 2003). IPSAS refers to the recommendations made by the IPSASB under the auspices of the IF AC (Delloitte & Touches, 2013; IPSASB, 2008). IPSAS are norms that govern the recognition, measurement, presentation and disclosure requirements in relation to transactions and events in general purpose financial statements. The

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development of IPSAS has its origin in the Accounting profession as a way to improve the transparency and accountability of governments and their agencies by improving and standardising financial reporting (Deloitte & Touches, 2013; Ijeoma, 2014). The IPSASB issues IPSASs dealing with financial reporting under the cash European Scientific Journal October 2016 edition vol.12, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431 163 basis and the accrual basis of accounting (Kanellos et. al, 2013). It is ideal for all public financial reporting to adopt accrual basis financial reporting. Even so, IPSASB has acknowledged that for many governments, adoption of a cash-basis IPSAS is a more realistic intermediate goal (PWC, 2009). The primary role of the IPSASB is to ensure that published financial statements are uniform in content and in format and communicate precisely what they purport to convey leading to better informed assessments of the resource allocation decisions made by governments, thereby increasing transparency and accountability (Stephen et al, 2012).

### **Quality of Financial Reporting Financial reporting**

This is a communication of financial statements and related information from a business enterprise to third parties (external users). The main objective of financial reporting is to provide high-quality information on reporting entities, which can be used for sound economic decisions making (IASB, 2010). This can positively influence present and potential capital providers and other stakeholders when making economic decisions; (investments, credit decisions, and allocating resources) that may enhance overall capital markets efficiency (IASB, 2008; 2010). It also provides information on management's effectiveness in utilising the resources and running the enterprise. Accountability is beyond the narrow limits of companies' legal responsibility to shareholders. It obviously includes the interest of persons other than existing shareholders (FASB, 1978). Quality of financial reporting is the precision with which financial reports convey information about the firms operation. Indeed so many definition of financial reporting quality are encountered based on the objectives of each research. For instance; Tang et al, (2008), define financial reporting quality as "the extent to which the financial statements provide true and fair information about the underlying performance and financial position". IASB, (2008), states that "the objective of financial reporting is to provide financial information about the reporting entity that is useful to present and potential equity investors, lenders and other creditors in making decisions in their capacity as capital providers". AICPA (1970), defines the purpose of financial accounting and financial statements as "the provision of quantitative financial information about a business enterprise useful to the statement users". The role however of financial reporting is broader and aims to provide even-handed financial and other information that together with information of other sources facilitates the efficient functioning of capital and other markets and assists the efficient allocation of the scarce resources in the economy, (FASB, 1978). The concept of financial reporting quality is European Scientific Journal October 2016 edition vol.12, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431 164 therefore broad and includes financial information disclosures and nonfinancial information useful for decision making. Financial reports should meet certain qualitative criteria in order to avoid poor quality and accomplish their purpose. Both IASB and FASB in their Conceptual framework concluded that high quality is achieved by adhering to objective and the qualitative characteristics of financial reporting information (IASB 2008; 2010). Qualitative characteristics are "the attributes that make the financial information useful" (IASB, 2008).

However, provision of decision useful information is limited by one pervasive constraint: the costs of reporting information must be justified by its benefits (IASB, 2010). The various qualitative characteristics studied are as follows; Relevance is the potential that information has of making a difference in the decisions taken by users of that information. "Finance information is capable of making a difference in the decisions if it has predictive value, confirmatory value, or both" (IASB, 2010). Reported information therefore is useful only if it relates to the issues that are prime concern to the users. To give a faithful representation of economic phenomena, annual reports must be complete, neutral, and free from material errors (IASB, 2010). The phenomenon's to be presented are "economic resources, obligations and the transactions and events that change those resources and obligations", (FASB, 1980). Understandability;

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information can be better understood if it is classified, characterised, and presented clearly and concisely. Information with such qualities enables user's comprehension of its exact meaning (IASB, 2008). Information that users do not understand is not useful even if it is relevant. Comparability is the quality of information that enables users to identify similarities and differences between two sets of economic phenomena. It includes consistency which refers to the use of the same accounting policies and procedures, either from period to period within an entity or in a single period across entities (IASB, 2010). Timeliness means that information becomes available to decisionmakers before it loses its capacity in influencing decisions. Timeliness refers to the amount of time it takes to make information known to others, and it is related to decision usefulness in general (IASB, 2010).

### **Quality of Financial Reporting**

The fundamental economic function of accounting standards is, to provide agreement about how important commercial transactions are to be implemented. According to Clarke (2009), if accounting reports are not prepared following the standards, then the meaning of comparisons between performance in different time periods and the performance between entities European Scientific Journal October 2016 edition vol.12, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431 165 are virtually impossible. Barth et al, (2006) suggest that accounting quality could be improved with elimination of alternative accounting methods that are less reflective of firm's performance and are used by managers to manage earning. Overall, evidence on voluntary IFRS adoption and accounting quality is mixed, however there is relatively better accounting quality among the firms that adopt IFRS (Christensen et al. 2008; Ashbaugh & Pincus, 2001). By eliminating many international differences in accounting standards, and standardising reporting formats, IFRS eliminate many of the adjustments that analysts historically have made in order to make companies financial information more comparable internationally. IFRS adoption therefore could make it less costly for investors to compare firms across markets and countries (e.g. Armstrong et al, 2007; Covrig et al, 2007). Thus, a common set of accounting standards would solve agency problem in corporate sector, reduce information asymmetries among investors and/or lower estimation risk by increasing comparability between lower and higher quality firms (Bradshaw et al, 2004; Daske et al, 2007). Thus, reducing international differences in accounting standards assists to some degree in facilitating international integration of capital markets (Covrig et al, 2007) by removing barriers to cross-border acquisitions and divestiture, which in theory will reward investors with increased takeover premiums. Lastly, better accounting standards make reported earnings less noisy and more accurate, hence more "value relevant". (Ashbaugh & Pincus, 2001; Hope 2003). It would also, make earning easier to forecast and would improve average analyst forecast accuracy. Ball et al, (2000) thought oppositely that managers in low-quality reporting regimes are able to "smooth" reported earnings to meet a variety of objectives, such as reducing the volatility of their own compensation, reducing the volatility of payouts to other stakeholders (notably, employee bonuses and dividends), reducing corporate taxes, and avoiding recognition of losses

### **Public Sector**

The public sector is a term used to identify the portion of a nation's economy that is focused on providing basic services to citizens through the framework of a governmental organization. The practice of government sector accounting evolved over the years with focus on cash receipts and disbursements on the cash accounting basis or modified cash accounting basis. Hence, government revenue is only recorded and accounted for when cash is actually received and expenditure is incurred only when cash is paid irrespective of the accounting period in which the benefit is received or the service is rendered. It therefore means that, the amounts incurred by the government in purchasing fixed assets are treated the same way as expenses. They are therefore written off as part of expenditure for the period the costs were incurred (Oecon, 2010). Accountability is all about being answerable to those who have invested their trust, faith, and resources to you (ijeoma & Oghoghomeh 2014). Adegite (2010) defined accountability as the obligation to demonstrate that work has been conducted in accordance with agreed rules and standards and the officer reports fairly

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and accurately on performance results visvis mandated roles and plans. It means doing things transparently in line with due process and the provision of feedback. Premchand (1999) observed that the capacity to achieve full accountability has been and continues to be inadequate, partly because of the design of accountability itself and partly because of the widening range of objectives and associated expectations attached to accountability. He further argued that if accountability is to be achieved in full, including its constructive aspects, then it must be designed with care. The purpose of accountability should go beyond the naming and shaming of officials, or the pursuit of sleaze, to a search for improvements in economics management to reduce the incidence of institutional recidivism. According to Nweze (2013) Public sector accounting (PSA) is defined as a process of recording, summarizing, analyzing, communicating and interpreting financial transactions of government units and agencies. It reflects all levels of transactions, involving the receipt, custody and disbursement of government funds. Based on the above the researcher intended to align to the definition giving by Nweze (2013).

### **Public Sector in Nigeria**

The Federal Republic of Nigeria is a multi-party democracy with the executive, legislative and judicial arms of government. The executive comprises of three tiers of government, the Federal, State and Local government and each of the three arms and three tiers enjoys some autonomy to a large extent in the running of the Federal, State or Local government affairs. Any law passed by each tier may not be binding on the other tiers separately or collectively on the same scale, and thus different points of view as regards the implementation of the law may ensue, an example of this; is the Financial Reporting Council Act 2011, which provides for the adoption and implementation of IPSAS. Such laws run the risk of slow implementation as is currently the case with IPSAS in the Nigerian public sector accounting system. According to the Institute of Chartered Accountants of Ghana (ICA- Ghana) (2010) public sector accounting is a system that gathers, records, classifies and summarises as reports the fiscal and financial transactions that exist in the public or government sector, as financial statements and interprets them as may be required by accountability and fiscal transparency to provide information to users associated with public institutions. It involves the receipts, custody, disbursement and rendering of stewardship of public funds entrusted.

Nigerian public sector accounting is strategic in the development of the Nation through the public sector apparatus on one hand as it drives the business operations of the private sector to a large extent on the other hand. The public sector accounting financial system in Nigeria is managed by the Ministry of Finance and the budget office at the Federal level, while each of the thirty-six States of the Federation run their financial affairs through their individual Ministries of Finance and budget offices as each State is autonomous with separate budgets backed up by an appropriation law. Also, each of the seven hundred and seventy four Local councils of the nation run their affairs separately. The three tiers maintain individual budgets that are guided by separate appropriation laws from preparation, approval, and implementation of the government budgets. They are individually governed with separate functionaries. They also maintain the development of the public sector financial reports for audit and publication individually.

### **IPSAS Adoption in Nigeria**

Onwubuariri (2012) Reported that the Federal Executive Council of Nigeria in July 2010 approved the adoption of the International Financial Reporting Standards (IFRS), and international Public Sector Accounting Standards (IPSAS), for the private and public sectors. The adoption is aimed at improving the country's accounting and financial reporting system. Umoru and Ismail(2010), stated that “ as part of plans to meeting international standards, the Federal Government has disclosed that new accounting system, the International Financial Reporting Standard (IFRS) will take off in Nigeria on 1stJanuary 2012. Consonance with global standards. Consequently, the Federation Account Allocation Committee, (FAAC), in June 2011 set up a subcommittee to work out a roadmap for the adoption of IPSAS in the three tiers of government.

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However, he noted that some stakeholders believe that the tools and strategies needed to fully implement IPSAS in the three tiers of government in Nigeria are still problematic. He explained that IPSAS is a good development and an international best practice which has been embraced in most developed countries. There is nothing wrong with Nigeria taking queue in making sure that public entities in the country fully adopt IPSAS. The practice of government sector accounting evolved over the years with focus on cash receipts and disbursements on the cash accounting basis or modified cash accounting basis. Hence, government revenue is only recorded and accounted for when cash is actually received and expenditure is incurred only when cash is paid irrespective of the accounting period in which the benefit is received or the service is rendered. It therefore means that, the amounts incurred by the government in purchasing fixed assets are treated the same way as expenses. They are therefore written off as part of expenditure for the period the costs were incurred. Formally announced its adoption and launching the road map for its implementation on 2nd September 2010 (Jonah 2010). Because the adoption was not feasible, the federal government has extended the implementation of Cash bases IPSAS to January 2014. The committee also extend the accrual bases IPSAS from 2015 to 2016. Jonah (2012) asserts that “We still need to do a lot of capacity building because this is a new system that requires a lot of training for accountants, budget officers and operators in all the three tiers of government”. Citizen participation in such governments avails them to an avenue to ask questions, which make provision of checks and balances in government. It will also promote accountability in governance and improve credibility rating for Nigeria. Nigeria’s quest to reposition it is economy as one of the top 20 economies of the world by the year 2020 as encapsulated in vision 20:2020 has given rise to various policies and reforms of government, all targeted at preparing a fertile ground for the actualization of the vision. Ijeoma and Oghoghomei (2014) in their findings said that adoption of IPSAS is expected to increase the level of accountability and transparency in Public sector of Nigeria.

### **Challenges of Adopting IPSAS**

A fundamental question is whether the implementation target dates set by Federal Executive Council are realistically achievable and whether the organizations will be able to receive unqualified audit opinion on their first set of IPSAScompliant FS. The risk is that if their financial statements purport to be IPSAS compliant but this proves to be only partly the case, their external auditor will issue a qualified opinion on their disclosures. Output and outcome measures each present a different set of challenges. Systems which only concentrate on outputs can result in goal displacement. Outcomes are technically more difficult to measure; they are complex and involve the interaction of many factors, planned and unplanned (Curristine, Lonti & Jourmad 2007). Ijeoma and Oghoghome (2014), conducted a study on challenges and benefit of IPSAS they found out adoption of IPSAS is expected to increase the level of accountability and transparency in public sector of Nigeria. It was found that the adoption of IPSAS will enhance comparability and international best practices. Frost (2012) assert that Governance can easily become confused and compromised in ‘joinedup’, networked or partnership projects, where initiatives are delivered collaboratively by different areas of government or the community. Declining sense of integrity honesty lack of professionalism and conflict or interest has destroyed African public service (Ebai & Forge 2009). Under traditional cashbased accounting methods expenses and revenues need not be recorded in the period to which they relate; expenses and revenues, together with capital spending are booked in total in the year in which the capital purchase or disposal is made. In addition, cashbased accounts do not fully recognize assets and liabilities. By contrast, accrual based accounting measures an entity’s performance and financial position by recognizing economic events at the time when transactions occur (instead of when payments are made). As a result, FS prepared on an accrual basis should provide information about elements such as the resources controlled by the reporting entity, the cost of its operations (cost of providing goods and services), cash flow and other useful financial information about its performance and financial resilience. Ijeoma and Oghoghomei (2014) assert that Nigeria transition to Accrual bases of IPSAS will accrue the following challenges which include:



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- (a) Systematic identification and valuation of assets and liabilities as at the date from which accrual accounting is to commence.
- (b) Lack of adequate technical resources
- (c) Political ownership such as inadequate support at the highest levels of the executive
- (d) Consolidation issues

The following are conditions precedence for a successful migration to accrual basis of accounting:

- (a) An acceptable cash accounting based system Countries with inadequate budget classification, no Unified double entry based general ledger system, and inadequate fiscal reporting are advised to adopt Cash Basis of Accounting before migrating to Accrual Basis.
- (b) Entities or government considering a move to accrual accounting must have either a core of officials with required technical skills such as accounting, information technology etc., or the capacity to recruit such people for its key positions
- (c) Total support from the political class
- (d) Adequate system; with multi-dimensional reporting requirements of accrual based IPSAS, implementation of full accrual accounting can only be effective with the aid of a modern government financial management information system (GFMIS) with proven functionality in areas such as general ledger, accounts payable, purchases, assets management, etc.

The accrualbased IPSAS accounts are more complete than the cashbased ones and by definition eliminate the scope for manipulating payments and receipts in order to suit specific reporting and control objectives (Biraud 2012). Another important factor to consider for the consequences of adopting accrual basis of accounting in public sector entities is the question whether the application of IPSAS will fit better the political or accounting purposes for the government of Nigeria. However, the fit of the introduction of accrual IPSAS to the accounting context of the government is still under a big doubt.. One of the key disadvantages and barriers to the adoption and efficient implementation of accrual basis IPSAS is argued to be the high costs to the governments associated with the process, especially in the case of transition economies in relative terms (Amirkanyan, 2013)

### **IPSAS Implementataion Issue**

Gerard (2010) highlights some issues relating to implementation of IPSAS, which include:

#### **Potential Risk**

IPSAS adoption is a complex and comprehensive change management process. While it offers numerous benefits over the medium and long term, it also entails shortterm costs and challenges that need to be seriously addressed by the executive heads of all the organizations concerned.

#### **Change Management**

Inevitably, the introduction of IPSAS will come at some price for every organization. As pointed out in a 2002 communication by the European Commission, —experience in the Member States shows that reforming public accounting systems represents a major upheaval both in terms of the introduction of new practices and in human terms, not to mention the financial resources required.

### **IPSAS is time and money consuming**

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The adoption of IPSAS compliant accounting methods requires additional commitment of time and effort from staff. During the transition phase, depending on their available resources, the organizations will have either to rely for an extended period of time on support from existing staff working in addition to their regular duties or recruit many additional staff.

### **Political Aspect**

Politically the most sensitive requirement is contained in IPSAS 6–Consolidated<sup>35</sup> and Separate Financial Statements, which stipulates that an entity shall present FS in which it consolidates all the entities it controls<sup>36</sup>. The application of this stipulation raises several key.

### **Empirical Review**

Udeh and Sopekan (2015) examined the adoption of IPSAS and quality of public sector reporting. It was observed that IPSAS adoption is expected to improve the level or quality of public sector financial reporting in Nigeria. The study affirms that accrual-based IPSAS has the ability to improve financial reporting compared to cash based accounting. Mhaka (2014) conducted a cost-benefit analysis of IPSAS adoption in Zimbabwe by a comparative study of the current cash accounting basis and the proposed IPSAS based accounting reporting. The study reveals the challenges inherent in cash-based accounting which will be resolved by the adoption of IPSAS-based standards. He disclosed that the adoption of IPSAS would alter the basis for financial reporting from prevailing cash accounting to IPSAS-based cash accounting and accrual and finally to complete and total accrual based IPSAS. The study maintains that this facilitates the reconciliation between budgeted and actual results as it would be necessary to align the budget preparation to full accrual as well as the enhancement of existing capacity, allowing reporting and comparison of budget against actual results would also allow for improvement in resultsbased budgeting. Erin Olayinka; Okoye, L. U.; Modebe, N. J. & Ogundele Olaoye 25 Ijeoma and Oghoghomeh (2014) examined the expectations, benefits and challenges of adoption of International Public Sector Accounting Standards (IPSAS) in Nigeria. The study employed primary data and adopted thIjeoma and Oghoghomeh (2014) examined the expectations, benefits and challenges of adoption of International Public Sector Accounting Standards (IPSAS) in Nigeria. The study employed primary data and adopted the Chisquare test, Kruskal Wallis test and descriptive analysis. The findings of the study reveal that adoption of IPSAS is expected to increase the level of accountability and transparency in public sector of Nigeria. It was found that the adoption of IPSAS will enhance comparability and international best practices. Also, it was shown that adoption of IPSAS based standards will enable the provision of more meaningful information for decision makers and improve the quality of financial reporting system in Nigeria.

Alshujairi (2014) conducted a survey to determine whether a developing country like Iraq should adopt IPSAS as a means of improving the government accounting system. The study used qualitative methodology through a questionnaire to obtain required data with the survey result showing that a large number of respondents think that the Iraqi government accounting system needs an important reform citing the main reason as corruption. The result further emphasised the need to improve the transparency, quality of accounting system and accountability of government to citizens. Within this context, Iraqi government accounting should be reformed through adoption of IPSAS because accrual accounting gives a better financial integrity assurance compared to cash or modified cash based accounting. Christiaens et al. (2013) examined the extent to which European governments adopt IPSAS accrual accounting and how the differing levels of adoption can be explained through the medium of a survey on related experts. They show that there is no uniform method to the adoption process of IPSAS and accrual accounting as well as some governments' still use cash based accounting with a smaller fraction applying IPSAS. The majority of local and central governments apply accrual accounting disregarding IPSAS which can be explained by the need for transparency and efficiency. The study disclosed that the main argument for the usage of IPSAS is the fact that it offers uniqueness and specific know-how and argues that the success of IPSAS strongly depends on setting out its strengths and emphasising the necessary settings to be met.

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Atuilik (2013) studied the relationship between the announcement of IPSAS adoption and the perceived levels of corruption in the developing and developed countries. The study employed quasi experimental research design where the Corruption Perception Index (CPI) compiled by Transparency International was used to measure perceptions of corruption. The study finds that the levels of perception of corruption for developed countries that have announced IPSAS adoption do not differ significantly from the levels of perceived corruption for the developed countries that have not announced IPSAS adoption. For developing economies, the result shows some degree of differences. He explained that the governments of developed countries may not have expected the IPSAS adoption to significantly enhance their ratings on corruption index while governments of developing countries may likely expect an improvement in their ratings following the adoption of IPSAS. This is line with the study of Alshujairi (2014) that provides evidence that developing countries are greatly affected by corruption. Trang (2012) carried out a similar study which examined whether or not the Vietnamese government accounting should operate the IPSAS, and describes the extent to which they can be applied within the existing setting in Vietnam. He appraised the usefulness and feasibility of the IPSAS for the Vietnamese government accounting and financial statements and advocates that the movement in the accounting systems from cash to an accrual basis is usually an element of a broader set of their reforms, those changes are increased in delegation, departments are directed to provide a service for citizens rather than follow set rules, and there is better transparency of public sector in terms of reporting and performance measurement.

### **Theoretical Discussions**

#### **The Economic Network Theory**

Economic network is a combination of individuals, groups or countries interacting to benefit the whole community. Economic networks use the various competitive advantages and resources of each member to increase the production and wealth of all the members. Economic network theory predicts that in addition to network benefits, a product with network effects can be adopted due to its direct benefits (Liebowitz & Margolis, 1994 cited in Hamisi, 2012). In the case of the IPSAS adoption by a country, the theory European Scientific Journal October 2016 edition vol.12, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431 169 argues that the direct benefits are represented by both the net economic and net political value of IPSAS over local standards (Barth, 2008). According to this theory economies with high levels of or expected increases in foreign investment and trade are more likely to adopt IPSAS. This theory reveals evidence of regional trends in IPSAS adoption, such that a country is more likely to implement IPSAS if other countries in its geographical region are IPSAS adopters (Hamisi, 2012). Adopting a set of standards like IPSAS can be more appealing to a country if other countries have adopted them as well, in this sense, IPSAS can be a product with “network effects”. The theory of Isomorphism The theory of isomorphism defines the “constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions” (DiMaggio and Powell 1983 cited in Antwi, 2010). This theory in practice implies that, the features of an organisation can be tuned to some extent for the sake of compatibility and uniformity to suit the surrounding environment of organization in question.

The theory of Isomorphism can be classified as follows; Coercive Isomorphism; Stems from political influence and the problem of legitimacy. It takes the shape of a formal or an informal pressure exerted on an organization by other superior organization upon which they depend as well as cultural environment within which an organization operates. The adoption of IPSAS by developing countries to a larger extent is influenced by external factors such as foreign investors, International accounting firms, and international financial organization among others. Internally such force, persuasions or invitations to adopt IPSAS have been influenced by for example ICPAK, NSE and CMA. Mimetic Isomorphism; Stems from standard responses to uncertainty. The degree of uncertainty is a powerful force that encourages imitation such that an organisation desire to adopt others’ practices that are both successful and worthy of adoption (DiMaggio and Powell 1983 cited in Antwi, 2010). As such uncertain in GOK financial system in managing their finances and inability to matching financial assets and liabilities in terms of amounts and timing might have

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necessitated government to emulate other public entities that are more legitimate and successful. Normative Isomorphism; is attributable to professionalization which is defined as the collective struggle of individuals of similar calling organising in a professional organisation to promote a cognitive base, diffuse shared orientations and organisational practices, and legitimise their occupational autonomy (DiMaggio and Powell,1983 cited in Antwi,2010). Professional bodies exhibit similar traits to their professional counterparts in that they mimic each other. These professional bodies to a larger degree European Scientific Journal October 2016 edition vol.12, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431 170 influence greatly their counterparts. Conscious of this, either of these institutions may mimic the other in instances where a certain standard has worked for them In Kenya such accounting professional bodies as ICPAK, and PSASB positively influence each other very much. However, unless a country opens its doors to these institutions, there is little they can do to politicise the adoption process.

### **Accounting Theory**

Accounting theory is dynamic and is concerned with improving financial accounting and reporting in broad perspective. It is essential that accounting is used according to generally accepted rules to avoid chaos that would occur in the process. The first prerequisite is that accounting should agree or conform to the basic truths according to which our economic system functions; the current economic and business practices and the applicable law as embodied in legislative regulations or common law. Consequently, it is important that uniformity is maintained in accounting and reporting practice (Kiugu, 2010). The continuously increasing scope and complexity of our economics system requires a corresponding process of adaptation in accounting and effective reporting in order that the relevant information regarding economic activities may be recorded (ASB, 2000). An analysis of the need for a transparent and accountability driven governance has generated debate stemming from the NewPublic Management (NPM). (Onalo, Lizam, and Kaseri, 2013; Andriani, Kober, and Ng (2010). Cortes (2006) explain that NPM focuses on efficiency, performance measurement, fiscal discipline, accountability and transparency. The various theories of governance accommodate that social conflicts are resolved by a sovereign from a perspective of responsibility as guided by the new public management theory (Bevir 2011; Carrington, DeBuse and Lee 2008). Also, a set of new accounting standards based on IPSAS was adopted to reform effective and efficient governance in the provision of services to Citizens. IPSAS applies to the underlying principles of recent social, economic, public sector reforms as means to improve the accountability, transparency and public sector governance in Nigeria. The implementation of IPSAS in Nigeria as a part of broader financial management and public sector reforms in line with the doctrine of NPM in the country is still a dream.

### **Stakeholders Theory**

Stakeholders' theory is based on the assumption that “values are necessarily and explicitly a part of doing business. It asks managers to articulate the shared sense of the value they create, and what brings its core stakeholders together so as to deliver on their purpose” (Freeman, Wicks, Parmar 2004, p. 1). Financial statements are subject to stakeholders' scrutiny to ascertain their usefulness in line with the Stakeholders theory. Danescu and Rus (2013) argue that accounting information available should serve the users for their target purpose. The users of the IPSAS in the public sector suggest that its implementation is necessary for measuring performance, accountability by government organisations, efficiency, and effectiveness and decision making to support a proper function of democracy. Ironically, at the practical level, the implementation of the new policies is not a simple process (Haroun, 2012; Nor-Aziah and scapens, 2007; Dambrin, Sponem and Lambert, 2007). Thus it is a mistake for technocrats to see the introduction of IPSAS as merely a technical reporting innovation. Government accounting needs a broader theory of government accountability, which can be derived from Herbert Simon's organization theory (Simon, 1945).

### **METHODOLOGY**

The research method is quantitative. It is based on available information on the conceptualization of the implementation of IPSAS, laws, and regulations in Lagos state the data used are survey of interview

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documented in the Lagos state ministry of Finance this data approach is used because of the peculiarity of this study which is about a technically distinctive situation with many variables of interest. The result relies on multiple sources of evidence, with data coverage and benefits from the prior development of theoretical proportion to guide data collection and analysis in line with Yin (2003). Following Yin's (2003) the data for this research focus on why and how questions on IPSAS. This study uses perception analysis, following the trend in Jachev & Bowser (2008).

The population of the study cuts across the accountants and auditors in Lagos State government. They are the foremost practitioners in charge of the implementation of IPSAS. This research focuses on State government because governments have a high stake in achieving the implementation framework in the area of legislation, enforcement and monitoring. Lagos State is the pacesetter state in Nigeria when it comes to issues of technical accounting change such as the implementation of IPSAS. The State is a large employer of public servants accountants and auditors, who are well informed in the issue at stake that is the implementation of IPSAS in Nigeria. These public servants constitute the population of this study. The population chosen is representative for Nigeria given that over 65% of Nigeria's commercial activities are carried out in Lagos, also Lagos State contributes the highest to the Country's Gross Domestic Products at 12% among the thirty- six States of Nigeria as at 2013 (Business news, 2014). Lagos is the fifth largest economy in Africa (Akintilo,2015). The population size is three hundred and ninety (390) Accountants and two hundred and six (206) Auditors in Lagos State government, making a total of five hundred and ninety-six (596) respondents. By investigating the perception of practitioners, this study explores the events, evidence, facts, and actions of actors who are involved in the policy formulation and implementation of the IPSAS in Nigeria. Following Yin (2003) the primary data for this research focuses on why and how questions on IPSAS.

### **RESULT AND DISCUSSION**

**Table 1: Perception of the factors that affect the implementation of IPSAS in Nigeria**

<b>Item No.</b>	<b>Description</b>	<b>N</b>	<b>Mini mum</b>	<b>Maxi mum</b>	<b>Mean</b>	<b>Std. Deviation</b>
1.	Implementation of IPSAS in Nigeria is affected by political buy-in among the different government functionaries in Nigeria.	228	2.00	5.00	4.08	.84
2.	Implementation of IPSAS in Nigeria is affected by sociological factors	225	1.00	5.00	3.46	1.08
3.	Implementation of IPSAS in Nigeria is affected by availability of expertise	224	1.00	5.00	3.48	1.27
4.	Implementation of IPSAS in Nigeria is affected by accountability,	226	1.00	5.00	3.72	1.13
5.	Implementation of IPSAS in Nigeria is affected by institutional commitment	224	1.00	5.00	3.85	1.01
6.	Implementation of IPSAS in Nigeria is due to cultural dichotomy	221	1.00	5.00	3.25	1.30
7.	Cost of funding affects the implementation of IPSAS in Nigeria	232	1.00	5.00	3.40	1.25

**Source:** *Ministry of Information Lagos*

This result supports the finding in earlier scarce research on the implementation of IPSAS in the developing economies. Nurunnabi (2012) finds that politico-institutional factors are stronger and more dominant factors than accounting regulatory frameworks for IFRSs implementation in Bangladesh. Ball (2006) argues that

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most political and economic influences on financial reporting practice are local. Hamisi (2012) finds that there are some factors such as availability of expertise that affect the implementation of IPSAS in Kenya. Harun (2007) finds that improved accountability poses a significant threat to politicians' and bureaucrats' overall income level in Indonesia. The result of this study actualises the objective of the study which is to investigate the factors that contribute to the slow implementation of IPSAS in Nigeria. Also, the study answers the research question having found that political support, institutional commitment, expertise, sociological issues and cost of funding IPSAS are the factors affecting the implementation of IPSAS in Nigeria.

### **CONCLUSION AND RECOMMENDATION**

This study concludes that political buy-in among the various functionaries of government is a major factor affecting the implementation of IPSAS in Nigeria. This study has largely achieved its aim of contributing to the debate on accounting change regarding the implementation of IPSAS. It also achieved its objective of investigating the factors that affect the implementation of IPSAS in Nigeria. Given the foregoing, the following recommendations are being put forward;

- i. The factors mitigating against the implementation of IPSAS in Nigeria should be addressed to achieve the implementation of IPSAS in Nigeria in compliance with the trend in IFAC financial reporting convergence policy.
- ii. Given the findings in this study, moral-suasion is recommended as a way to improve the acceptance of IPSAS among all the functionaries of Government, collectively, in solidarity and conformity with one another, for effective political-buy-in and ownership of the accounting change of successful implementation of IPSAS in Nigeria.
- iii. A timely implementation of IPSAS is desirable to enjoy the benefits of a transparent government in the best interest of Nigerians.

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## **Impact of Business Analytics and Enterprise Resource Systems on Effective Accounting Practices in Corporate Organizations**

**YIGA, Tim Junior**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: timyigajnr@gmail.com, Phone No: +234 7063699042

### **Abstract**

*This study examines the impact of Business Analytics and Enterprise Resource Systems on Effective Accounting Practices in Corporate Organizations . By means of an exploratory research design and based on the empirical reviews on business analytics, the study concludes that businesses should move from a traditional accounting structure to a more comprehensive accounting system that has integrated analytics. The implementation and integration of analytics bring a challenging process for businesses and individuals. Also, Staff of corporate organizations needs to adapt to analytics and allocate more resources to the process management of enterprises for their implementation. The study recommends that; since ERP systems are allowing capital budgeting, budgeting, operating statements, forecasting, performance measurement, and costing to be more detailed, more accurate, and reported more quickly, organizations across the globe should deliberately drive a shift in the role of the management accountant and accounting, as a whole. ERP implementation should remain one of the major contributors to this change. Accountants must persistently consider ERPs that allows them to expand their roles and as against producing figures, they can dispose of more time for further analysis and value adding activities in areas such as cost control.*

**Keywords:** Business Analytics, Enterprise Resource Programmes, Accounting Practises, Corporate Organizations

### **INTRODUCTION**

The fact that information today has become increasingly digitized to enable the combination of conventional company data with digital data, and expansion of the data ecosystem. The changing data structure from the traditional toward digitized provides radical developments in business analytics and makes it a key to the management accounting as well as the organization performance. Big data utilization and technology contribute to a competitive advantage (Granlund, 2011; Haas & Pentland, 2014). Business analytics paves the way for accounting practices applications to take advantage of both internal and external resources by expanding the data ecosystem. Analytics also allows businesses to access more data and details. Increased quality of information supports both quantitative and qualitative performance to reach the targeted level. Analytics becomes a component of organizational processes as important optimization techniques and tools used to solve problems (Vidgen, 2017). Cost performance, which is an indicator of organizational performance, can be positively affected by the interaction between the management accounting practice or system and business analytics. Business analytics methods to be integrated into the management accounting practices improve cost performance by strengthening various aspects of information. On the other hand, studies show that this change is not adequately reflected in management accounting (Scapens and Jazayeri, 2003). Business analytics methods and tools, including descriptive, predictive, and prescriptive features, have a positive impact on management accounting knowledge and cost performance. Technological facilities and sophisticated tools should be used more to obtain information more closely related to managerial processes (Appelbaum et al., 2017). Using business analytics allows businesses to make predictive, descriptive, and prescriptive inferences by obtaining data from various sources.

Organizations have become more complex in terms of their corporate structure and geographical presence due to the globalization process, and they are facing an increasing amount of data to be handled in daily operations. The more and more changes of the business environment and the increased complexity of the companies' activities need to permanently adapt, in an alert rhythm, which sometimes exceeds the effort and analysis capacity of the human factor. In order to overcome the problems incurred by different

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information systems within the organization, companies have integrated all their operational systems into one single system (Shang& Seddon, 2002). This could refer to enterprise system software (ESS) which consists of, for instance, enterprise resource planning (ERP), supply chain management (SCM) and customer relationship management (CRM). These systems are already considered ‘classic’ imperatives within the big companies, a very important condition for maintaining the competitive advantage. enterprise resource planning (ERP) systems enable organizations to integrate business processes and functions and they can supply managers with real time information. Consequently, enterprise resource systems are considered to provide management means to respond more efficiently to changes in the business environment (Spathis& Constantinides, 2003). The role of an accountant includes collecting, recording, analyzing, and reporting of financial data. In the past, the accountant will have to utilize very basic, manual, and time-consuming methods; data collection is done in person and the records are registered on a traditional file system. Complex analysis is most of the time very hard to perform and sometimes even impossible. For the business, this is not only time consuming but could also cost a lot of money. However, with the advancement of technology, new systems have emerged to assist businesses and accountants. The Enterprise Resource Planning (ERP) system is a group of software designed to “coordinate all the resources, information, and activities needed to complete business processes such as order fulfillment or billing (Swapnil & Mullick, 2010). Thus, the main objective of this research is to discuss the potential impact of business analytics and enterprise resource systems, on effective accounting practices in corporate organization.

### **LITERATURE REVIEW**

#### **Business Analytics**

Organizations need more sophisticated data due to uncertainty and fluctuations in business life. Virtual world and real-life provide more data called “big data” for businesses. Conventional data replaces with digitized data. This transformation expands the data ecosystem like never, bringing both advantages and challenges (Shmueli & Koppius, 2011). Consequently, business analytics are gradually increasing their impact. Business analytics refers to techniques, approaches, applications, and orientations that include data, information-communication technologies, visualization tools, statistical analysis, mathematical and quantitative models in business life to make evaluations and make rational decisions. Business analytics helps test and understand causal phenomena in business life using mathematical and statistical methods (Davenport & Harris, 2007). Research confirms that business analytics is becoming increasingly important both for present and future organizational activities (Aydiner, Tatoğlu, Bayraktar, Zaim, & Delen 2019), as such business analytics may enhance the effective use of organizational resources.

According to Holsapple, Lee-Post & Pakath (2014) business analytics applications consist of three orientations that are descriptive, predictive, and prescriptive in nature. Orientation describes the function and content of analytics. Descriptive analytics provides an analytical summary of business activities and events and, includes basic and advanced statistical analyses, qualitative and quantitative ratios, dashboards and visual tools, and are frequently used in business (IBM, 2013). Descriptive analytics describes the financial and non-financial results of the business following its interaction with the environment through statistical and other tools. It includes all kinds of data sources in the analysis rather than financial statement data. In this way, business analytics changes the traditional data-oriented view of management accounting. Predictive analytics is the next step in obtaining information from descriptive analytics. It provides forecasting about what might be (IBM, 2013). Predictive analytics is performed with probability and forecasting models, statistical advanced analyses and scoring tools. Forecasting and probability models use historical data collected over time to understand possible future events. Descriptive analytics is strongly related to the use of predictive analytics. Prescriptive analytics focuses on the question of what should be done based on data provided by the descriptive and predictive outcomes (Holsapple *et al.*, 2014). With this feature, prescriptive analytics can be considered as an optimization technique. Prescriptive analytics take into the data of descriptive and predictive analytics to the next level by revealing possible solutions. Organizations may achieve their objectives owing to

prescriptive analytics that generates solutions by processing qualitative and quantitative data obtained from various information sources (Basu, 2013).

### **Business Analytics and Management Accounting Practices**

Management accounting has three basic roles: control and planning, performance measurement, and cost management (Cokins, 2013). Business analytics can contribute to each function of management accounting. Accountants can use the data provided by business analytics at every stage of their business. The budget to be prepared using the data obtained from social media can be given as an example. In this way, risk analysis can be done to prevent the allocation of resources to wrong market segments. In addition, social media and industry reports can help managements redesign their business processes. Analytics tools positively affect the performance evaluation, as they include sophisticated tools such as text mining, machine learning, and data mining (Nielsen, 2015). Accounting data quality enhances owing to business analytics. High-data quality is one of the prerequisites of business management (Redman, 2013). Business analytics helps to provide quality data for data users to make valuable analyzes and predictions. In this context, business analytics utilization improves the performance of the accounting system. The management accounting system performs basic functions such as strategic cost management, operational control, and performance measurement, budgeting, and reporting (Brands, 2015). Information produced through reporting should be predictive rather than historical based (Cokins, 2013). Therefore, the need for predictive accounting information and financial statements is increasing rather than historical accounting information and financial statements. It will be useful to integrate business analytics methods into accounting and corporate resource planning systems to realize this change and transformation by enterprises.

Descriptive analytics improves the cost management function of accounting as it helps to summarize and explain an entity's cost structure. Sivarajah, Kamal, Irani, & Weerakkody (2017) addressed those analytics are applied in conjunction with dashboards, scorecards, data visualization to monitor operational processes. Predictive and descriptive analytics such as machine learning, statistical analysis, mathematical modeling, trend analysis, a regression equation can be used in performance measurement and evaluation studies. Prescriptive analytics can improve the efficiency of both cost management and planning by contributing to the determination of optimal solutions. The planning and control function can be performed more efficiently through scenarios provided by risk analytics and prescriptive analytics. Due to predictive, prescriptive, and descriptive analytics, management accounting can provide more optimal solutions in solving business problems. In this way, instead of relying on internal data, management accounting can perform more comprehensive analyses that consider external data. Relatively difficult processes, such as cost reduction, supplier selection, measurement of company reputation, quality, and pricing in material management, can be made by management accounting easier and more feasible owing to business analytics tools. Increased effectiveness of management accounting allows the firm to focus more on cost performance. In this context, business analytics positively affects management accounting and cost performance. Prescriptive analytics utilization not only reduces costs, but also increases the effectiveness of accounting in understanding new markets, developing new products, and determining customer preferences. Data from social media facilitates changes in consumer preferences and understanding of trends by the business. Thus, management accounting can perform more realistic analyzes both in planning activities and in cost management.

Business analytics improves the planning and control effectiveness of management accounting by providing the data needed to help businesses get to know their customers better. For example, indicators such as customer satisfaction, the return rate of products, customer complaints can be easily monitored through analytics. The analytics also enable the accounting unit to compile customer ratings from various websites or forums. The effect of this change is seen in the creation of a social media analysis team for many companies. Analytical techniques, such as text mining, enable the accountant to perform budgeting and control more effectively by identifying the frequency of company brands taking part in customer conversations (such as Facebook, Instagram, Pinterest). Analysis on Facebook, Twitter, Instagram

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statistics can be reflected in the management accounting studies through business analytics tools. Business analytics contribute to management accounting for evaluating the internal processes of the business. The use of descriptive analytics enables internal processes to be summarized for managers. Summarizing and aggregating data increases the success of planning and control functions (Sun, Strang & Firmin 2017). The evaluation of internal performance and development of forecasting models can be easier with predictive analytics utilization. Management accounting controls the success levels of internal processes and objectives using transaction mining. Descriptive analytics contribute to the quality of control by providing descriptors such as mean, median and standard deviation for managerial processes. Prescriptive and predictive methods support management in developing employee skills, improving product quality. An example is when the accountant chooses a raw material supplier using an optimization model that increases revenue by reducing costs in the production process (Taleizadeh, Noori-daryan & Cárdenas-Barrón, 2015). Business analytics has a vital position in creating value and using resources effectively (Hindle & Vidgen, 2018).

### **METHODOLOGY**

This study adopts an exploratory research design through an in-depth analysis of Enterprise Resource System and Effective Accounting Practices in assessing the Impact of Business Analytics and Enterprise Resource Systems on Effective Accounting Practices in Corporate Organizations.

### **RESULT AND DISCUSSION**

#### **Enterprise Resource System and Effective Accounting Practices**

The interaction between the enterprise resource planning systems and accounting practices is quite a new research topic and is continually developing. The emergence of ERP systems has signified the beginning of a new era in the business environment, where companies can integrate business processes/applications and respond to real-time information (Stefanou, 2002; Nicolaou, 2003; Spathis, 2006). Nevertheless, the focus of the relevant literature has been on ERP systems in general and there is limited published scientific evidence on the ERP implementation processes and their effects on accounting practices in particular (Sutton, 2016). According to quite recent studies, the implementation of ERP systems affects the accounting processes and the accountants' role (Granlund & Malmi, 2002). Spathis and Constantinides (2003) identified in their study the benefits of ERP systems which include: increased flexibility in information generation, as well as improved quality of reports and financial statements. Also, in 2004, they examined the impact and the changes occurred by replacing the traditional information systems with ERP systems, in terms of accounting application. One relevant finding of the study was the fact that ERP implementation produced important benefits for accounting. Further, researchers have investigated the impact of ERP systems on management accounting. Both, Matolcsy and Wieder (2000) studied the effects of ERP systems on management accounting. Although they did not observe significant differences between ERP adopters and non-adopters regarding the use of advanced management accounting techniques, they concluded that ERP systems function as a driver behind the adoption of modern management accounting techniques. According to the researchers, implementation of the new ERP system did not change the management accounting practices. Nonetheless, the study provides evidence that ERP systems reduce the time needed for execution of routine tasks and, thus, leaves accountants additional time to conduct more useful information analysis.

Expectations for ERP systems to change management accounting were introduced by Kaplan and Cooper (1998), especially through the fourth of their four-stage model for cost and performance measurement systems. When speaking about first stage systems of a company, these systems are basically inadequate for all purposes, even for financial reporting. When improvements are made, the first stage companies tend to add financial systems to meet regulatory requirements. As a result, they evolve into second stage systems where financial reporting systems dominate; these companies being driven by financial reporting. The companies with third stage systems have customized, relevant cost management, financial reporting, and performance measurement systems; however, these systems are independent. ERP systems are only

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used with the fourth stage systems where ERP systems integrate cost management, financial reporting, and performance measurement (Kaplan and Cooper, 1998). Kaplan and Cooper (1998) also state that the integration with ERP systems allow all managerial processes, including budgeting, what-if analysis, and transfer pricing to be also based on activities rather than only on dollars. Furthermore, the activity-level focus of budgeting leads to more accuracy in forecasting the demands for all direct and, especially indirect activities. Cook et al.'s (2000) field study suggests that ERP systems can increase the effectiveness of capital budgeting by anchoring financial numbers to activities rather than stopping at monetary measures with pre-ERP practices. Their arguments were convincing, yet not able to be verified. Scapens and Jazayeri (2003) reviewed the literature to find that 'ERP systems are having relatively limited impacts on management accounting and management accountants'. According to the literature, the purpose of Scapens and Jazayeri (2003) was 'to explore the processes of change and to examine in more depth the nature of the changes in management accounting which have accompanied the implementation of an ERP system ... within a specific organization.' The latter lead to more information sharing and teamwork on one hand and greater centralization of information processing activities on the other. Although the authors considered three years to be long enough to study the change process, this would not appear long enough given the existence of institutional forces (Burns and Scapens, 2000).

Booth et al. (2000) analyzed the extent to which the application, by an enterprise, of an ERP system can result in the adoption of new accounting practices. It was concluded that ERP systems represent data sources for new accounting practices, being designed to support that practices. More exactly, Rom and Rohde (2006) found that ERP proved to be very useful in terms of data collection, as well as management accounting. This was further confirmed by Javernpaa (2007), who noted that such systems lead to more efficient development of the routine activities, adoption of new management accounting practices, use large databases more quickly and reporting in a more flexible and faster way. According to Colmenares (2009), the implementation of the ERP systems generated benefits for the enterprise, consisting of the improvement of the decision-making processes, as well as enterprise integration. On contrary, Kelton *et al.* (2010) noted that the effects of the information presentation, through ERP implementation are pervasive and affect the decision making processes in various contexts. There are some reasons for which the days of the ERP systems are considered numbered, due to the shift regarding the way in which people consume products and services. It is considered that ERP systems were specifically designed for the 20<sup>th</sup> century manufacturing era rather than the 21<sup>st</sup> century services-based world, according to Tien Tzuo, the CEO of Zuora (2012). In the literature there are also additional studies which indicate that ERP systems improve the decision-making process within an organization (Spathis, 2006; Spathis and Kanellou, 2007), other benefits derived from ERP implementation being: more accurate reports - statements of accounts and improved service of accounts in accounting tasks (Velcu, 2007; Colmenares, 2009). Furthermore, Brazel and Dang (2008) pointed out that ERP implementation appears to reduce reporting lags. To sum up, in the literature exists confusion regarding the potential for ERP systems to change management accounting, as well as confusion regarding the changes that have actually occurred. Perhaps management accounting practices will take longer to reflect changes because of the institutional forces (Burns and Scapens, 2000).

### **CONCLUSION AND RECOMMENDATIONS**

Based on these empirical reviews on business analytics, it can be stated that businesses should move from a traditional accounting structure to a more comprehensive accounting system that has integrated analytics. The implementation and integration of analytics bring a challenging process for businesses and individuals. The staff needs to adapt to analytics and allocate more resources to the process management of enterprises for their implementation. Enterprise Resource Planning systems also have the capability to help in the current management accounting activities. This conclusion supports the claim that having an ERP system is still better than having no ERP system with regard to the existing management accounting tasks. Also, ERP systems are changing the practices of capital budgeting and management accounting. ERP systems lead to highly standardized and highly computerized information. Without significant

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changes, ERP systems are allowing capital budgeting, budgeting, operating statements, forecasting, performance measurement, and costing to be more detailed, more accurate, and reported more quickly. It is proved, through the conducted studies over the past decades that there has been a shift in the role of the management accountant and accounting, as a whole. ERP implementation is one of the major contributors to this change. Accountants consider that ERP allows them to expand their roles and instead of producing figures, they dispose of more time for further analysis and value adding activities in areas such as cost control. Although there are negative aspects of the ERP implementation in management accounting, the truth is that, overall, there also exist positive aspects, which certainly outweigh the negative ones. The academics and practitioners can use the findings of this study to effectively comprehend how business analytics and enterprise resources planning system impacts the accountant's performance/ accounting practices and the difficulties they have faced during the implementation and can help to improve the performance of their businesses.

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# **Effect of Foreign Direct Investment on Capital Market Development in Nigeria**

**JOHN, Dzarsa Dauda**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail:dzarsa@yahoo.com, Phone No: +234 8028356998

## **Abstract**

*Reliance of Nigeria on mono-product export (oil) which is prone to price shock in international market has led to many years of instability in government revenue and has served as constraint to effective implementation of national development plans. The study examines effect of foreign direct investment on capital market development in Nigeria for duration of 20 years starting from 2002 - 2021. Secondary data was obtained from Central Bank Nigeria Statistical Bulletin and the data was analysed using ordinary least square regression techniques. Findings show that the relationship between foreign direct investment and capital market development is positive and significant in the short run. The study therefore concluded that foreign portfolio has significant effect on capital market development in Nigeria. Since the exerts foreign portfolio investment has positive but significant effect on market capitalization in Nigeria, the study recommended that capital market regulators should apply all necessary tools and continue to encourage listing of private companies on the floor of stock exchange market.*

Keywords: Foreign Direct Investment, Capital Market, Development, Investor, Trade, Openness

## **INTRODUCTION**

One of the salient features of globalization drive is conscious encouragement of cross-border investments, especially by transactional corporations and firms (TNCs). Foreign direct investment (FDI) is an important tool for the growth of any economy as it is more stable than several forms of capital flows. It provides the needed capital for investment, increases competition in the host country industries, and aids local firms to become more productive by adopting more efficient technologies or by investing in human and/or physical capital (Ajayi, 2006). Developed countries view attraction of foreign direct investment (FDI) as a strategy for economic development. This may be because FDI is often regarded as an amalgamation of capital, technology, marketing and management. To attract Foreign Direct investment (FDI), developing countries have established pro-investment policies that help firms to open subsidiaries in all parts of the world with relative ease. In this regard, policy makers in developing countries such as Nigeria attract FDI to accelerate economic growth, job creation and poverty reduction. This is based on the premise that FDI is a way of obtaining capital and technology that is not available in the host country (Olusanya 2013). According to Ajayi (2006), three main conduits through which FDI can bring about economic growth are augmenting domestic savings in the process of capital accumulation; main channel through which technology spillovers can increase factor productivity and efficiency in the utilization of resources leading to growth; and leading to increase in exports as a result of increased capacity and competitiveness in domestic production. This linkage is often said to depend on another factor, called “absorptive capacity”, which includes the level of human capital development, type of trade regimes and degree of openness (Borensztein, Gregorio and Lee, 1998). According to Loungari&Razin (2001), FDI has not only avoided creating an overhang of debts, but it has also facilitated the transfer of technology and managerial skills and hence, it can be directly tied to productive investment of a country.

The Nigerian economy has recorded some appreciable and moderate economic growth and FDI inflows (Bello & Adeniyi, 2010). Over the years, since the colonial era, Nigeria has had inflow of foreign capital. Foreign direct investment (FDI) inflow has been on the increase having an average growth rate of 10.8% between 1981 and 2006 (WilemteVelde, 2006). From 2010 – 2013, Nigeria attracted over US\$27 billion in foreign direct investment, making it one of the top FDI destinations on the African continent (Amobi, 2014). These FDI inflows targeted the oil and gas, real estate, communications and consumer goods

sectors of Nigeria's economy (Oguh, 2016). However, according to Onuba (2016) the Nigerian economy recorded its worst investment inflow in 10 years with the country attracting a total investment of \$5.12bn in the 2016 fiscal period. The three major categories of investment that make up the total investment inflow into the country which include portfolio investment – attracted \$1.81bn in 2016; foreign direct investment – attracted \$1.04bn; and other investments attracted \$2.26bn. This investment apathy in the Nigerian economy is a consequence of the weak value of the naira. Africa and Nigeria in particular joined the rest of the world in seeking FDI as evidenced by the formation of the New Partnership for Africa's Development (NEPAD), which has the attraction of foreign investment to Africa as a major component (Olokoyo, 2012; Okoyes&Nwisienyi, 2019). Generally, the importance of investments in the growth process has been recognized and efforts are made to rekindle investment in Nigeria. The inadequate capital for financing developmental projects has been a stumbling block facing the country and has retarded economic growth in Nigeria. Furthermore the reliance of Nigeria on mono-product export (oil) which is prone to price shock in international market has led to many years of instability in government revenue and has served as constraint to effective implementation of national development plans. While FDI have been seen as a very important source of capital that can bridge both the saving and trade gaps in Nigeria, little success has been achieved in attracting FDI despite reforms introduced by successive administrations in Nigeria. FDI inflows has been mainly in the mining sector while Agriculture, building and construction sectors has not attracted so much. The study examine effect of foreign direct investment on capital market development in Nigeria

## **LITERATURE REVIEW**

### **Conceptual Framework**

#### **Foreign Direct Investment**

Foreign direct investment is not just a capital movement (Devrim, 2009). In addition to capital, a controlled subsidiary often receives direct input of managerial skills, technology, and other tangible and intangible assets. Unlike portfolio investors, foreign direct investors have substantial control over the management of foreign subsidiary. According to Thomas and Peter (2000), FDI is any flow of lending to, or purchase of ownership in a foreign enterprise that is largely owned by the residents of the investing country. Also, FDI has been described as investment so as to acquire a lasting management interest (for instance 10% of voting stocks) and at least 10% of equity shares in an enterprise operating in another country other than that of investors' country (Mwillima, 2003 & World Bank, 2007). Foreign direct investment (FDI) is seen as a major and integral part of an open and international economic system and a major catalyst to development (OECD, 2002). It refers to investment made to acquire a lasting management interest (usually at least 10 % of voting stock) and acquiring at least 10% of equity share in an enterprise operating in a country other than the home country of the investor; it can take the form of either "greenfield" investment (also called "mortar and brick" investment) or merger and acquisition (M&A), depending on whether the investment involves mainly newly created assets or just a transfer from local to foreign firms (Mwilima, 2003). It involves the mobilization of investment funds from foreign investors into the host economy. It may be in the form of transfer of ownership from domestic to foreign investors, or in the form of expansion in productive capacity and capital formation in a country (Adelopo, 2010).

Foreign direct investment is the category of international investment in which an enterprise resident in one country (the direct investor) acquires an interest of at least 10 % in an enterprise resident in another country the direct investment enterprise(World Investment Report, 2007, 2009). According to United Nations Conference on trade and development (UNCTAD), subsequent transactions between affiliated enterprises are also direct investment transactions. Broadly speaking, FDI is a type of international capital flows from one country to another. What makes FDI different from financial capital flows is the usage of transferred capital in the host country. When foreign investors invest on financial instruments, it is called financial flows. Nonetheless, FDI implies that foreign investors either invest into an existing company or

found a new company (factory) in the host country. Since FDI is a form of physical investment, it is expected to have direct and indirect impacts on macroeconomic variables such as growth, current account, gross capital formation, productivity, employment, and so on. In this regard, it gets a great deal of attention in empirical and theoretical studies (Tintin, 2010). FDI is also seen as an engine of growth as it provides the much needed capital for investment, increases competition in the host country industries, and aids local firms to become more productive by adopting more efficient technology or by investing in human and/or physical capital (Ajayi, 2006).

### **Foreign Portfolio Investment**

The foreign portfolio investment is regarded as indirect investment. It is capital flow that engages in transfer of financial assets including cash, stock or bonds across intercontinental borders in order to earn mostly short-term investment profit (Aderamola&Obisesan, 2015). IMF (1993) describe foreign portfolio investment as equity and debt issuances including country funds, depository receipts and direct purchases by foreign investors of less than 10% control. Koluman (2020) also described foreign investment portfolio as indirect investment and different from foreign direct investment with the features which includes the fact that the investor has no influence on the control and management of the investee, the risk factor which makes inflow of portfolio investments into the country to be rapid as well as the outflows in a negative situation, the contribution of investments to the development of states which is regarded as short term or temporary and that there is no high entry and exit costs or detailed planning. Foreign portfolio investments include portfolio equity, direct and real estate investment - between one country and others are recorded in the current accounts in the balance of payments. It enables investors to diversify their portfolios, spread investment risks more broadly and promote inter-temporal trade. In turn, higher rates of return can encourage savings and investment that deliver faster economic growth. Foreign Portfolio investment includes investments by a resident entity in one country in the equity and debt securities of an enterprise resident in another country which seek primarily capital gains and do not necessarily reflect a significant and lasting interest in the enterprise. The category includes investments in bonds, notes, money market instruments and financial derivatives other than those included under direct investment, or in other words, investments which are both below the ten percent rule and do not involve affiliated enterprises. Foreign Portfolio investment includes the flow of both equity and long-term debt (bonds and loans) between individuals and/or institutions domiciled in different countries. This is achieved either indirectly through the capital market, or directly in a foreign company, as long as the financial stake is below that which constitutes a direct investment. Such investment may be channeled across national boundaries in several different ways (Araoye, 2021).

### **Trade Openness**

Trade openness is often measured by the ratio of import to Gross Domestic Product (GDP) or alternatively, the ratio of trade to GDP. Trade openness is interpreted to include import and export taxes, as well as explicit non-tariff distortions of trade or in varying degrees of broadness to cover such matters as exchange-rate policies, domestic taxes and subsidies, competition and other regulatory policies, education policies, the nature of the legal system, the form of government, and the general nature of institution and culture (Baldwin, 2012). Empirical literature suggests that an open economy attracts the needed technological transfer through trade and thus contributes significantly to the growth of the nation. The positive a priori sign assumed for this variable in this study is therefore due to the theory that openness encourages specialization in the production and marketing of certain goods based on comparative advantages. Openness is considered under two titles; trade openness and financial openness. Trade openness is considered to be a prerequisite for financial openness. Accordingly, trade openness can be described as the approach aiming to facilitate the international free trade by the removal of the government control on the trade of goods and services. Financial openness is a set of policies aiming to remove the control and intervention of state on the domestic banking and other financial instruments and the integration of domestic markets to international markets. Briefly, trade and financial openness can be described as the removal of the national restrictions that have a negative effect on the competition and block the free circulation of the good, services, workforce and capital (Adigwe, Ezeagba& Francis, 2015).

### **Capital Market**

Capital market is a subset of financial market that deals with the mobilization and channeling of long term funds for investment purposes by bring together economic units requiring funds and economic units

desirous of parting with funds for relatively long period of time. It is a framework of institutions that arrange for long term financial instruments entailing shares debentures stocks and mortgages (Araoye, 2021). Aderamola and Obisesan, (2015) stressed the element of control in his definition of foreign private investment as “investment in a foreign country where the investing party that is, corporations, firms and so on retain control over the investment. The heart of any Foreign Private Investment is control”. According to International Monetary Fund (IMF), Foreign Private Investment is defined as “investment that is made to acquire a lasting business in an enterprise’s operation on economy other than that of the investor, the investor’s purpose being to have an effective voice in the management of the enterprises”. Essentially, the functions of capital market includes the promotion of liquidity and safety of financial assets in order to encourage saving and investment; ensuring a more refund allocation of resources by equating the demand and supply of loanable funds; enabling the transfer of funds from one sector or country to another for economic or commercial growth and enhancing successful implementation or monetary and indigenization policy (Araoye, 2021).

### **Market Capitalization**

Market capitalization represents the aggregate value of stock size. Market capitalization is the measurement of the size of businesses and corporations which are equal to the market share price times the number of shares in this case shares that have been authorized, issued, and purchased by investors of a publicly traded company (Araoye, 2021). Market capitalization is also calculated by multiplying the shares of the company by the price per share. The investment community uses the figure to determine a company’s size or worth, as opposed to sales or total asset figure (Adigwe, Ezeagba& Francis, 2015s). Market capitalization refers to the number of shares of a company multiplied by the market share price. In other words, market capitalization is usually considered as reflecting the worthiness of a company used by the investing public to determine the credit worthiness of a firm in terms of investing in such companies.

### **Empirical Review**

Araoye (2021) examined effect of capital market development on the foreign portfolio investment in Nigeria. The time series secondary data covering the period 1990 to 2019 used for the study were obtained from the Central Bank of Nigeria Statistical Bulletin, Nigeria Stock Exchange fact sheet, National Bureau of Statistics, Articles, Journals libraries and Internet. The study analyzed the data using unit root test to determine the stationarity or otherwise of the time series data with Augmented Dickey Fuller (ADF) unit root test. Vector Error Correction Model was employed in estimating the effect of the independent variables on the dependent variable. Granger causality test was also adopted to establish the direction of causality among the relevant variables. The findings revealed that market capitalization has positive but significant impact on foreign portfolio investment in Nigeria. The granger causality result indicates unidirectional causality movement from market capitalization (MCAP) and real gross domestic product (RGDP) to foreign portfolio investment. The study recommended that capital market regulators should apply all necessary tools to encourage listing of private companies on the floor of stock exchange market. Ekine, Ewubare and Ajie (2019) examined the impact of foreign portfolio investment and Foreign Direct Investment on the performance of the Nigerian Economy over a period of 1980-2017. The data used were purely secondary sourced from the central Bank of Nigeria statistical Bulletin and World Bank Development indicator. The ordinary least square (OLS) regression analysis was used. The findings revealed that the performance of the Nigerian Economy is directly related to inflow of foreign portfolio investment and foreign direct investment and it is also statistically significant at 5% level. This means that a good performance of the economy depends on the inflow of these variables, or that the variables serve as an engine of economic growth. The study therefore recommends that policy makers should work on improvement of economic incentives capable of mobilizing external resources to the country to engender macroeconomic stability. A stable economy will attract foreign investment and this result to increased inflow of foreign capital.

Ajayi and Araoye (2019) examined the effect of trade openness on economic growth of Nigeria using data from 1970 to 2016. We used secondary data obtained from world development data base (2000), World Bank and International Financial Statistics, IFS- International Monetary Fund Data Base (2010) and Central Bank of Nigeria Statistical Bulletin 2014. Using the Augmented Dickey-Fuller (ADF) and Phillip-Peron (PP) unit root test, they discovered that all the series are non-stationary at levels. However taking the variables at first difference, results shows that all are I(1) at 5% for ADF and 1% for PP level of significance except the labour input which was not stationary at first difference in ADF. The findings from Co-integration test showed that an equilibrium relationship exists among the variables and using the Co- integration test in line with Engel and Granger (1987) which believed that there is a long-run relationship among economic variables if tested for unit root problem and since no problem is found which then conform with the claim of the study. Thus, all the coefficient was correctly signed and stationary at 5% level. Trade openness and economic growth depicted a positive relationship but a negative relationship existed between economic growth and exchange rate but this was expected especially for a country that engaged in international trade. The study recommended that Government should formulate policies that will liberalize trade and should be administered with caution so as not to discourage local production and exploitation and exploration of resources that will improve revenue earning capacity of Nigeria which would hasten growth and development. Chukwuemeka (2018) researched on the long-run influencing factors of foreign portfolio investment in Nigeria. They discovered the appropriate policies to attract foreign portfolio investment in the long-run. They used the quarterly time series data over the period of 1981-2010. Market capitalization, real exchange rate, real interest rate, real gross domestic product, and trade openness were considered variables. Net portfolio investment was considered as dependent variable. They applied finite distributed lag model of time series analysis. The study revealed that foreign portfolio investment flow into Nigeria had a positive long-run relationship with market capitalization and degree of openness. The study recommended that it was good to make Nigeria's trade policy as investment welcoming policy for attracting portfolio investment flows.

Shanab (2017) examined the effect of Foreign Portfolio Investment (FPI) on capital market indices for the period 2005-2016. The study employed Ordinary Least Square (OLS) for the analysis. The study revealed that there is a statistically significant effect on both the purchases and sales by foreign investors on market capitalization. The study also found no statistically significant effect between inflation and market capitalization. Based on their findings, the study recommends that the government should ensure there is good monetary and fiscal policy to grow the economy and woo more foreign investors in the capital market which could drive economic growth. Shares and bonds should be regularly advertised to attract domestic and foreign investors in the portfolio market for enhanced sustainability. Ibrahim and Akinbobola (2017) investigated the relationship between foreign portfolio investment, democracy and economic growth in Nigeria from 1986 to 2013. The results revealed that foreign portfolio investment inflow was more stable in democratic periods between 1999 and 2013 than the military periods between 1986 and 1998 and that the correlation between economic growth and foreign portfolio investment is positive and very significant. Furthermore, the result revealed that in the longrun foreign portfolio investment had positive and significant effect on the economic growth in Nigeria. It also showed that democracy had a positive and significant effect on economic growth, while it has positive but not significant effect on the relationship between foreign portfolio investment and economic growth. The study recommend the need for bureau-de change market and asymmetric portfolio in the capital market be monitored properly to ensure compliance to financial regulation because their activities are important to inflow of foreign capital to the country.

Ajayi, Adejayan and Obalade (2017) examined the impact of foreign private investment on the Nigerian capital market using time series data from 1986 to 2014. Johansen co-integration model was used to estimate the causal effect between both variables. Market capitalization, foreign direct and portfolio investments were proxies for the dependent and independent variables respectively. The result of the study revealed that that there is a long run relationship between Market capitalization and foreign

portfolio investment however this relationship is negative meaning that an increase in foreign portfolio investment will cause a decrease in Market capitalisation. The study concluded that foreign direct investment has a positive and significant impact on capital market Development while foreign portfolio investment has positive but insignificant impact. They recommend that a robust re-investment incentive policy or roll-over window package need to be established to encourage retention of foreign portfolio investment proceeds within the system. This is required in order to minimize the rate of flight capital through illegal and indiscriminate repatriation of investment proceeds through foreign portfolio investment channel. Adaramola and Obisesan (2015) assess the impact of foreign direct investment on Nigerian capital market development given the role of the later in stimulating the development of the nation's economy. The study employed ADF unit root test and Johansen co-integration test to analyze the secondary data obtained from Central Bank of Nigeria statistical bulletin from 1970-2010. The absence of co-integration between foreign direct investment and market capitalization informed the resort to OLS regression result which shows that foreign direct investment impact positively and significantly on market capitalization. Since foreign direct investment is a significant determinant. Efforts should be made by government and monetary authority to encourage foreign direct investment into Nigeria. However given the lack of co-integration and low beta weight suggest that emphasis on foreign direct investment as a way of stimulating long run growth in the developing country like Nigeria does not worth the while.

## **Theoretical Framework**

### **Capital Market Theory**

The capital market theory, being a foreign investment one was established by Boddewyn (1985). The theory ascertains that foreign investment inflow is a function of the rate of interest charged by the host country's financial institutions. It is a portfolio investment and capital market theory for attraction of foreign investment.

### **The Internalization Theory of FDI**

Buckley and Casson (1976) coined the notion of internalization itself, based on the application of the market imperfections approach in an international context. In the theory, Buckley and Casson suggest that firms try to maximize profits under the imperfect condition existing in intermediate products by internalizing the key intermediate products such as knowledge, marketing, human capital and management expertise. They think the markets for key intermediate products are imperfect. Under the imperfect market conditions in intermediate products, firms link different activities through markets under common ownership and control. The linking of different activities through these markets, however involves significant time lag and transaction costs. Thus, firms want to bypass the external markets in intermediate products by creating internal markets in order to avoid the significant time lag and transaction costs. In other words, firms are encouraged to replace these external markets with their own internal markets for these products to avoid the above mentioned difficulties. For reason of increase in profit, some transactions should be carried out within a firm rather than between firms. In other words, some transactions should be internalized to reduce transaction cost and hence increase profitability. There are technologies that are embodied in the mind of a group of individuals and not possible to sell to other parties. This difficulty of marketing and pricing know-how forces multinational corporations to open a new subsidiary in a foreign country instead of selling the technology. Also a number of problems may arise if an output of a firm is an input to other firm in another country. For instance if each has a monopoly power, they may try to hold the price down while the firm that produces the input tries to raise price. Hence this problem can be avoided by integrating various activities within a firm rather than subcontracting the activities (Krugman&Obstfeld, 2003).

### **Product Life Cycle Theory of FDI**

This theory was developed by Vernon in 1970. At the early stage, a new product is first produced and sold in home market. When the home market is saturated, the product will be exported to other countries.

The firm starts to open subsidiaries in locations where cost of production is lower when the competition from the rival firms become intense and the product reach its maturity. This theory was for a set of studies that regarded the spreading of multinational firms as being sequential, taking place in stages. The firm would initially supply the export markets, then establish trade representatives abroad, and eventually end up setting up production outfit in target markets by way of subsidiaries. Agarwal (1980) explains that product life cycle is conceived in three stages. In the first stage when the product is new it is produced by the innovating firm in its home market, because of the greater need for efficient co-ordination between research and development ( R & D) and the production units as well as the availability of demand for it there. The second stage is marked by the maturity and export of the product to countries having high level of income. Expansion of demand and growing competition in these markets lead eventually to FDI of the innovator into these countries for local production of the product. The third stage is characterized by a complete standardization of the product as well as its production technique which is no longer an exclusive possession of its innovator. Price competitions from other producers' forces innovators to now invest in developing countries to seek cost advantages, especially labor costs and other factor costs such as land and materials.

## **METHODOLOGY**

The methodology employed is the expo-facto research design. Ex post facto design examines how an independent variable, present prior to the study, affects a dependent variable. The target population and sample size of the study is from 2002-2021. The study employed secondary data collection. The study variables were obtained from Central Bank of Nigeria Statistical bulletin for the year. Ordinary Least Square (OLS) regression technique will be used and it is useful for estimation, (Capital Market) which is the dependent variable will be regressed on the explanatory variables in the equation which includes: Trade openness and foreign portfolio investment. Some statistical and econometric test will be used to evaluate the regression, the include Multiple R, which is the correlation 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 statistic, the Beta coefficient measures the relative significance of each of the independent variable, “t” statistics and Durbin Watson test. In formulating an econometric model for the relationship between Foreign Direct Investment and Capital Market in Nigeria. The objective of this study will be specifying a regression equation model.

### **Model Specification**

$$MCAP = f(FPI)(TO) \dots\dots\dots 1$$

From the above function, the following model is derived:

$$MCAP = \alpha + \beta_1 FPI + \beta_2 TO + \epsilon$$

Where;

MCAP = Market Capitalization

FPI = Foreign Portfolio Investment

TO = Trade Openness

$\epsilon$  is the error term.

$\alpha$  is to take care of the constant variable;  $\beta_1$  and  $\beta_2$  is the coefficient of FPI (Foreign Portfolio Investment) and TO (Trade Openness)

## **RESULT AND DISCUSSION**

### **Descriptive Statistics Results**

Descriptive statistics provide simple summaries about the sample and about the observations that have been made. Such summaries may be either quantitative, i.e summary statistics or visual. These

summaries from the basis of the initial description of the data as part of a more extensive statistical analysis that will be presented in this section. The summary of the descriptive statistics is presented;

**Table 1: Descriptive Statistics**

	MCAP	TO	FPI
Mean	1521.300	19.14850	82.11500
Median	1653.000	19.20000	87.55000
Maximum	2191.000	29.80000	142.3000
Minimum	129.0000	2.070000	21.80000
Std. Dev.	564.2112	6.615508	33.03009
Skewness	-0.813856	-0.697421	-0.431085
Kurtosis	2.995671	3.480148	2.858477
Jarque-Bera	2.207888	1.813437	0.636137
Probability	0.331561	0.403847	0.727553
Sum	30426.00	382.9700	1642.300
Sum Sq. Dev.	6048352.	831.5339	20728.75
Observations	20	20	20

**Source:** *E-View 10 Output (2022)*

Table 1 presents the explanatory enumerations of the effect of Foreign Direct Investment on Capital Market development in Nigeria, all the while the ending of 2002 to 2021. The table shows that market capitalization (MCAP) has a mean of 1521.300 accompanying a predictable difference of 564.2112 and the minimum and maximum principles of 129.0000 and 2191.000 respectively. Although the range middle from two points the minimum and maximum is off-course, it indicates a fixed acting as the predictable difference registered that skilled is no off-course dispersal of the dossier from the mean advantage. Similarly, the table shows that the average of trade openness and foreign portfolio investment ranging from 19.1485 and 82.1150. The minimum and maximum principles of TO and FPI are 2.07000 and 21.8000 with maximum of 29.8000 and 142.3000 respectively.

**Table 2: Correlation Matrix Result**

	MCAP	TO	FPI
MCAP	1.00000		
TO	0.630692	1.00000	
FPI	0.748656	0.771847	1.00000

**Source:** *E-View 10 Output (2022)*

Table 2 present the correlation between the dependent variables, Market Capitalization (MCAP) and the independent variables, Trade openness and foreign portfolio investment. Generally, a high correlation is expected between dependent and independent variables while a low correlation is expected among independent variables. Corrected coefficient representing the relationship between the variables is high as the coefficients of TO and FPI shows a positive relationship of 0.63069 and 0.74865 respectively.

**Unit Root Test**

Non-fixed dossier produces counterfeit reversion; therefore the result can be deceptive, essentially, it was inevitable to authenticate the stationarity of dossier. Overtime, moment of truth succession features of econometric studies have proved that most economic and large-business-related opportunity succession variables are non-fixed and utilizing non-fixed variables leads to counterfeit reversion. Thus, the variables were examined for their guessed possessions. Augmented Dickey-Fuller (ADF) test was used to double-check either the variables of the study exhibit whole root features.

**Table 3: Unit Root Test (MCAP at 1<sup>st</sup> Difference)**



Null Hypothesis: D(MCAP) has a unit root  
 Exogenous: Constant  
 Lag Length: 0 (Automatic - based on SIC, maxlag=4)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-7.395815	0.0000
Test critical values: 1% level	-3.857386	
5% level	-3.040391	
10% level	-2.660551	

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

**Source:** *E-View 10 Output (2022)*

From the table above, the established test of Augmented Dickey-Fuller (ADF) registered that the chance worth beneath the ADF is nothing 0.0000, inferior 0.05 at 1st dissimilarity. This means that capital market (organized) changing altered into non-fixed at standard (as joined inside the Unit root test inside the addendum), but have enhance table bound at 1st quality. Also, the Augmented Dickey-Fuller (ADF) t-Statistic (7.395815) is extra than certainly the essential principles of (3.040391) at 5% level of importance. This means the Null Hypothesis must be rebuffed and it maybe decided that MCAP has no whole root and the dossier is fixed.

**Table 4: Unit Root Test (TO at 1<sup>st</sup> Difference)**

Null Hypothesis: D(TO) has a unit root  
 Exogenous: Constant  
 LAG LENGTH: 1 (AUTOMATIC - BASED ON SIC, MAXLAG=4)

	t-Statistic	PROB.*
Augmented Dickey-Fuller test statistic	-18.45668	0.0000
Test critical values: 1% level	-3.886751	
5% level	-3.052169	
10% level	-2.666593	

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

**Source:** *E-View 10 Output (2022)*

From the table above, the traditional test of Augmented Dickey-Fuller (ADF) indicated that the Probability value under the ADF is 0.0000, less than 0.05 at 1st difference. This implies that trade openness (independent) variable was non-stationary at level but became stationary at 1st difference. Similarly, the Augmented Dickey-Fuller (ADF) t-Statistic (18.4566) is greater than the absolute critical values of (3.05216) at 5% level of significance. This implies the Null Hypothesis must be rejected and it can be concluded that TOhas no unit root and the data is stationary.

**Table 5: Unit Root Test (FPI at 1<sup>st</sup> Difference)**

Null Hypothesis: D(FPI) has a unit root  
 Exogenous: Constant  
 Lag Length: 0 (Automatic - based on SIC, maxlag=4)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-6.444169	0.0001
Test critical values:		
1% level	-3.857386	
5% level	-3.040391	
10% level	-2.660551	

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

Source: E-View 10 Output (2022)

From the table above, the traditional test of Augmented Dickey-Fuller (ADF) indicated that the Probability value under the ADF is 0.0001, less than 0.05 at 1st difference. This implies that foreign portfolio investment (independent) variable was non-stationary at level but became stationary at 1st difference. Similarly, the Augmented Dickey-Fuller (ADF) t-Statistic (6.44416) is greater than the absolute critical values of (3.04039) at 5% level of significance. This implies the Null Hypothesis must be rejected and it can be concluded that FPI has no unit root and the data is stationary.

**Table 6: Summary Results of Augmented Dickey-Fuller Unit Root Tests**

Variables	Test Critical Values	Probability Values	Order of integration
MCAP	-3.040391	0.0000**	I(1)
TO	-3.052169	0.0000**	I(1)
FPI	-3.040391	0.0001**	I(1)

Note: \*\*indicate significant at 5% levels; Source: E-View 10 Output (2022)

The summary results of the Augmented Dickey-Fuller Unit Root Tests for all the three variables of the study; market capitalization (MCAP), trade openness (TO) and foreign portfolio investment (FPI) are bestowd in table 6 as proved above.

**Table 7: Regression Result**

Dependent Variable: MCAP

Method: Least Squares

Date: 03/22/22 Time: 01:16

Sample: 2002 2021

Included observations: 20

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	399.2284	277.1947	1.440246	0.1680
TO	11.14882	21.39807	0.521020	0.6091
FPI	11.06483	4.285763	2.581764	0.0194
R-squared	0.567393	Mean dependent var		1521.300
Adjusted R-squared	0.516498	S.D. dependent var		564.2112
S.E. of regression	392.3202	Akaike info criterion		14.91952
Sum squared resid	2616558.	Schwarz criterion		15.06887
Log likelihood	-146.1952	Hannan-Quinn criter.		14.94867
F-statistic	11.14833	Durbin-Watson stat		2.443525
Prob(F-statistic)	0.000807			

Source: E-View 10 Output (2022)

From table 7 above, the coefficient of diversified determinations ( $R^2$ ) is 0.5673. This displays that about 56% of the total differences in market capitalization is related apiece alternatives in the free variables (TO and FPI), while the surplus 44% of the alternative in the model is apprehended apiece mistake term. This signifies that foul line of best fit is well equipped. The predictable difference test is used in consideration of measure the magnitude of the wrong and decides the grade of assurance in the genuineness of the estimates. Usually if the predictable difference is tinier than half the mathematical advantage of the limit estimate, it maybe decided that the estimate is statistically important. Having completed activity a predictable difference test on the limits supposed and as still determined by their particular feasibility principles, the limit estimate for TO is not statistically meaningful, likely that the individual probabilities is 0.6091 individually that is degree 5%, while that of FPI is statistically meaningful, likely that the individual contingency is 0.0194. The Durbin Watson test is consistently selected to test for Autocorrelation.

### **Discussion of Findings**

This study examined the effect of Foreign Direct Investment on Capital Market development in Nigeria range from 20 age grazing from 2002 to 2021. The effect of the independent variable on dependent variable was analyzed in terms of strength and significant and the Ordinary Least Square analysis was used to compare the relationship among the variables. The result of the analysis shows that the relationship between foreign direct investment and capital market development is positive and significant in the short run. This is consonance with apriori expectation and in agreement with the findings of Araoye (2021) but contradict the finding of Shanab (2017).

### **CONCLUSION AND RECOMMENDATIONS**

In the accounting and financial literatures, several studies have investigated the hyperlink between foreign direct investment on the only hand as well as and capital market development. A tremendous and statistically massive relationship exists between foreign direct investment and capital market development in Nigeria. The study therefore concluded that foreign portfolio investment has significant effect on capital market development in Nigeria. Since the foreign portfolio investment exerts a positive significant effect onmarket capitalizationin Nigeria, the study recommended that capital market regulators should apply all necessary tools and continue to encourage listing of private companies on the floor of stock exchange market.

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## **Effect of Contributory Pension Funds on Capital Market Performance in Nigeria**

**BAKARE, Joyce Lade**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail:joycebakare18@gmail.com, Phone No: +234 7039258601

### **Abstract**

*Using time series secondary data retrieved from the National Pension Commission and the Nigerian Exchange Group for the periods 2005 Q1 through 2019 Q4, this study explores the effect of contributory pension funds on capital market performance in Nigeria. The study's particular goals were to look into the effect of pension funds investment in government securities, corporate securities, and real estate property in Nigeria on capital market performance. Market capitalization is a proxy for capital market performance. It used an ex post facto research approach, and the data were subjected to a stationarity test, which revealed that they were stationary at first difference. The study uses the Johansen co-integration test to conduct a co-integration test, the results of the cointegration test demonstrated that the variables have a long-term relationship. Pension funds' investments in government and corporate securities have a significant positive effect on capital market performance in Nigeria in both the long and short run, whereas pension funds' investments in real estate property have no significant effect on capital market performance in Nigeria in the long or short run. The study suggests that pension fund investments have had a favorable effect on the expansion of the Nigerian stock market. According to the study, administrators of pension funds should allocate more assets and investments in government securities because they are a less hazardous and safer investment option. In order to expand Nigeria's capital market expansion, pension fund administrators should invest more funds in relatively high corporate debt securities that give high yields, such as banks. Finally, Nigerian Pension Fund Administrators should gradually lower their investment exposure to real estate property, as our study has indicated that investing in real estate property has not benefited Nigeria's capital market performance.*

**Keywords:** Capital Market Performance, Corporate Securities, Pension Funds Investments, Real Estate Property

### **INTRODUCTION**

The growth of the capital market is linked to an increase in the volume and supply of various asset kinds from a bigger number of issuers, as well as deeper and more liquid markets. Furthermore, when the capital market grows in size, economies of scale allow for lower information costs for participants, lower trading expenses, and the development of efficient mechanisms for executing securities transactions. Improvements in capital market performance provide pension funds with more alternatives for portfolio diversification in the capital market (Walker & Lefort, 2002). The capital market facilitates the inflow of required domestic and international capital into the country. However, in most African countries, including Nigeria, a lack of long-term capital has created a significant impediment to capital market performance. Long-term funding are available in a variety of ways, including through pension plans (Ekundayo, 2002). Pension funds are long-term investment vehicles because they are managed by professionals who have more knowledge than individual investors. In this regard, it is predicted that pension funds will contribute to the capital markets' performance by accumulating capital, raising funds, enhancing liquidity, and increasing financial innovation (Enache, Milos & Milos, 2015). According to the National Pension Commission (PENCOM), the influence of pension funds on capital market performance has arisen primarily due to the investing of resources in various securities.

Nigeria has a contributing pension system in place. An employer, as well as the employee, contributes to the employee's retirement account on a regular basis under this plan. The contributions are frequently set as a predetermined percentage of compensation, though this percentage does not have to remain constant during a career. The employee is frequently offered a choice in how his account is invested. Contributions may be invested in any security in theory, but most plans limit investment possibilities to a variety of

bond, stock, and money-market funds in fact. The employee receives either a lump payment or an annuity at retirement, the quantity of which is determined by the accumulated value of the funds in the retirement account. Apart from paying a regular contribution, the employee has no further obligations. Contributory pensions allow pension funds to build up assets that can be invested in the stock market. Pension funds have incentives to invest more in illiquid and long-term assets that generate greater yields because of their accumulating assets and the longer-term nature of their liabilities, and so provide a long-term supply of cash to the capital markets (Mesike & Ibiwoye, 2012). Extensive research has been undertaken to highlight the impact of pension funds on capital markets across countries (Hu, 2012; Raisa, 2012; Enache et al., 2015; Chovancova, Hudcovsky & Kotaskova, 2019). These are cross-country studies, and there are geographical variations between Nigeria and these countries, as well as political and economic environments that distinguish them. Furthermore, the results are only applicable in these nations. To study the relationship between pensions and capital market performance, empirical findings have benefited from panel regression and causality analysis. Because the studies mentioned above are cross-country studies with limited application to the Nigerian setting, this study aims to fill a vacuum in the realm of past research.

Most studies on the effect of pension funds on capital market performance are country specific, even if they are undertaken outside of Nigeria's borders, are of particular interest (Thom, 2014; Kyando, 2014; Moleko & Ikhide, 2018). These studies are being carried out in Tanzania and South Africa. These are international studies having minimal relevance to the Nigerian context. Few research on pension fund investment and capital market performance have been conducted in Nigeria; such studies are empirical works of (Madukwe, 2014; Madukwe, Obinna & Darlinton, 2015; Eke & Onafalajo, 2015; Zubair, 2016; Okparaka, 2018; Usman & Nwala, 2019; Nwannebuike & Chidimma, 2019). Only Usman and Nwala (2019) used disaggregated value of pension fund assets, but they did not include pension fund investment in real estate property as part of investment outlets of pension fund assets investment, resulting in the gaps in variable measurement. The main objective of this study is to assess the effect of contributory pension funds on capital market performance in Nigeria. This study embraces the effect of contributory pension funds on capital market performance in Nigeria, while covering the period of fifteen years ranging from 2005-2019 and the data used are quarterly data, which translates to sixty observations.

## **LITERATURE REVIEW**

### **Conceptual Framework**

#### **Contributory Pension Fund Investment**

Pension can be thought of as a regular payment paid by an employer to a retired employee, usually until the employee's death; such payments may also be made to the pensioner's next of kin for a set amount of time. Pension, according to Chizueze, Nwosu, and Agba (2011), is money paid on a regular basis by the government or any establishment to someone who is formally regarded retired from active service after serving for a specified period of time, usually 10 years to thirty-five years. Pension plans might be contributory or noncontributory, fixed or variable benefits, group or individual, insured or trustee, private or public, single or multi-employer, according to Ozor (2006). A contribution pension scheme is a type of retirement plan in which the employer's annual contribution is fixed.

According to the most recent changes and modifications to the new pension law, the employee must open a Retirement Savings Account (RSA) in his name with a personal identification number with a Pension Fund Administrator of his choice, into which all of his contributions and investment returns are paid (Pension Reform Act, 2014). According to the Act, the employer must contribute ten percent (10%) and the employee must contribute eight percent (8%) of the employee's current basic salary, housing, and transportation allowance to be paid to the PFCs, who are responsible for warehousing the pension fund assets (Pension Reform Act, 2014).



## **Capital Market Performance**

The capital market is a part of the financial system that allows long-term funds to flow from surplus to deficit economic units, promoting capital formation and socioeconomic growth. The market brings together those who have and those who need funds at usually competitive prices and conditions that are acceptable to both parties, providing efficient resource allocation while fostering economic growth, by mobilizing funds for channeling into productive projects (Onyiuke, 2008). This study compares market capitalization to capital market performance. The importance of measuring capital market performance is that it serves as a guideline for forecasting market performance (Naceur, Ghazouani & Omran, 2007). There are also some more variables that can be used to assess capital market performance. These include the number of listed shares on exchanges, market capitalization, the value of traded shares, the volume of traded shares, and the number of trades completed.

## **Empirical Review**

### **Pension Fund Investment in Government Securities and Capital Market Performance**

Hu (2012) looked at the impact of Asian pension funds on a number of major transmission channels, including pension reform and financial development. The study used quarterly data from 1985 to 2013 to examine financial data from ten Asian and Pacific economies. A substantial positive relationship between pension fund assets and market capitalisation was found using the panel error correction model. Pension assets have a long-term positive impact on market liquidity in Asia's less developed nations, but not in the more developed economies, according to the study. Raisa (2012) investigated the effects of pension funds on stock markets in 15 European nations. In the case of the former EU member states, the study presented new empirical evidence for the link between pension reform and domestic stock market development. After controlling for additional explanatory variables, the study employed a panel data regression. The findings revealed a positive relationship between pension funds and the stock market. The impact of pension funds on the expansion of the South African stock market was studied by Thom (2014). Market capitalization, liquidity, and volatility were used to gauge the progress of the stock market. According to the conclusions of the study, South African pension funds have enhanced liquidity and reduced stock market volatility. Kyando (2014) evaluated the impact of pension funds on Tanzania's capital market development. The findings revealed that pension funds only own a modest portion of the market capitalisation. Finally, the findings revealed that government bonds, bank deposits, and loans make up the majority of a pension fund's portfolio. Enache et al. (2015) used a sample of eleven Central and Eastern European nations to investigate the link between pension reform and capital market development. The results of the study, which used a single equation ECM, verified the existence of a substantial positive short-term influence as well as a smaller positive long-term effect of pension funds' assets on market capitalization. Ijeoma and Nwufo (2015) investigated the stability of Nigeria's contributory pension program. They used a simple regression analysis method. The contributory pension program, according to the report, has had a substantial impact on the development of the Nigerian capital market. Madukwe (2015), on the other hand, used secondary data to investigate the impact of a contributory pension program on the Nigerian capital market. The data was analyzed using Pearson correlation, and it was discovered that the contributory pension system has not contributed considerably to the expansion of the Nigerian capital market.

Zubair (2016) investigated the impact of pension fund investments on Nigeria's capital market performance. The study used the Autoregressive Integrated Moving Average regression technique to conduct a time series analysis that spanned the years 2009 to 2016. The findings of the study indicated that there is a favorable association between pension fund investments and capital market performance in Nigeria. Okparaka (2018) investigated the impact of a contributory pension program on the Nigerian stock exchange. It was discovered that the Nigerian pension industry's assets under management have a

favorable and considerable impact on the Nigerian capital market's overall market capitalization. Furthermore, the value of pension assets under administration in the Nigerian pension industry has no positive or significant impact on the total value of deals done in the Nigerian Capital Market each year. Usman and Nwala (2019) looked at the impact of pension fund investments in listed securities, such as Local Ordinary Share Capital, Federal Government Bonds, and Corporate Debt Securities, on the development of the Nigerian Capital Market as measured by Market Capitalization. Quarterly data from 2011 to 2018 was analyzed using VECM. The research concluded that pension fund investments in listed securities had both positive and minor short-term effects on the Nigerian capital market. Bonds issued by the federal government have a large inverse effect over time. Corporate Debt Securities has a large favorable impact. The relationship between stock market capitalization and pension fund assets was investigated by Nwannebuike and Chidimma (2019). From 1981 to 2016, secondary data was gathered from the CBN Statistical Bulletin 2017 and the Global Financial Development Bulletin 2017. The findings revealed that stock market capitalization to GDP had a positive but non-significant effect on economic growth in Nigeria, whereas pension fund assets to GDP had a positive but non-significant effect.

### **Pension Funds Investment in Real Estate Property and Capital Market Performance**

Akowe, Ocheni, and Daniel (2015) examined the impact of new contributory pension fund portfolios on Nigerian GDP and the linkages between pension portfolios and GDP. The research period was from 2007 to 2012. The data was analyzed using OLS in this study. The results demonstrated that the pension fund's Real Estate Property contributed positively to Nigeria's gross domestic product throughout the time under consideration. Micah and Obah (2016) looked on the connection between Nigerian pension fund administration and infrastructure financing. The study's 108 participants were chosen using a basic random sampling method. Pearson Products Moment Correlation was used to test the hypotheses. The study indicated that there is a substantial association between superannuation pension account and economic and social infrastructural financing in Nigeria, as well as a relationship between retirement pension account and return on economic and social infrastructural financing. Eke, Ndubuisi, and Eleagu (2018) investigated the relationship between housing infrastructure investment and the safety-equity factor in the management of Nigeria's public pension funds. Ex post facto research design was used for this study. The study's findings revealed that public pension funds had substantial links to fund safety and equity returns.

### **Pension Funds Investment in Corporate Securities and Capital Market Performance**

Moleko and Ikhide (2018) investigated the impact of pension fund assets on South Africa's total capital market development. The findings revealed a link between pension savings and stock market performance. The study identified only a one-way association between pension fund savings and stock market development using the VECM framework. Okparaka and Makwe (2019) looked at the impact of pension industry investment in Nigeria's financial intermediation. The analysis technique employed was OLS regression. Pension fund investment in Federal government bonds has a positive and no significant effect on financial intermediation in Nigeria; pension fund investment in State government bonds has a negative and no significant effect on financial intermediation in Nigeria; and pension fund investment in Private sector bonds has a positive and no significant effect on financial intermediation in Nigeria, according to the findings.

Chovancova et al. (2019) looked at how the stock and bond markets affect the pension fund. The study looked into the relationship between the stock market, bond market, and pension funds. The research was based on data from the Organisation for Economic Cooperation and Development's pension statistics. The bond market had a greater impact on pension fund performance.

## Theoretical Framework

### Life Cycle Theory

Franco Modigliani created the Life-cycle Theory in 1957. According to the hypothesis, people try to spread their consumption out over their lives by borrowing during times of low income and saving during times of high income. The most widely utilized theory in the research of pension contributions and capital market performance is life cycle theory. Using the life cycle theory, it was determined that a pension fund's development may be divided into three stages: start-up, growth, and maturity. The theory highlights that an individual's income fluctuates during his or her life, and that by saving, an individual may smooth their income so that consumption remains constant regardless of whether income is high or low. Individuals are thus planning their lifetime spending patterns in order to consume all of their accessible wealth. As a result, savings fluctuate across a person's lifespan. A person often does not save prior to starting a job, saves while working, and then quits saving after retirement. This indicates that in a country with a big working population, those who save exceed those who do not, and therefore the country generates savings.

## METHODOLOGY

This study adopted the *ex post facto* research design. The population of this study is 21 registered pension funds administrators in Nigeria. This study used aggregate data on pension funds asset invested in Government securities, real estate property and corporate debt. Because the data required for this study are aggregate data, the study census the 21 registered pension funds administrators, therefore, no sampling technique and sample size for this study as all the population is census. The secondary data on contributory pension fund investment in government securities, real estate property and corporate securities were sourced from pension commission annual reports while data on capital market performance proxy with market capitalization was sourced from Nigerian Exchange Group Reports. These data were collected for the periods of fifteen years (15) years, covering the periods of 2005Q1 to 2019Q4. The data used are quarterly data, which translate to sixty observations. The study adopted the Vector Error Correction Model (VECM) to estimate and analyse the long and short-run effect of contributory pension funds on capital market performance in Nigeria.

### Model Specification

#### Vector Error Correction Model

The Vector Error Correction Model (VECM) shows the speed of adjustment from short-run to long run equilibrium. The a priori expectation is that the VECM coefficient must be negative and significant for errors to be corrected in the long run and the higher the VECM, the more the speed of adjustment. Based on the objectives of the study the VECM model which is specified as:

$$\begin{aligned} \Delta MCAP_t &= \alpha_0 + \sum_{g=1}^{k-1} \beta_g \Delta MCAP_{t-i} + \sum_{h=1}^{k-1} \phi_h \Delta PFGS_{t-i} + \sum_{i=1}^{k-1} \partial_i \Delta PFCS_{t-i} + \sum_{j=1}^{k-1} \partial_i \Delta PFRE_{t-i} + \lambda_1 ECT_{t-1} + \varepsilon_{1t} \\ \Delta PFGS_t &= \sigma_0 + \sum_{g=1}^{k-1} \beta_g \Delta PFGS_{t-i} + \sum_{h=1}^{k-1} \phi_h \Delta PFCS_{t-i} + \sum_{i=1}^{k-1} \partial_i \Delta PFRE_{t-i} + \sum_{j=1}^{k-1} \partial_i \Delta MCAP_{t-i} + \lambda_2 ECT_{t-1} + \varepsilon_{2t} \\ \Delta PFCS_t &= \delta_0 + \sum_{g=1}^{k-1} \beta_g \Delta PFCS_{t-i} + \sum_{h=1}^{k-1} \phi_h \Delta PFGS_{t-i} + \sum_{i=1}^{k-1} \partial_i \Delta PFRE_{t-i} + \sum_{j=1}^{k-1} \partial_i \Delta MCAP_{t-i} + \lambda_3 ECT_{t-1} + \varepsilon_{3t} \\ \Delta PFRE_t &= \delta_0 + \sum_{g=1}^{k-1} \beta_g \Delta PFRE_{t-i} + \sum_{h=1}^{k-1} \phi_h \Delta PFCS_{t-i} + \sum_{i=1}^{k-1} \partial_i \Delta PFRE_{t-i} + \sum_{j=1}^{k-1} \partial_i \Delta MCAP_{t-i} + \lambda_4 ECT_{t-1} + \varepsilon_{4t} \end{aligned}$$

Where;

MCAP= Market Capitalisation  
 PFGS = Pension Fund Investment in Government Securities  
 PFRE = Pension Fund Investment in Real Estate Property  
 PFCD = Pension Fund Investment in Corporate Securities  
 t = Periods covered by the study

$ECT_{t-1}$  = the error correction which is the lagged value of the residuals obtained from the co-integrating regression of the dependent variable on the regressors.

$\Delta$ = denotes the first difference operator,

$\sigma$  is the drift component,

$\varepsilon_t$ = Error Term

$t_i$ = Lag value

$\lambda$  = Speed of adjustment parameter with a negative sign

$\sum$  = Summation

K-1 = the lag length

$\gamma_i$ = Short run dynamic coefficients of the model's adjustment to long run equilibrium

**RESULT AND DISCUSSION**

**Descriptive Statistics**

**Table 1: Descriptive Statistics**

Descriptive Statistics	MCAP	PFGS	PFRE	PFCS
Mean	15482.43	4848.663	3115.119	1065.867
Maximum	19550.15	11115.45	7011.82	2630.450
Minimum	10303.07	1039.430	132.02	284.6500
Std. Dev.	2335.985	2713.801	1187.181	787.0123
Jarque-Bera	1.943722	3.161139	4.771157	7.042325
Probability	0.378378	0.205858	0.092036	0.029565
Observations	60	60	60	60

Source: E-view 10 Output, 2022.

Table 1 above shows the average value of market capitalization, pension funds invested in government securities, pension funds invested in real estate property and pension funds invested in corporate securities. The average value of market capitalization is 15482.43; the average value of pension funds invested in government securities is 4848.663; pension funds invested in real estate property is 3115.119 while that of corporate securities is 1065.865.

**Stationarity Test**

**Table 2: Augmented Dickey-Fuller Unit Root Test**

LEVEL			FIRST DIFFERENCE			
Variable s	ADF Test Statistic	Critical Value @ 5%	ADF Test Statistic	Critical Value @ 5%	Max Lag	Order of Integration
PFGS	-1.586543	-2.918778	-3.394614	-2.918778	3	1(I)
PFRE	-0.738020	-2.918778	-2.991480	-2.918778	3	1(I)

PFCS	-1.073423	-2.916566	-10.99489	-2.916566	3	1(I)
MCAP	-0.344445	-2.918778	-6.279514	-2.918778	3	1(I)

**Source: E-view 10 Output, 2022.**

At level, pension funds invested in government securities, in real estate property, in corporate securities and market capitalization are not stationary because their absolute value of the ADF test statistic of -1.586543; -0.738020; -1.073423 and -0.344445 are less than the critical values of -2.918778; -2.918778, -2.916566 and -2.918778 at 5% level of significance respectively. After first difference, pension funds invested in government securities, pension funds invested in real estate property, pension funds invested in corporate securities and market capitalization became stationary as their ADF test statistics values of -3.394614, -2.991480, -10.99489, and -6.279514 became greater than their critical value of -2.918778, -2.918778, -2.916566 and -2.918778 at 5% level of significance.

Since all the variables are integrated at the same order of I(1), that is first difference, this study proceeds to conduct the co-integration tests to determine the long run relationships among the variables.

**Co-Integration Analysis**

**Table 3: Johansen Co-Integration**

Hypothesized No. of CE(s)	Unrestricted Cointegration Rank Test (Trace)			
	Eigenvalue	Trace Statistics	0.05 Critical Value	Prob
None	0.409214	34.79513	29.79707	0.0122
At most 1	0.363219	18.47980	15.49471	0.0172
At most 2	0.134799	4.488598	3.841466	0.0341
At most 3	0.017255	1.009533	3.841466	0.3150

**Source: E-view 10 Output, 2022.**

From Tables 3, it is observed that the trace test statistics indicate at most one co-integrating equation at the 5% level of significance. Based on this evidence, we can safely reject the null hypothesis of no co-integrating vectors and conveniently accept the alternative hypothesis of the presence of co-integrating vectors among the variables in the specified error correction model. This implies that a long-run relationship exists between the variables that have entered the specified model of study. That is, there is a long-run relationship among contributory pension funds and capital market performance in Nigeria. This study proceeds to run Vector Error Correction Model because basic steps to estimate VECM requires all the series to be stationary at first difference, that is I(1), and not I(2).

**Table 4: Result of Victor Error Correction Model**

Vector Error Correction Estimates  
Standard errors in ( ) & t-statistics in [ ]

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Cointegrating Eq:	CointEq1
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MCAP(-1)	1.000000
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PFGS(-1)	1.001483 (0.21253) [4.71220]			
PFRE(-1)	0.622522 (0.98426) [0.63248]			
PFCS(-1)	0.508179 (0.12242) [4.15105]			
C	-1671.095			
<hr/>				
Error Correction:	D(MCAP)	D(PFGS)	D(PFRE)	D(PFCS)
<hr/>				
CointEq1	-0.932388 (0.19525) [-4.77525]	-0.534044 (0.15760) [-3.38870]	-0.220462 (0.05490) [-4.01552]	-0.402989 (0.11587) [-3.47794]
D(MCAP(-1))	0.530864 (0.42888) [ 1.23780]	0.575798 (0.34616) [ 1.66339]	0.157306 (0.12059) [ 1.30443]	0.511881 (0.26890) [ 1.90361]
D(PFGS(-1))	0.401788 (0.11251) [3.57113]	-0.322988 (0.33303) [-0.96986]	-0.020865 (0.11602) [-0.17985]	-0.162283 (0.25870) [-0.62730]
D(PFRE(-1))	0.448180 (1.01603) [0.44111]	-0.262804 (0.82007) [-0.32047]	-0.540999 (0.28569) [-1.89365]	-0.104783 (0.63704) [-0.16448]
D(PFCS(-1))	0.436635 (0.15817) [ 2.76054]	-0.365178 (0.69265) [-0.52721]	0.032181 (0.24130) [ 0.13336]	-0.398012 (0.53806) [-0.73971]
C	120.2450 (193.945) [ 0.62000]	141.4336 (156.539) [ 0.90351]	24.81170 (54.5342) [ 0.45498]	50.80416 (121.601) [ 0.41779]
<hr/>				
R-squared	0.325170	0.207042	0.267798	0.296398
Adj. R-squared	0.260282	0.130796	0.197394	0.228744
F-statistic	5.011281	2.715453	3.803733	4.381083
S.D. dependent	1697.459	1263.906	458.2178	1042.298
<hr/>				

**Source: E-view 10 Output, 2022.**

The lagged value of ECM is negative, as expected, and statistically significant at the 5% level. The speed at which the entire system adjusts toward the long term equilibrium is revealed by the coefficient of the lagged ECM, which is negative and significant. The ECM coefficient is -0.93, indicating that the speed of adjustment from short run disequilibrium to long run equilibrium is 93 percent per year. Finally, the R-square of 0.32 indicates that contributory pension funds invested in government securities, real estate property, and corporate securities in Nigeria contribute 32% to capital market performance. The F-statistic score of 5.011 also indicates that the model is statistically significant and well-fit.

### **Residual Test**

**Table 5: Residual Tests**

<b>Test</b>	<b>P-Value</b>
Serial Correlation LM Test	0.8649
Residual Normality Test	0.1370
Heteroskedasticity Test	0.8903

**Source: Author's Computation from E-view 10 Results (2022)**

The result as presented in the above table revealed that there were no evidences of serial correlation, heteroskedasticity and the data are normally distributed in the estimated VECM model because they have *p-values* of 0.8649, 0.1370 and 0.8903 respectively. They were found to be greater than 0.05 level of significance.

### **Discussion of Findings**

#### **Pension Funds Investment in Government Securities and Capital Market Pefomance**

If all other variables remain equal, one unit increase in contributory pension funds invested in government securities will result in about 1.001483 unit rise in capital market performance in the long term, according to the VECM regression finding. Because the t-statistics value of 4.71220 is bigger than the essential t-value of 1.96 at the 5% level of significance, the influence of contributing pension funds invested in government securities is considerable in the long term. This suggests that pension funds investing in government securities have a long-term favorable impact on Nigeria's capital market development.

If all other variables remain constant, one unit increase in contributory pension funds invested in government securities will result in a 0.401788 unit gain in capital market performance in the short run. Because the t-statistics value of 3.57113 is bigger than the essential t-value of 1.96 at a 5% level of significance, the influence of contributing pension funds invested in government securities is considerable in the short run. This shows that pension assets are utilized to support government deficits, that a sufficient amount of pension funds are invested in government securities, and that pension regulations allow for a diversity of pension fund investments in government securities since they are safer investment options. This finding is in line with Hu (2012), Raisa (2012), Thom (2014), Kyando (2014), and Zubair (2014) studies (2016). Furthermore, the findings contradict Madukwe's research (2014).

#### **Pension Funds Investment in Real Estate and Capital Market Performance**

In the case of pension funds invested in real estate property, the coefficient is 0.622522 and the t-statistics value is 0.63248, implying that a unit rise in pension funds investment in real estate property equates to 0.622522 unit increases in capital market performance in the long term. Because the t-statistics value of 0.63248 is less than the crucial t-value of 1.96 at the 5% level of significance, the effect of contributing pension funds invested in real estate property in the long term is not significant. This shows that pension funds' investments in real estate property have no long-term impact on Nigeria's capital market performance. Furthermore, because the t-statistics value of 0.44111 is smaller than the critical t-value of 1.96 at a 5% level of significance, the short run outcome of the VECM implies that pension funds'

investment in real estate property has no meaningful effect on capital market performance in Nigeria. This evidence supports the findings of Akowe, Ocheni, and Daniel (2015); Micah and Obah (2016); Eke, Ndubuisi, and Eleagu (2016). (2018).

### **Pension Funds Investment in Corporate Securities and Capital Market Performance**

According to the VECM regression results, pension funds' investments in corporate securities have a strong beneficial impact on capital market development in Nigeria, both in the short and long term. The coefficient of pension funds investment in corporate securities is positive (0.508179; 0.436635), implying that a unit increase in pension funds investment in corporate securities translates to 0.508179 and 0.436635 units increase in capital market performance in Nigeria, respectively, in the long and short run. The long and short term t-statistics values of pension funds' investments in corporate securities are 4.15105 and 2.76054, respectively, and these values are more than the crucial t-value of 1.96 at a 0.05 level of significance. This suggests that pension funds' investments in corporate securities have a major favorable impact on Nigeria's capital market performance in the short and long term. Moleko and Ikhede (2018); Chovancova, Hudcovsky, and Kotaskova (2018) have all found similar results (2019). Furthermore, the findings contradict Okparaka and Makwe's research (2019).

### **CONCLUSIONS AND RECOMMENDATIONS**

The study suggests that pension fund investments have had a favorable impact on Nigeria's stock market development. As a result, pension fund investments can help the stock market thrive. In light of the findings, the study came to the following specific conclusions;

- i. The study concluded that pension funds' investments in government securities significantly accounted for capital market performance in Nigeria, both in the long and short run.
- ii. The study shows that pension funds investing in corporate securities in Nigeria boosts capital market performance in the short and long term.
- iii. The study shows that pension fund investments in real estate property in Nigeria have a weak positive link with capital market performance in both the short and long term.

This study makes the following recommendations;

- i. Administrators of pension funds should allocate more assets and investments in government securities because they are a less risky and safer investment window. This study's empirical findings imply that investing in government securities by pension funds boosts capital market performance.
- ii. In order to expand Nigeria's capital market expansion, pension fund administrators should invest more funds in relatively high corporate debt securities that give high returns, such as banks.
- iii. Finally, Nigerian Pension Fund Administrators should gradually lower their investment exposure to real estate property, as our study has indicated that investing in real estate property has not benefited Nigeria's capital market performance.

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## **Impact of International Financial Reporting Standards Adoption on Financial Reporting of Agricultural Firms in Nigeria**

**POPOOLA, Abayomi Odunayo**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: [popoolabayomi@gmail.com](mailto:popoolabayomi@gmail.com), Phone No: +234 7039286170

### **Abstract**

*Since the adoption of IFRS in Nigeria, most of the empirical studies have been geared towards the impact of IFRS adoption on financial reporting with little effort towards the impact of IFRS adoption on financial reporting of Agricultural Firms in Nigeria by comparing the two periods. The study examined the impact of IFRS adoption on financial reporting of Agricultural Firms in Nigeria. The coverage of the study is the period of sixteen years with eight years which was disaggregated into two periods: pre covering eight years and covering eight years. The study also covered all the five listed agricultural companies. The theoretical strength of the study was drawn in Efficient Market Hypothesis and the technique employed to analyze the data OLS regression model. The study established that book value and cash flow are relatively useful in explaining share prices in pre adoption period while in post adoption period only earnings has explanatory power to share prices. The study recommended that book value and cash flow are relatively useful in explaining share prices in pre adoption period while in post adoption period only earnings has explanatory power to share prices.*

**Keywords:** IFRS, Financial Reporting, Agriculture, Adoption

### **INTRODUCTION**

Impact of IFRS adoption on financial reporting of agricultural firms in Nigeria has been an area of research since late sixties following the efforts of researchers to empirically evaluate accounting income numbers. The impact of IFRS adoption on Financial Reporting of Agricultural, is seen as an ability of information generated through accounting system to capture the value of shares and serves as pointer of statistical association between values of shares in the markets and accounting numbers (Herbohn & Herbohn, 2006). In addition to that, accounting is believed to be an information system through which information is generated which enables relevant economic units to take well informed decisions. For accounting information to serve as input for well informed decision, it should be generated within a reliable financial reporting framework; that is to say using standards that represent the realities of economic activities of entities under consideration. Within the framework of accounting, information is seen as any fact, financial or otherwise, generated from a record keeping system of an entity through available sources like financial statements, verbal statement or any special reports which investors depend on in order to take their decisions (Abubakar, 2011). Since the investment decisions taken by investors are based on accounting information made readily available, the information should be of high quality. To investors, accounting information is only of high quality if it is value relevant helping them to maximize returns on their investments and minimize risks. With globalization of business world, it is believed that in order to enhance the reliability and comparability of accounting information, there is the need for harmonization of standards that guide the preparation of financial statements by all countries in the world. And this can only be achieved if all countries in the world prepare their financial statements using the same accounting standards (Rodosthenous, 2017).

In response to this, Federal Executive Council of Nigeria in its meeting on 28th July, 2010 approved the 1st January, 2012 as a day for implementation of International Standards for the purpose of reporting. The approval mandated listed entities in Nigeria to account for their financial activities in tandem with the International Financial Standards using, as a guide, roadmaps for adoption designed and implemented by Financial Reporting Council Nigeria. One standard that came new to Nigeria is International Accounting Standard on agriculture (IAS 41); a standard that had hitherto been nonexistent in our reporting framework. As a result of the absence of the standard, accounting for agriculture was based on historical cost methods. The absence of standard that would govern the financial reporting of agricultural firms in Nigeria had affected the accounting information quality provided by firms because agricultural firms have some peculiar characteristics that our local standards could not cater for. For example, in agriculture, there are assets that cannot be adequately

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accounted for on historical cost basis like biological assets; living plants or animals managed by agricultural sector. Accounting for such assets was based on historical cost prior to adoption of IAS 41. However, with adoption of IAS 41, the accounting for agriculture had radically changed as assets owned by agricultural firms (biological assets, agricultural produce) now are to be measured at fair in the first recognition while deducting cost to sell and the same applies at subsequent reporting dates and this points to a marked difference from the old valuation method that had been used in the past. Despite the fact that agriculture plays a very vital role in the global economy, accounting for got little efforts from researchers before the adoption of international accounting standard on agriculture (Herbohn & Herbohn, 2006). And it is worthy of mention that agriculture has been considered as mainstay of Nigeria's economy because it is one of the largest contributors to our Gross Domestic Product (GDP). Until early 2016 when Nigeria fell into economic recession caused by sharp decline in price of oil in the global market and when it was generally believed by experts that the only solution for Nigeria is economic diversification, there had been little attention to agricultural sector because there was seamless oil production in the country and the prices in the global market were stable. But following the efforts by federal government to diversify the economy beyond total dependence on oil, market capitalization of agricultural sector on the Nigerian Stock Exchange stood at N103.017 billion as at September 2019 (Leadership, 2019). The current status of agriculture in Nigerian Stock Exchange signifies that the sector has attracted the attention of the investors and there is the need to conduct a study to find out whether the content of accounting information in the sector has a high quality so as to help investors take well informed decisions.

Most of the researches on Impact of Financial Reporting on Agriculture have been concentrated on other sectors of Nigerian economy with no efforts towards agricultures. For example, the studies of Olarinka (2017) focused on consumer goods, Sullubawa (2015) focused on industrial goods, Olabede (2016) was on non-financial firms. Bagudo et al.(2016) focused on financial industries and lastly Muhibudeen (2015) focused on cement. Moreover, some studies have focused on Impact of Financial Reporting on Agriculture only with little or no efforts to study the relativity of value relevance by examining the value relevance before the adoption of the standard and after the adoption so as to provide a framework for comparison. Another area of concern in value relevance studies is the period coverage as most of the literatures reviewed stopped at 2015. For example, Olarinka (2017) stopped at 2015. Sullubawa (2015), Olabede (2016) and Bagudo et el (2016) all stopped at 2014. The study of Muhibudeen (2015) stopped at 2011. This study intends to widen the scope of literature by extending the period to 2019. This study intends to contribute to the pool of existing literature by studying relative value relevance of IAS 41 on the accounting information of agricultural firms by taking eight year before the adoption of the standard and eight year after the adoption. The study will be beneficial to all stakeholders especially regulators like Financial Reporting Council of Nigeria who will use the results as a basis for determining whether the adoption of IAS 41 has been value relevant or not. The result will also be useful to both existing and potential investors as it will help them in determining which proxy of accounting number is value relevant and which one is not Under this heading, some relevant and related empirical studies are reviewed as seen below;

### **LITERATURE REVIEW**

#### **Conceptual Framework**

##### **Earnings and Share Prices**

Rodosthenous (2017) during the early period of financial crisis experienced by Greece between 2010 and 2012 studied how value relevant accounting information is. The study used Ohlson model (1995) with a sample of 150 firms among the listed firms among the listed firms in Greece. The study found that earnings is positively and statistically linked to share prices in period of crisis. The empirical study studied many firms cutting across many sectors of Greece economy; due to heterogeneous nature of the firm the findings cannot be applicable to a particular sector like agriculture. Uwuigbe et al. (2016) also conducted his study with a view to investigating the value relevance of accounting information among the listed banks in Nigeria between 2010 and 2014. The study maintained OLS technique of analysis and a sample of 15 banks. The study found earnings per share to have a positive but significant relationship with share prices. The next study was conducted by Sullubawa (2015) with an objective of investigating how value relevant of accounting information is among listed companies in Nigeria. Additionally, the study also studied the impact of IFRS on the value relevance of accounting information of Nigerian listed companies. Samples of 68 companies listed NSE were used and the study

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covered 6 years (2009-2014), with 2009 and 2011 as pre-period between and 2012-2014 as post period. The study used pooled Ordinary Least Square model to analyse the data gathered from Thompson Reuters data stream

Furthermore, the study documented that accounting information of listed companies in Nigeria is value relevant by using the Ohlson model. Earnings was found to be positively and significantly related to market value of equity. So also, the study found value relevance of earnings to have increased in the post-adoption period. However, the study is somewhat deficient because the data used for analysis is gotten from an online data source not hand collected by the researcher from the firms' financial statements or regulatory bodies. Therefore, the reliability of the data is of doubtful authenticity Alfraih and Alanezi (2015) also conducted a study aimed at critically analysing the association between International Financial Reporting Standards (IFRS) mandatory disclosures compliance and the value relevance of accounting information. This association was examined within the context of listed companies in Kuwait, the value relevance of financial statement information, specifically earnings was empirically examined using Ohlson's (1995) model that captures the compliance level with IFRS among the listed firms. The study took a sample of 119 listed firms and used OLS technique of analysis; the results of the study show that there is statistically significant association between the compliance level with IFRS and the value relevance of earnings to investors in Kuwait Exchange. However, cross sectional data was used, but this study will improve on that by using panel data

### **Book Value and Share Prices**

Rodosthenous (2017) examined value relevance of accounting information in the early years of financial crisis in Greece between 2010 and 2012. The study employed Ohlson model (1995) and a sample of 150 firms among the listed firms in Greece. The study documented that book value has positive statistical relationship with share prices in the period of crisis. The empirical study studied many listed firms cutting across many sectors and because of the diverse nature of the companies the findings cannot be applicable to a particular sector like agriculture. Uwuigbe et al. (2016) also conducted a study with the aim of investigating how value relevant affects accounting information among the listed banks is between 2010 and 2014. The study maintained OLS technique of analysis and a sample of 15 banks and the study found book value to be statistically but negatively related to sharp prices. In addition, Solomon, Memba and Muturi (2016) studied value relevance of accounting information in the listed firms on the floor of Nigerian stock exchange between 2004 and 2014. The study used a sample of 58 firms, after analysing data using OLS tool of analysis, it was documented that there is positive but insignificant relationship between book value and share price. However, the study used only one independent variable.

Alfraih and Alanezi (2015) also conducted a study aimed at exploring the association between the compliance with International Financial Reporting Standards (IFRS) mandatory disclosures and the value relevance of accounting information. This association is examined in the context of listed companies in Kuwait, the value relevance of financial statement information, specifically earnings was examined empirically using Ohlson's (1995) valuation model that captures the level of compliance with IFRS among the listed firms. The study used a sample of 119 listed firms and OLS technique of analysis; the results show that there is a significant relationship between the compliance with IFRS and the value relevance of book value to Kuwait Stock Exchange investors. However, their study used cross sectional data. The next study was conducted by Sullubawa (2015) with an objective of investigating the value relevance of accounting information among listed companies in Nigeria. Additionally, the study also studied the impact of IFRS on the value relevance of accounting information in Nigerian. Samples of 68 companies on the floor of NSE were used and the study covered a period of 6 years (2009-2014). Pre-IFRS period between 2009 and 2011 and post-IFRS period from 2012-2014 was studied. The study used pooled OLS to analyse the data extracted from Thompson Reuters online data stream. Furthermore, the study found that accounting information of listed companies in Nigeria is value relevant using the Ohlson model. It was found that there is positive but significant relationship between book value and share price. So also, it was established that how value relevant book value is had gone up after IFRS. However, the researcher did not collect the data himself making it vulnerable to data Collection unreliability.

### **Cash from Operation and Share Prices**

Omokhudu and Ibadin (2015) examined value relevance between the year 1994 and 2013. The study used OLS technique of analysis and a sample size of 47 firms out of the listed firms in the Nigeria stock market

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and found cash flow among other independent variables to be statistically and significantly associated with market value. However, the study didn't conduct post estimation test. Additionally, Camodeca, Almici and Brivio (2014) studied value relevance of accounting information among the listed firms on the Milan and London stock exchange markets, a sample of 100 firms were drawn from the two markets between 2011 and 2013 and OLS technique of analysis was used, it was found that accounting information is more value relevant in the Italian stock exchange than in the UK as showed by the  $R^2$ . Individual results showed that cash was value relevant in London more than in Italy. Adaramola and Oyerinde (2014) examined value relevance of accounting information of listed companies in Nigeria with focus on trend analysis. Data was sourced from the Nigerian Stock Exchange Fact Book and a sample of Sixty-six (66) quoted companies was maintained between 1990 and 2009, using OLS technique of analysis, the study found cash flowing from operating activities to be value relevant among the quoted companies in Nigeria. However, the study revealed further that the value relevance of accounting information does not follow any trend in particular within the period under study. While the value relevance was weak in the eras of political crisis occasioned by military dictatorship 1992 to 1998 and global economic crisis 2005 to 2009, it was high in the other periods. However, the period covered by the study is not current prices.

## **Theoretical underpinning**

### **Efficient Market Hypotheses (EMH)**

The theory that underpins this study is efficient market hypotheses (EMH) theory propounded by Eugene Fama (1960) and this is because other others like signaling theory do not signify how information released by firms is absorbed by the market and used in determining the values of the securities. EMH presupposes that in an efficient market there is a huge number of profit maximisers trying to envisage market values for the purpose of future decision. The theory has three distinct levels. Strong form where all information is believed to have been captured, semi strong form where only publicly available information is reflected in the share prices and weak form where only the past information is reflected. In the context of the study, semi-strong-form of efficient market hypothesis best suits the Nigerian capital market and therefore the study deems it appropriate to underpin it.

## **METHODOLOGY**

The research design is correlational; the choice of the design was informed by the research paradigm which is the positivism approach. The data used was panel. Therefore, panel regression was used for the analysis with the aid of STATA version 13 (STATA13). The study covers a period of eight years (2004-2019), the choice of this period has been influenced by the availability of data of the firms, adoption of IAS 41 and significant attention paid to the sector by the government. The study considered all agricultural firms listed in Nigeria as at 31st December, 2019. The study takes all listed agricultural firms as at aforementioned date because it is concerned with both pre and post adoption era IAS 41. The firms are: Ellah Lakes Plc, FTN cocoa processors Plc, Livestock Feeds Plc, Okomu Oil Palm Plc, Presco Plc. The model for this study relies upon a modified version of Ohlson model (1995) which has its root from the work of Edward and Ball. It states that, share price is a function of earnings and book value. Beyond that, this study extends the model to incorporating cash flow from operation as follows:

$$SHP_{it}^{SAS} = \beta_0 + \beta_1 EPS_{it}^{SAS} + \beta_2 BPS_{it}^{SAS} + \beta_3 CF_{it}^{SAS} + \epsilon_{it} \dots \dots \dots 1$$

$$SHP_{it}^{IFRS} = \beta_0 + \beta_1 EPS_{it}^{IFRS} + \beta_2 BPS_{it}^{IFRS} + \beta_3 CF_{it}^{IFRS} + \epsilon_{it} \dots \dots \dots 2$$

Where;

$SHP_{it}$  = share price of firm i in year t

$EPS_{it}$  = earnings per share of firm i in

year t  $BPS_{it}$  = book value per share of firm i in year t.  $CF$  = cash flow from operation of firm i in year t.

$\beta_0$  = constant or intercept

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$\beta_1 - \beta_3$  = coefficients of explanatory variables SAS=financial reported prepared under SAS

IFRS=financial reports prepared under IFRS  $\epsilon$  = error term. The result will be interpreted by comparing the result of SAS regression Equation 4 with IFRS regression Equation 5. If the information content of IFRS accounting numbers are relatively higher than that of Nigerian SAS accounting numbers, it is expected that the adjusted R-squared for IFRS regression (Equation 5) will be greater than that of SAS regression (Bagudo, 2016)

### Measurements

**Market share price:** this is the market price per share as obtained from the Nigerian stock exchange Website four months after the release of annual reports.

**Earnings:** this is computed as the profit after tax all over the weighted average of shares.

**Book value:** measured as net value of equity all over the outstanding number of shares at the end of the accounting period.

**Cash flow:** This is obtained through dividing the total cash from operation by the outstanding number of shares at the end of the accounting period.

## RESULT AND DISCUSSION

**Table 1: Descriptive Statistics**

Variables	Obs	Mean	Minimum	Maximum	Standard Deviation
SHP	40	0.48	0.30	1.45	0.67
BPS	40	5.65	-0.86	18.53	10.77
EPS	40	1.02	-0.12	4.11	1.26
CF	40	0.87	-0.12	3.47	0.87

**Source: Descriptive Statistics Results from STATA13 Output**

From table 1 above, the average share price for the firm before the adoption of IAS 41 IS 0.48 meaning that the value of shares from 2004 to 2011 averaged 0.48 with the standard deviation of 0.67 showing that the variation from the mean is not a thing of concern. The minimum value of share is 0.3 with the maximum value of 1.48. For book value per share the average is 5.65 with -0.86 and 18.53 as minimum and maximum respectively. Earnings per share has 1.02 as average in the sector with -0.12 and 4.11 as minimum and maximum respectively while cash flow from operations has 0.87 as average with -0.12 and 3.47 as minimum and maximum respectively. The standard deviations for all the proxies of accounting numbers that is book value, earnings and cash flow from operations show that the deviation from the mean is not a thing of concern.

**Table 2: Correlation Matrix**

	SHP	BPS	EPS	CF
SHP	1.0000			
BPS	0.8212	1.0000		
EPS	0.8919	0.8631	1.0000	
CF	0.6632	0.6154	0.7275	1.0000

Source: STATA13 output



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The correlation matrix table 4.2 above shows there is possible presence of Multicollinearity. This is because the highest relationship among the independent variables is approximately 89%, and this goes above the bench mark of 80% according to (Gujarati, 2004).

**Regression Analysis Result**

The robust regression result for pre IFRS data is presented in table 3 below.

**Table 3: Regression Result**

Variables	Coefficient	T-value	P>(Z)
BPS	0.724117	4.19	0.000
EPS	0.0875885	1.09	0.284
CASH	0.1308286	2.16	0.037
Constant	0.136861	-1.83	0.075
RSquared:	0.7616		
f-Statistics:	42.54		
Prob.:	0.0000		

**Table 4: Regression Result for post IFRS Data**

Variables	Coefficient	t-value	P>(t)
BPS	0.0127138	1.40	0.171
EPS	0.3798928	4.14	0.000
CFS	0.0277575	0.33	0.740
Constant	0.0132829	0.19	0.851
RSquared:	0.7904		
f-Statistics:	50.01		
Prob.:	0.000		

STATA13 OUTPUT

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The two tables above show that the regression results for both pre and post adoption period. It can be seen from the two tables that while in pre adoption period book value, earnings and cash explain share price to the tune of 76% which for post adoption period the explanatory power of the three variables is 79%. It can also be seen that book value per share and cash contain valuable information to explain share prices. The coefficients of book value and cash are 0.728 and 0.131 all significant at 1% and 5% respectively showing that the two variables are useful in explaining share prices. For earnings per share in pre adoption period, the coefficient is not statistically significant showing that earnings per share does not contain information capable of explaining the value of share price. For post adoption period, it can be seen that only earnings has coefficient of 0.372 at 1% level of significance which signifies that it has the ability to explain share price. The other two proxies of accounting in post adoption period that is to say book value and cash all have statistically insignificant coefficients which mean that the adoption of IAS 41 did not grant any explanatory power to them. In other words, they don't contain any valuable information that has a role to play in determination of share prices.

### **CONCLUSION AND RECOMMENDATION**

The study concludes that book value per share and cash flow are relatively useful in explaining share prices in pre adoption period while in post adoption period only earnings per share has the ability to explain share prices. Based on the conclusions drawn above, the study recommends that regulatory bodies should put in place regulatory mechanisms to ensure that strict applications of IAS 42 so that its ability to help proxies of accounting numbers like earnings and book value can be enhanced. Furthermore, the study recommends that efforts should be by both the companies and regulatory bodies to explore other accounting numbers that can help in explaining share prices.

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## **Impact of Budgetary Deficit on the Nigerian Economic Growth**

**AJIBOYE, David Oluwaseun**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: seunjiboye@yahoo.com, Phone No: +234 8175549541

### **Abstract**

*Given the importance of budgetary provisions to developing economies such as Nigeria, the twin subject of budgetary provisions and economic growth has remained a focal point for discussion in recent times. By means of an exploratory research design, this study examines the Impact of Budgetary Deficit on the Nigerian Economic Growth. Findings from the study reveal that, there is significant positive correlation between deficit financing and economic growth in Nigeria. The study therefore concludes that deficit financing has positive impact on economic performance of Nigeria, as it clearly shows that financing activities affects economic growth positively. Furthermore, inflation has been established as monetary phenomenon in Nigerian economies; and also for budget deficit to be effective, some fundamental changes in the productive base of the economy need be made. Based on the findings of the study, it is recommended that government should pursue policies capable of reducing in the size of informal sector which has imposed greater constraint to revenue collection and generation. Also, interest rate should be further reduced to enable availability and accessibility of funds for private sector investment which will contribute significantly to economic growth of the Nigeria. Furthermore, exchange rate depreciation should be discouraged in the economy as it has negative implication to the economic growth.*

Keywords: Budget, Budgetary Deficit, Nigerian Economy, Economic Growth

### **INTRODUCTION**

The importance of efficient and effective public expenditure of management cannot be over-emphasized. Budgeting is an important part of the Government fiscal management. Omosebi (1995), commenting the growth and development of budgets explained that the process of budgeting in Britain was to enable the king in around 1215 in Britain to levy tax and to obtain the approval of the legislature. This is because the British government has to approve the welfare facilities for the generality of the people. In order to perform this function, tax has to be collected. Legislative controls of taxes continue to date as all budgets proposals have to be approved by the parliament. In 1921 in the United State, the Budget and Accounting Act was passed. The federal and the State Government apply the budget as instrument of expenditure control to manage public expenditures. In the US, the planning programming Budgeting system (PPBS) was adopted. Budgeting later became a tool of management and instrument of economic policy. Various types of budgeting systems were used at different times. The control budgeting system emphasizes the control of the budget and established limitations and conditions designed to secure compliance with the spending restrictions imposed by the government. The line item budgeting system, describes every expenditure item. The performance budgeting system stresses output based on the efficient use of resources. The program budgeting system relates to activities which are directed towards the common objectives and goals. The planning, programming, budgeting system (PPBS) emphasizes planning. The zero-based budgeting system (ZBB) required the justification of each item in the entire budget. Recently introduced is the input-output model to spectral allocation budgeting system. This is an economic model that presents the flow of sectorial allocation against the performance of those sectors over a given period of time. The allocation made constitutes the output, while performance of the various sectors in terms of goods and services produced/delivered constitutes the output.

The Budget Officer of Nigerian Federation was established to provide budget functions, implementation of budget and fiscal policies of the Federal Government of Nigeria. It is structured into six departments which are: revenue, expenditure, budget monitoring and evaluation, fiscal policy, administration/supplies and finance and accounts. The office is to maintain aggregate fiscal discipline, allocate resources in accordance with government priorities and promote the efficient delivery of services. Budget preparation

and formulation entail revenue estimation using current information on oil production and prices. It also involves estimation of non-oil receipts and developing of a macroeconomic framework. Section 81 of the constitution of the Federal Republic of Nigeria 1999 states that;

The president shall cause to be prepared and laid before each House of the National Assembly at any time in each financial year estimates of the revenues and expenditure of the Federation for the next following financial year...a supplementary Estimate showing the sums required shall be laid before each House of the National Assembly and head of any such expenditure shall be included in the supplementary Appropriation Bill.

Budget data are reported on a gross basis. Such data are classified according to revenue, expenditure and financing. The expenditure are classified according to the economic, functional administrative categories. There guidelines and procedures on budget preparation. First is the call circular. It gives the overview of the national economy to serve to the estimated available resources and essential priority areas to be given attention in making estimates for current and capital expenditures. The budget must be approved by each House of the National Assembly. The annual review of the performance of the current years budget is done around June of every year with a view to assessing the shortcomings of the past and to note the areas that need improvement. It also reveals the economic, social and political factors that affect the budget. There is usually a meeting of the finance minister with the private sector, Manufacturers Association of Nigeria (MAN) and other interest groups to obtain their views on the budget. Nigeria is endowed with enormous resources. There is no state in the Federation that does not have enough resources if well managed. In early 1970s there was no oil boom. Oil was discovered in commercial quantity in Nigeria in 1958. Prior to that 1958, agricultural products were exported from Nigeria as the country was largely an agricultural nation. From the Western Region, cocoa and palm produce were exported. Midwestern Region had rubber and coffee. Eastern Region of Nigeria had palm produce and Northern Nigeria had groundnut and cotton. Tin was mined in Jos and coal in Eungu. This provided a lot of foreign exchange and therefore Nigeria did not need to borrow, and exportation of agricultural produce were jettisoned immediately oil was discovered in large quantity in Nigeria. The oil made the Nigerians to develop an insatiable appetite for imported items. Products imported include food items such as rice, flour, edible oil, sardine, motor cars and industrial machines. As the country expenditure exceeded income, it resulted into deficit Budgeting.

Available evidence shows that over the years Nigeria budget deficits trend has been on the increase. It recorded forty years of deficits since 1980, deficits are meant to accelerate economic activities during depressions through induced variables or aggregates. Despite the fact that Nigerian economy has been operating deficits for these periods and also operated in a situation of less than full employment, it has been in distress which runs contrary to the essence of deficits. There is an obvious reduction in the standard of living of the citizens; there is a decline in growth of the economy; poverty is in the land; there is persistent unfavorable balance of payment, increased public debt, continuous depletion of foreign reserve, little or no savings, and decline in exports, increased inflationary pressure and continuous dependence on external economies. Budget deficit's impact on these macroeconomic variables has been unfavorable. One would then ask if budget deficit no longer stimulate economic growth. Do we then accept the Keynesian economists that budget deficit crowds-in private investment through its impact on macroeconomic variable or do we accept the neoclassical economists that budget deficit crowds-out private investment through its impact on interest rate and other variables or do we accept the Ricardian economists that budgets does not have positive or negative impact on aggregate demand. Since there is no consensus in the literature yet about the net impact of deficit financing in developing economies, we need to undertake further studies by extending the period to 2016. The main objective of this study therefore is

to examine the impact of the deficit budgeting on the Nigeria economy and the basic hypothesis underlying this study is stated thus;

**H<sub>01</sub>:** There is no significant relationship between Deficit financing and economic growth in Nigeria

## **LITERATURE REVIEW**

### **Conceptual Framework**

#### **Budget**

Olatunde (2003) quoted the definition of budget as defined by the chartered institute accountants (CIMA) official terminology 1995 as a financial quantitative statement, prepared and approved prior to a defined period of time, of a policy to be pursued during that period for the purpose of attaining a given objective. They may include income, expenditure and the employment of Capital. For satisfactory control, a budget requires regular review and modification to reflect rapidly changing conditions in the business environment. He referred to a budget as statement, expressed in financial terms of the desired performance of an organization in the pursuit of its objective in the short run (one year). It is an action plan for the immediate future, representing the operational and financial end of the corporate planning chain. As a building guide the builder in the construction process, so does a budget guide all those who have any responsibility for the fiscal operation. Aremo (2002) postulated that there are many definitions as there are many writers on budget. He stated that a budget is a plan expressed in a quantitative and usually in monetary terms covering a specific period of time, usually a year. He also quoted Hadden (1938) that defines budget as a plan of action that is dynamic rather than static. Success will come to those whose plans were carefully prepared. Aremo (2000) further observed that budget is a process that has stages which include preparation, approval, execution, control and review. He quoted Singer (1982) to remark about problems in constructing budgets stated that; in the budgetary process, it is generally acknowledged that behavioral factors can dominate technical consideration when it comes to agreeing and acting on a budget. Budgeting requires the exercise of judgment. It is a bargaining process in which corporate politics can loom large, and it is a powerful instrument for motivating or demotivating those responsible for conforming to its reference standards.

Ruett and Truett (2000) define Federal budget as a financial plan of the federal government during a particular 12-month period, called a fiscal year. Aremo (2000:14) states that budgeting started in Great Britain in 1822. He therefore confirmed Griesemer (1983:4) stated that: "If one accepts 1822 as the birth date of a budget; budgeting as human enterprise is well under 200 years old". This assertion was proved incorrect as budget was proved to be earlier than 2000 years ago. Olatunde (2006) quotes the bible (King James version) in the first interactive section of SEC 28, 2006 at the national institute at the national institute for policy strategic studies, Luke 14:28,29; "For which of you, intending to build a tower, does not first sit down and count the cost, whether he has sufficient to finish it? Lest haply after he hath laid the foundation, and is not able to finish it, all that behold it begin to mock him". That implies that budget preparation is as old as the time of Jesus Christ. Thus, a budget can be viewed as a formal expression of management plans of action prepared in advance of the period to which it relates. It may be prepared for the business as a whole, department, faculty, college, the university, the local, state and federal government. The process of preparing and agreeing on budgets are means of translating the overall objectives of the organization into detailed plan of action.

Public budgets describe in monetary terms what a particular government will do. It lists how much the government will realize during the financial year and how it will be expended. It relates task to be performed with the amount of resources necessary to accompany those tasks. Irene (2000) analyzed public budget as reflecting choices about what government will do or will not do. It reflects general public consensus about what kinds of services government should provide and what citizens are entitled to as

members of a society. It examines whether government should provide services that the private sector could not provide, such as water, electricity, transportation and housing. Public budget reflects government priorities. The essence of budgeting is that it allocates scarce resources and hence implies choice between potential object of expenditure. Budgeting implies priority balance and it requires some kind of decision-making process. Public budgeting is political. Premchand (1990) dealt extensively on the current problems in government financial management. Some of the problems are absence of expenditure priorities, inadequate review of programs, absence of budgetary guidance to spending agencies, poor preparatory work by the spending agencies and; absence of contingency plans. Other challenges are inadequate attention to operate and maintenance, of expenditures, public debt and government lending programs. Moreover other problems inadequate resource planning and poor government accounting and financial reporting

### **Budget Deficit**

The issue of deficit financing has been in focus among scholars because whenever there is budget deficit in any country, what comes to the mind of experts in finance is the remedy for financing such budget deficit so as to obliterate the negative effects on the economy. Financing represents government's sources of remedying deficit or utilizing surplus. Deficit financing arises each time the government has budget deficit. However, for the economy to grow as planned in a budget, shortfall of revenue resulting from excess expenditure has to be financed by raising fund from other sources available to the government. Deficit financing can be seen as the practice of seeking to stimulate a nation's economy by increasing government expenditures beyond revenue sources (CBN, 2012). This means that deficit financing can be defined to mean financing undertaken by a corporation or government to make up for a shortfall in revenue. Government or corporation may undertake deficit financing in order to provide an economic stimulus.

When government expenditure tends to exceed public income, the government may resort to deficit financing to meet the deficit in the budget. Keynes theory recognizes the idea of deficit financing as a compensatory spending meant to solve the problem of unemployment and depression. Modern economists prescribe deficit financing for developmental purposes. Nwaotka (2004) defines deficit financing as a planned excess expenditure over income, dictated by government policy or creating fund to finance deficit by borrowing whether from internal or external sources, which must be repaid with interest within a specific period of time. Deficit financing is defined in finance as government spending in excess of revenues which is financed by borrowing. Keynesian economist's theory states that deficit is financed in order to increase economic activity and reduce unemployment in a nation. Stiglitz (2005) sees deficit financing as a situation in which the federal government's excess fund of outlays over receipt of revenue for a given period is financed by borrowed funds from the public. Deficit financing can also be seen as the sale of debt securities in order to finance expenditures that are in excess of income. This method of financing can also be seen as nonbanking public source of financing. Generally, deficit financing is applied to government finance because income, represented by tax revenues and fees, is often unavailable to pay expenses. As with monetizing the debt, deficit financing puts upward pressure on interest rates because government debt securities compete with private securities for limited capital (Smriti, 2010).

### **Economic Growth**

The concept of economic growth has series of definitions: Eleje and Emerole, (2010) see economic growth as a rise in the productive capacity of a country on a per capita basis. It involves the expansion of the economy through a simple widening process. It is the increase in the national output or GDP of the nation Hogendorn, (1992). Ajayi (1996) perceived economic growth as the increase overtime of country's output of goods and services. Schumpeter (1973), defines economic growth as gradual and steady change in the long-run which comes about by gradual increase in the rate of savings and population. Thus, economic growth is related to the quantitative and sustained increase in the countries per capita output or

income accompanied by expansion in its labour force, consumption level, capital and volume of trade. However, for the purpose of this research, economic growth means an increase in country's Real Gross Domestic Product over a period of time usually one fiscal year. Economic growth is the increase in the market value of the goods and services produced by an economy over time. It is conventionally measured as the percent rate of increase in real gross domestic product, or real GDP. Of more importance is the growth of the ratio of GDP to population (GDP per capita), which is also called per capita income. An increase in growth caused by more efficient use of inputs is referred to as intensive growth. GDP growth caused only by increases in inputs such as capital, population or territory is called extensive growth (Schema, 2004).

In economics, "economic growth" or "economic growth theory" typically refers to growth of potential output, i.e., production at "full employment". As an area of study, economic growth is generally distinguished from development economics. The former is primarily the study of how countries can advance their economies. The latter is the study of the economic development process particularly in low-income countries. Growth is usually calculated in real terms i.e., inflation-adjusted terms to eliminate the distorting effect of inflation on the price of goods produced. Measurement of economic growth uses national income accounting. Since economic growth is measured as the annual percent change of gross domestic product (GDP), it has all the advantages and drawbacks of that measure (Schema, 2015).

### **Empirical Review**

Khieu (2014) examined budget deficit, money growth and inflation: empirical evidence from Vietnam. The study empirically examines the nexus among budget deficit, money supply and inflation by using a monthly data set from January 1995 to December 2012 and a SVAR model with five endogenous variables, inflation, money growth, budget deficit growth, real GDP growth and interest rate. Since real GDP and budget deficit are unavailable on the monthly basis, he interpolated those series using Chow and Lin's (1971) annualized approach from their annual series. Overall, he discovered that money growth has positive effects on inflation while budget deficit growth has no impact on money growth and therefore inflation. In addition, budget deficit is autonomous from shocks to other variables. The estimation results also reveal that the State Bank of Vietnam implemented tightening monetary policy in response to positive shocks to inflation by reducing money growth but the response was relatively slow because it took three months for the monetary authority to fully react to such shocks. Finally, interest rate was not an effective instrument for fighting inflation but it was significantly and positively influenced by inflation. Bakare, Adesanya and Bolarinwa (2014) conducted a study on empirical investigation between budget deficit, inflation and money supply in Nigeria. The paper critically investigates the long term relationship between budget deficit, money supply and inflation in Nigeria between 1975 and 2012. The paper employed quantitative methodological framework and specifically draws on econometric technique to find the relationship between inflation rate, growth rate of money supply, growth of budget deficit/GDP and growth of external debt/GDP. Stationarity test conducted using Augmented Dickey-Fuller (ADF) reveals that the variables used are stationary at levels. The Johansen co-integration test suggests that there are at least three co-integrating vectors among these variables. The estimated coefficient of the ECM reveals that about 132% of the errors in the short run are corrected in the long run. The overall result between inflation rate and growth of money supply, growth of BD/GDP and growth of ED/GDP indicates that the specified model is statistically significant at 5% level. By implication, the model is of goodness of fit i.e. reliable for policy making. However, the paper recommends that the Nigerian government should demonstrate a high sense of transparency in its monetary and fiscal operations in order to curb high prevalence of money supply and external debt, money supply in order to reduce the incidence of inflation in Nigeria.

Ezeabasili, Tsegba and Wilson (2012) studied economic growth and fiscal deficits: empirical evidence from Nigeria. They pointed out that there has been considerable debate about the relationship between fiscal deficits and economic growth. Although macroeconomic theory postulates that fiscal deficits stimulate economic growth, empirical research has been less conclusive about this relationship. This



paper examines this controversial relationship within the Nigerian context, using data over the period, 1970 — 2006. The study adopted a modeling technique that incorporates cointegration and structural analysis. The results indicate that (i) fiscal deficit affects economic growth negatively, with an adjustment lag in the system; (ii) a one percent increase in fiscal deficit is capable of diminishing economic growth by about 0.023 percent; and (iii) there is a strong negative association between government consumption expenditure and economic growth. Awogbemi, Adeyeye, Taiwo and Kola (2012) in their work examined the causes and effects of inflation in Nigeria between 1969 and 2009 and what could be done to ameliorate the negative effects on the economy. The time series variables properties on some selected variables were examined using Augmented Dickey Fuller (ADF) Unit root test and co-integration analysis. The result revealed that the explanatory variables (money supply, growth rates, gross domestic product growth rates and expenditure revenue ratio) are not spurious but exchange rate of dollar to naira was nonstationary. The study also revealed that the gross domestic product growth rate is counter inflationary as against inflationary factors. Odawara (2011) studied the relationship between government expenditure and economic performance. The first essay investigates a nonlinear relationship between government spending and macroeconomic performance by estimating a threshold model that relates real GDP growth to three measures of government spending: government consumption, government investment, and total government expenditure as share to GDP. Using quarterly data for five OECD countries from 1970 through 2008, Hansen's (1996, 1999, and 2000) method is applied to test for the presence of threshold effects and to estimate the threshold values. The main findings suggest that there is strong evidence of a nonlinear relationship between government spending and macroeconomic performance for all three measures of government spending in five OECD countries. The results also indicate the importance of compositional effects when examining government spending. The impact on government investment on macroeconomic performance is quite different from that for government consumption. According to Omoke and Oruka (2010), who employed Pair Wise Granger causality Test in an attempt to offer evident on the causal long term relationship between budget deficit, growth and inflation in Nigeria, considering the broadest definition of money supply, money supply causes budget deficit which means that the level of money supply in the Nigerian economy will determine whether there has been or there will be budget deficits. Inflation and budget deficit revealed a bilateral or feedback causality proving that the changes that occur in inflation could be explain by its own lag and also the lag values of budget deficit and in the same vein, changes that occur in budget deficits are explained by its lagged values and the lagged values of inflation. The implication of their findings is that both budget deficit and inflation could be caused by money, supply meaning that they are both monetary phenomena and also, inflation is also caused and found to be dependent on the performance of the budget.

Iyoha (2000) investigated the impact of external debt on economic growth in sub-Saharan African countries using simulation approach. It was observed that external debt variables has significant impact on economic growth in sub-Saharan African countries and that debt stock reduction would have significantly increased investment and growth performance. The study concludes that mounting external debt depresses investment through both a disincentive effect and a crowding out effect. Adam and Bevan (2001) investigated the relationship between fiscal deficit and growth for 45 developing countries using co-integration model and threshold. It was found that there is significant relationship between fiscal deficit and growth in developing countries and that there is evidence of interaction effect between debt stocks exacerbating the adverse consequence of high deficit. Brauninger (2002) examined the interaction of budget deficit, public debt and endogenous growth in Spain using co-integration analysis. It was revealed that if the ratio of deficit fixed by government is below a critical level, then there are two steady states where capital and public debt grow at the same constant rate and an increase in the deficit ratio will reduce the growth rates of gross domestic product (GDP). This means that if the deficit ratio exceeds the critical level, then there is no steady state of economy. Pattillo, Helene and Luca (2002) used growth accounting model to investigate the effect of external debt on economic growth in a group of 61 developing countries. The study observed that doubling the average level of 61 developing countries external debt reduced the growth of the country's economy. The results obtained

confirm the debt overhang because they found that beyond the debt-to-export ratio of 160-170 percent and debt-to-GDP ratio of 35-40 percent in nominal value, the debt overhang led to negative economic growth.

Clements, Rina, Benedict and Toan (2003) used modified growth model to investigate the impact of debt burden hypothesis on economic growth. The study found that a six point debt service reduction in percentage of GDP will increase the investment rate from 0.75 to one point and the growth to two points. They concluded that if half of the debt service were cancelled without a rise in the budget deficit, growth will increase by 0.5 percent per annum. With the use of non-parametric methodology in an economy, Adeboye (2003) examined the long run relationship between budget deficit and economic growth incorporating savings and investment. He grouped 64 developing countries, Nigeria inclusive into A, B, and C based on their level of interest rate. The study indicates that crowding out effect of budget deficit on private investment in Nigeria's economy has significance impact on the economic growth output, the level of employment, the standard of living. The study recommends that the government should put adequate measures in place to reduces its recurrent expenditure and increase its capital expenditure in order to encourage and make conducive environment for private investment to grow which will help the level of income growth in short and long run. Okoye and Akenbor (2010) examined the impact of deficit financing on socio-economic activities in Nigeria from 1997 to 2007 using Pearson product moment correlation coefficient to test the significance of the relationship between deficit financing, economic and social community service. The study found that deficit financing has a positive and significant impact on economic activities in Nigeria. Taiwo and Agbatogun (2011) used unit root test, co-integration test and error correction model to investigate the implications of government spending on economic growth in Nigeria spanning from 1980 to 2009. It was found that total capital expenditure, inflation rate, degree of openness and current government revenue are the most significant variables that help to improve or boost growth in Nigerian economy. It was recommended that future spending on capital and recurrent must be managed well with adequate manipulation of other macroeconomic variables so as tom ensure steady growth in the economy.

Vincent, Ioraver and Wilson (2012) investigated the relationship between fiscal deficit and economic growth in Nigeria using modeling technique that incorporates co-integration and structural analysis at 5% (0.05) level of significance from 1970 to 2006. The study with the help of co-integration techniques indicates that fiscal deficit affects economic growth negatively, that there is one percent increase in fiscal deficit which is capable of diminishing economic growth by about 0.023 percent and there is a strong negative relationship between government consumption expenditure and economic growth. Onyeiwu (2012) investigated the relationship between domestic debt and the growth of Nigeria economy. Parsimonions model, error correction model and ordinary least square (OLS) were used for analysis. He employed gross domestic product as dependent variable while foreign exchange rate, credit to private sector, budget deficit, money supply domestic debt. It was found that the domestic debt holding of government is far above a healthy threshold of 35 percent of bank deposit s the average over the period. This means that the level of bank deposit is presenting evidence of crowding out private investments. The study also indicates that the level of domestic debt in Nigeria has negative effect on economic growth. The study recommends that Nigeria government should maintain a debt - bank deposit ratio below 35 percent and resort to increase in the use of tax revenue to finance its project and should not involve in any project that private sector can handle while providing enabling environment for private sector investment to operate. Osuji and Ozurumba (2013) investigated the impact of external debt financing on economic development in Nigeria using stationarity test, co-integration test and vector error correction model. The study shows that London debt financing possessed positive impact on economic growth while Paris Club debt and Promissory Note were inversely related to economic development in Nigeria. The study recommended that debt services should be cancelled to encourage survival of SMEs in Nigeria. Ojong and Hycenth (2013) examined the effect of budget deficit financing on the development of the Nigerian economy using ordinary least square (OLS) regression techniques. It was found that there is a significant relationship between economic growth and government

expenditure and there is no significant relationship between government revenue and economic growth in Nigeria. The study recommends that the government should maintain a high level of transparency in governance so as to bring to the barest minimum the level of deficit financing.

Okoro (2013) used granger causality and vector auto regression (VAR) techniques to test the hypothesis that deficit financing affects trade balance in Nigeria between 1980 to 2008. It was found that through short run dynamics result; there is positive relationship between deficit financing and trade balance (surplus). While the long run result posits that an increase in deficit financing diminishes trade deficit in Nigeria. This means that deficit financing is an available instrument for government to improve trade in the short run and in the long run, deficit financing could be used to reduce trade deficit in Nigeria if properly managed by government. Akinmulegun (2014) undertook a study of deficit financing and its effect on economic growth in Nigeria, employed the econometric technique of Vector Auto Regression (VAR) Model. The relevance variables used are as follows: real gross domestic product (RGDP), the gross capital formation (GCF), the real interest rate (RINTR), inflation rate (INFR) and budget deficit. It was discovered that deficit financing has not contributed significantly to economic growth in Nigeria. This is because of the negative impact of deficit financing on economic growth during the period under review. The study recommends that government should reduce unnecessary public spending, ensure greater budget discipline and adopt a financial structural transformation that can help to reduce wastage in public spending.

### **Theoretical Framework**

There are many theories (Keynesian economics theory, neoclassical economics theory, Ricardian equivalence approach, Fiscal Theory of Price Level and Musgrave Theory of Public Expenditure) which seek to explain the implications of deficit financing on the performance of economic stability around the world. These theories are of relevance to this study as they serve as building blocks to this thesis. For the purpose of this study, the theoretical frameworks that were considered relevant are as follow:

### **Keynesian Economic Theory**

Keynesian Economic Theory was developed by British Economist John Maynard Keynes (1936) and was used by Ali (2014); Bakare, Adesanya and Bolarinwa, (2014); Muhammad, Sofia, Syed and Abbas, (2014); Okelo, Momanyi, Lucas and Alia, (2013); Okoro, (2013); Ojong and Hycenth (2013) in their studies. Keynesian theory states that public expenditures can contribute positively to economic growth by increasing government consumption through increase in employment, profitability and investment. The theory also states that government can reverse economic downturns by borrowing money from the private sector and returning the money to private sector through various spending. This theory believes that active government intervention in the market place through deficit financing was the only method for ensuring growth and stability by ensuring efficiency in resources allocation, regulation of markets, stabilization of the economy and harmonization of social conflicts. Keynes states that in the short run, economic growth through economic stability is strongly influenced by total spending in the economy. This theory regards the economy as being inherently unstable and required active government intervention through spending to achieve economic stability. Parkim (1990) opines that Keynesian assign a low degree of importance to monetary policy and high degree of importance to fiscal policy. Bowden (1982) in Ojong and Hycenth (2013) states that Keynesian economics believes that our ability to understand what determines the level of spending will help us to know what determine the level of employment, production of output and income in the economy. Keho (2010) states that budget deficit has a positive effect on macroeconomic activity and thereby stimulating savings and capital formation. Deficit financing whether through domestic resources or foreign borrowings involves the absorption of real resources by the public sector that otherwise would be available to the private sector (Okelo, Momanyi, Lucas and Alia, 2013). Keynesian theory stimulates

the economy, reduces unemployment and makes households feel wealthier using government spending (Usher, 1998). In another view, Okpanachi and Abimiku (2007) opine that budget deficit stimulates economic activities in the short run by making households feel wealthier and hence, raising total private and public consumption expenditure. This means that Keynesian theory causes money demand to rise and interest rate will also increase which will make investment to decline. Keynesian economists often argue that private sector decisions sometimes lead to inefficient macroeconomic outcomes which require active policy responses by the public sector, in particular, monetary policy actions by the Central Bank of Nigeria and fiscal policy actions by the federal Ministry of Finance, in order to stabilize output over the economy thesis. For the purpose of this study, the theoretical frameworks that were considered relevant are as follow:

### **Neoclassical Theory**

Bluatia (2010) Argued that neoclassical group of economists proposed an adverse relationship between budget deficits and macroeconomic aggregates. They maintained that budget deficits lead to higher interest rates discourages the issue of private bonds, private investment, private spending and increases inflation level and creates a similar increase in current account deficits and slows the growth rate of the economy through resources crowding-out. This school of thought considers individuals planning their consumption over their entire cycle by shifting taxes to the future generations. Budget deficits increase current consumption by assuring full employment of resources. The neoclassical maintains that increased consumption means a decrease in savings. Interest rate must rise as to bring about equilibrium in the capital market.

Higher interest rates in turn bring about a decrease in private investment, domestic production and an increase in the aggregate price level. Yellen (1989) argued that in standard neoclassical macroeconomic models, if resources are fully employed so that output is fixed, higher current consumption means an equal and offsetting reduction in other forms of spending. Therefore, investment or net exports must be “fully crowded-out.” It is important at this point to differentiate between “financial” crowding out and “resources” crowding out which occurs when the government competes with the private sector on purchasing certain resources such as skilled labour, raw materials etc. when the government sector expands, the private sector will contract because of the increase in prices of these resources due to an excess demand by the government. This will lead to a fall in investment and consumption by the private sector. Therefore, the government sector’s expansion crowds out the private sector; the resources crowding out are an important issue to take into account especially in a developing country like Nigeria where resources are scarce even sometimes to the private sector. Any excess demand for these resources by the government will severely impinge on private sector productivity.

### **The Ricardian Theory**

There is another model or approach as advanced by Barro (1989) called Ricardian Equivalence Hypothesis (REH). This model suggests that government budget deficits do not affect the total level of demand in an economy. This model was initially proposed by the 19th century economist such as David Ricardo. This theory simply denotes that government may either finance their spending by taxing current taxpayers, or they may borrow money. If funds are borrowed, government must eventually repay this fund by raising taxes above what they would otherwise have been in the future; the choice therefore is between “tax now” and “tax later”. David Ricardo argued that although taxpayers would have more money or fund now, they would realize that they would pay higher tax in future and save the extra money in order to pay the future tax. The extra savings by consumers would offset the extra spending by government; therefore overall demand would remain unchanged. Recently economists such as Barro (1990) have developed sophisticated variations on this idea by using the theory of rational expectations. Ricardian equivalence suggests that government’s attempt to influence demand by using fiscal policy will

prove fruitless. He maintained that an increase in budget deficits as a result of an increase in government spending must be paid for either now or later, with total present value of receipts fixed by the total present value of spending. Which suggests that on cut in today's taxes must be matched by an increase in future taxes leaving real interest rates and thus private investment and the current account balance, exchange rate and domestic production unchanged. Therefore budget deficits do not crowd-in nor crowd out macroeconomic variables, that is no positive or negative relationship exists.

## **METHODOLOGY**

This study in an attempt to investigate the Impact of Budgetary Deficit on the Nigerian Economic Growth utilized the exploratory research approach. The major findings are subsequently discussed to provide a deeper perspective to the issue in question.

## **RESULT AND DISCUSSION**

The major finding from this study is the fact that; there is significant positive correlation between deficit financing and economic growth in Nigeria. From this finding its clear to conclude that deficit financing have positive impact on economic performance of Nigeria, This clearly shows that financing activities affects economic growth positively. From our findings inflation has been established as monetary phenomenon in Nigerian economies; for budget deficit to be effective, some fundamental changes in the productive base of the economy need be made. Based on the study findings, government of these economies should pursue policies capable of reducing in the size of informal sector which has imposed greater constraint to revenue collection and generation. Also, interest rate should be further reduced to enable availability and accessibility of funds for private sector investment which will contribute significantly to economic growth of the Nigeria. Furthermore, exchange rate depreciation should be discouraged in the economy as it has negative implication to the economic growth. Moreover, the regional blocks which these economies belong should be mindful of adoption of one-way-fit-all policy as it may have different consequences on individual economy rather than all member countries. Finally, fiscal discipline is highly recommended for the both economies to combat unsustainable fiscal deficits. Views and opinions expressed in this study.

## **CONCLUSION AND RECOMMENDATION**

Based on the findings of this study which show that, there was causal relationship between budget deficit and inflation in Nigeria, government should display a high sense of transparency in the fiscal operations to bring about realistic fiscal deficits. Fiscal deficits, where recorded, should be channeled to productive investments like road construction, electricity provision and so on, that would serve as incentives to productivity through the attraction of foreign direct investments, in other to reduce the incidence of inflation in Nigeria. Also, the implication of these findings was that both budget deficit and inflation could be caused by money supply meaning that they were both monetary phenomenon. Inflation was also found to be dependent on performance of the budget (deficit). The increase in money supply could as well help to cushion the extent of budget deficit in an economy, whereas, the same increase in money supply might still lead to an increase in the rate of inflation. Hence, adequate monetary policy should be geared towards balancing the role money supply performs to both budget deficit and inflation, noting that there was uni-directional relationship between budget deficit and inflation.

Based on the causal relationship that exists between budget deficit and inflation, relevant measures has to be put in-place in order to enhance policy coordination among various arms of government, especially monetary policy should be made to complement fiscal policy. According to the result of this research work, inflation has been established as monetary phenomenon in Nigeria. Then, for inflation to be curtailed, government should strongly adhered to fiscal discipline at all levels for budget deficit to be effective. In the quest of Nigeria to achieve high and sustained long-run economic growth, monetary policy has to be strengthened to act as checks and balances, that is, monetary policy should be used to complement fiscal policy, in order to curtail inflation when budget deficit is used as fiscal policy

instrument. From the research study, it was impossible for aggregate demand side of the economy to be motivated without causing inflation in an economy. Hence, government has to employ policy mix so as to put inflation under control if the gain that government intends to achieve through the promotion of economic growth is not to be eroded.

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## **Effect of Corporate Governance on Financial Performance of Non-Governmental Organizations in Nigeria: Evidence from Pro-Health International**

**UGE, Marshall Emeka**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail:ugemarshall@gmail.com, Phone No: +234 8068798944

### **Abstract**

*The main objective of this study was to establish the effect of corporate governance on financial performance of NGOs in Nigeria with emphasis on Pro-Health International. Secondary data was obtained from Pro-Health International annual reports and accounts, and notes to the financial statements. The sample was focused on Pro-Health, an implementing partner of foreign donor funded project for the period 2011 to 2020. The dependent variable financial performance was proxy by grants and award value and the independent variable corporate governance was proxy with board diversity, frequency of meetings and evaluations. The results revealed that corporate governance had significant influence on financial performance of NGOs in Nigeria and tests for significance also showed that frequency of meetings influence was statistically significant ( $r=0.533$ ). Embracing corporate governance practices therefore positively influence financial performance of NGOs in Nigeria. It is recommended that government should develop a code of conduct that outlines proper corporate governance measures for NGOs in Nigeria considering the voluntary nature of the members of the board. Also, the significant nature of meeting frequency requires that boards meet at least quarterly to ensure extensive program performance and financial review and feedback. It is also recommended that the organization establish an audit committee for effective monitoring of assurance services and financial performance.*

Keywords: Corporate Governance, Budget burn out, NGO, Audit Committee, Diversity

### **INTRODUCTION**

In this study, the term NGO will be a non-profit organization that operates independently of any government, typically one whose purpose is to address a social, economic, cultural, and political issue with funds being raised from aids and donations from individuals, corporate organizations within the country and from international agencies to carry out series of health, education and social services to ameliorate the sufferings on her citizens. Sammy et al. (2015) NGOs have not only grown in number and capacity, but also regarding their political influence. The numbers of NGOs with consultative status at the United Nations (UN) were limited in 1945 but the number increased to 3,289 in September 2009 (UNDESA, 2009). The World Bank reports that projects with some degree of civil society' involvement increased from six percent in the late 1980s to over 70 percent in 2006 (Werker and Ahmed, 2008). NGOs render welfare services and help in all such sectors of society, which aim to improve the life of the people in the community. NGOs can perform a major role because of having features for the promotion of micro- level development (Nzimakwe, 2008). NGOs are often seen as more trustworthy and credible than governments or private firms (Todaro, 2009). NGOs also provide public goods to sections of the population that might be socially excluded. The study hypothesis is

### **NGOs Global Perspective**

The period between 1978 and 1985 saw an 'explosion of donor aid' in Sri-lanka when 70% of the total \$6,140 million aid was received between 1960 and 1985 (Bastian, 2007). The rapid influx of foreign funds allowed overall government expenditure to rise. This 'minor Keynesian boom' helped to entrench and extend existing modes of governance and expanding police and military sectors (Spencer, 2008). Total aid to Sri Lanka increased significantly after the war ceasefire, rising from \$572 million in 2002 to \$991 million in 2003 (ERD, 2003). In 2003, donors pledged \$4.5 billion to help development and

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reconstruction in Sri Lanka and delivery of these funds was contingent upon progress in peace negotiations. As well as attempting to avert the resumption of conflict by applying peace conditionality's, aid was designed to address both the consequences and the causes of conflict (Goodhand and Klem, 2005).

NGOs in Bangladesh claim to operate in over 90% of villages (Fruttero and Gauri 2005), benefiting 35% of the population (Thornton et al, 2000). It's believed that the root cause of poverty was social injustice, and that poverty could not be eradicated until there was a 'basic change in the social structure' (Rutherford, 2010). Many NGOs work in two ways. They modify traditional products into handicrafts for which there is a market. The income affords people access to mass produced industrialized goods. A few NGOs, such as Bangladesh Rural Advancement Committee (BRAC), became agents for multinational companies such as Monsanto and Information Technology businesses. (Aminuzzaman et al, 2003). They also take responsibility to market the produce as a further extension of NGO business (Makita, 2009). In 1992 the government was forced to withdraw its order to cancel the registration of a few NGOs for financial irregularities. In 2007, NGOs resisted the government's attempt to modify the 1978 regulation on NGOs (Agarwal et.al. 2007). However, in 2006 the government was forced to implement the regulations on NGOs because of widespread financial corruption and swindling of the poor's money by many NGOs (Jumma and Nasir 2007). In Botswana the local NGOs play a huge role by bringing the much-needed services to the communities in which they operate (Hans, 2003). Helen et al. (2005) identify the strengths of the local NGOs as being flexible as opposed to government bureaucrats to respond to community needs and priorities. In the initial phases of Africa Comprehensive HIV/AIDS Partnership (ACHAP) activities in Botswana, they faced a lot frustration from government bureaucrats and red tape and they choose to engage local NGOs to facilitate quick implementation of their projects (Ramiah & Reich, 2006).

By June 2010 in Kenya the NGO Co-ordination Board had registered a total of 6,752 organizations (Sammy et al, 2015), they also posited that on average the sector has grown at the rate of 490 organizations per annum in the last ten years (NGO Board, 2010). The annual report for 2010 by the NGO Co-ordination Board further highlights that during the period in review (2010) most projects implemented by NGOs were in the Education followed by Health sectors. The emphasis on Health was consistent with the focus of the Millennium Development Goals and Vision 2030 (Kenya Vision 2030, 2008). Mbote (2000) notes that the proliferation of NGOs in the 80s and 90s in Africa and particularly in Kenya was as a result of the escalation of poverty, civil strife, internal displacements of people following war and conflicts and the general degradation or near collapse of socio-economic and political systems. For the first time in 1978, Kenya experienced a proliferation of civil society organizations (CSOs) that could be distinguished from the state (M'boge and Doe, 2004).

### **NGOs in Nigeria**

The registration of NGOs in Nigeria is done under Part A of the Company and Allied Matters Act as a company limited by guarantee or under Part C of the Companies and Allied Matters Act as Incorporate Trustees. As of 2021 the total number of Non-Governmental Organizations as reported by Nigeria Network of NGOs (2021) is 5003. Mohammed J.I (1985) with the dwindling economy of the nations the government cannot solely shoulder the responsibilities of development of the entire nation. For a sustainable development to be experienced in any rural area in Nigeria, there must exist active collaboration between government, non-government organization, communities, and the rural dwellers. The rural people need the recognition and help of government to enable them form co-operative and production organizations for quicker development and sustainable health system. In Nigeria NGOs have been greatly involved in developmental strides working with both Local, State and Federal Governments with fundings from both local and foreign donors including United States Agency for International Development (USAID), USAID has a long and proud history of assistance to Nigeria that dates to 1960, the year that Nigeria became the 26th African nation to gain independence. At that time, the U.S. Government awarded grants to four major U.S. state universities (Michigan State, Wisconsin State,



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Kansas State, and Colorado State) to build colleges of agriculture in four Nigerian universities: the University of Ibadan, University of Nigeria-Nsukka, Ahmadu Bello University-Zaria, and the University of Ife. From 1994 to 1999, USAID programming in Nigeria was reduced due to political sanctions imposed due to an increase in drug trafficking. During that time, the USAID program was relatively small—about \$7 million a year—and implemented entirely by NGOs. U.S. development assistance focused on population, health, child survival, democracy, HIV/AIDS, and support to advocacy groups. Despite their small size, the health and democracy programs achieved impressive results preventing a collapse in the provision of health care services in Nigeria prior to the country's political transition and, after the transition, provided the building blocks that would help the new government lay a foundation for democracy.

In May 1999, the military dictatorship that devastated the economic and social capital of the country ended and an elected, civilian-led government that represented the will of the Nigerian people was created. This change led to the transformation of USAID's relatively small health and democracy work into a fast-paced elections and subsequent transition program. Since the democratic transition, USAID in Nigeria has shifted from a small office to a robust mission that works in partnership with the Government of the Federal Republic of Nigeria. Their partnership with the people and government of Nigeria continues today with programs that prevent and mitigate conflict, strengthen government services and institutions, and improve Nigerians' livelihoods. In partnership with the Nigerian people, USAID is unleashing a new spirit of innovation and results-based development. Their success depends on listening and connecting with local leaders and communities, leveraging trust and partnership to support the vital work that remains to be done.

### **Code of Corporate Governance in Nigeria**

Corporate governance is the mechanisms by which corporate managers are held accountable for corporate management and financial performance, and the mechanism by which business is organized, directed, and controlled (Krivogorsky & Dick, 2011). A theoretical perspective of stakeholder-agency allowing exploring the impact of corporate governance mechanisms on the company's financial performance is the subject of an empirical research by Kock et al., (2011) starting with the work of Hill and Jones, (1992), who speak of a stakeholder agency paradigm in which the managers can be seen as the agents of various stakeholders. The results of this research indicate that the corporate governance mechanisms employed affect the company's financial performance by increasing the manager's sensitivity towards the stakeholders' preferences. Recently researchers have managed to come up with other definitions of corporate governance. Strine (2010) pointed out that corporate governance is about putting in place the structure, processes and mechanisms that ensure that the firm is directed and managed in a way that enhances long-term shareholder value through accountability of manager, which will then enhance firm financial performance. Currently financial sectors have seen the importance of having good corporate governance practices (Kolk & Pinkse, 2010). IFC (2004) examined the benefits of having good Corporate Governance at different levels. At the 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, on the other hand corporate governance reduce financial crisis.

Currently many country leaders all over the world have increased concern over corporate governance due to the increase of reported cases of frauds, inside trading, agency conflicts among other corporations' saga (Enobakhare, 2010). This is supported by Ahmad (2006) who argued that a sound banking system requires appropriate infrastructure to support efficient conduct of banking business operating environment, governance, and regulatory framework at domestic as well as international levels in order to reduce bank crisis. The World Bank is helping many economies to undertake the banking sector reformation and restructuring. This exercise will ease, reduce or eliminate some fatal global macroeconomic troubles which have emanated from poor governance of large financial and non-financial institutions (Zaharia et al, 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).

Board diversity could be used as a proxy for corporate governance. It is the mixture of men and women, people from different age brackets, people with different ethnic groups and racial backgrounds (Enobakhare, 2010). Currently board diversity is a highly debatable corporate governance topic. The topic put more emphasis on, gender diversity, i.e. the inclusion of women on corporate boards of directors, considered as an instrument to improve board variety and thus discussions. Though board diversity might be a constraint according to Goodstein, nevertheless it goes without doubt that for boards to be effective there is need for diverse perspective (Ogbechie & Koufopoulos, 2009). There has been an increasing focus on studies about board composition such as board size, board diversity and board independence (Carter, Simkins, & Simpson, 2003; De Andres et al., 2005; Erhardt, Werbel, & Shrader, 2003). Several studies tried to relate board diversity with organizational performance. Carter, D'Souza, Simkins, and Simpson (2010) indicate that gender and ethnic diversity in board of director could lead to better corporate governance which leads to the more profitable business. Furthermore, some previous studies prove clearly that board diversity is positively associated with firm financial performance (Carter et al., 2003; Erhardt et al., 2003; Kiel & Nicholson, 2003). On the contrary, the other studies show the opposite result: there is no significant relationship between board diversity and financial performance (Adams & Ferreira, 2009; Carter et al., 2010; De Andres et al., 2005; Ross, 2008). Despite this, there has been mixed evidence regarding the effect of board diversity on performance, diversity in board composition is still considered favorable based on these two important reasons (Kang et al,2007). Firstly, diversity increases discussion, exchange of ideas and group performance. A more diverse board provides different insights and perspectives in facing problem and finding solution. As reported by Dutta and Bose, (2006) the presence of women on boards of directors is limited, even if the literature reveals a slow but steady rise in the female presence on corporate boards throughout the world. With reference to the relationship between gender diversity and firm financial performance, the few existing empirical studies show contrasting results. Considering the United States context, Zahra and Stanton (1988) find no statistically significant relationship between gender diversity and firm financial performance. Dutta and Bose, (2006) reported a statistically significant positive relationships between both the presence and the percentage of women on the board of directors and market value added (MVA) and firm value.

The Audit committee (AC) has been endorsed by professional and regulatory committees to be adopted by corporate entities. The AC is thought to be effective in overcoming weaknesses in corporate governance and serving as one of the measures in curtailing the agency conflict. The agency framework developed by Jensen and Meckling (1976; Jensen & Fama, 1980) depicts the AC as a means of reducing these agency costs, providing more credibility to the firm, boosting its image which subsequently lead to increased financial performance . Kajola (2008) seeks to examine the relationship between audit committee and two firm financial performance measures: return on equity (ROE) and profit margin (PM) of a sample of twenty Nigerian listed firms between 2000 and 2006. Using panel methodology as a method of estimation, the results could not provide a significant relationship between the two financial performance measures and audit committee. In 2018, the Nigerian Code of Corporate Governance (NCCG) was issued for private companies, public companies, and not-for-profit Entities. The new Code is made up of seven (7) parts and contains twenty-eight (28) principles. It covers the 'board of directors', 'audit', 'relationship with shareholders', 'business conduct with ethics', 'sustainability', 'transparency' and 'definitions' The Code is principle-based and requires the 'apply or explain' approach. All companies are required to apply the Code or explain the reasons for not adopting them. The rationale for using the 'apply or explain' approach is to encourage better corporate governance practices in Nigerian companies. The issuer of the Code, the Financial Reporting Council of Nigeria, is saddled with the responsibility to monitor the implementation of the Code through sectoral or industry regulators. Each sectoral regulator has been empowered to impose appropriate sanctions for violations of the Code based on sectoral or industry laws and regulations. The 2018 NCCG improves on the previous code in three key areas namely;

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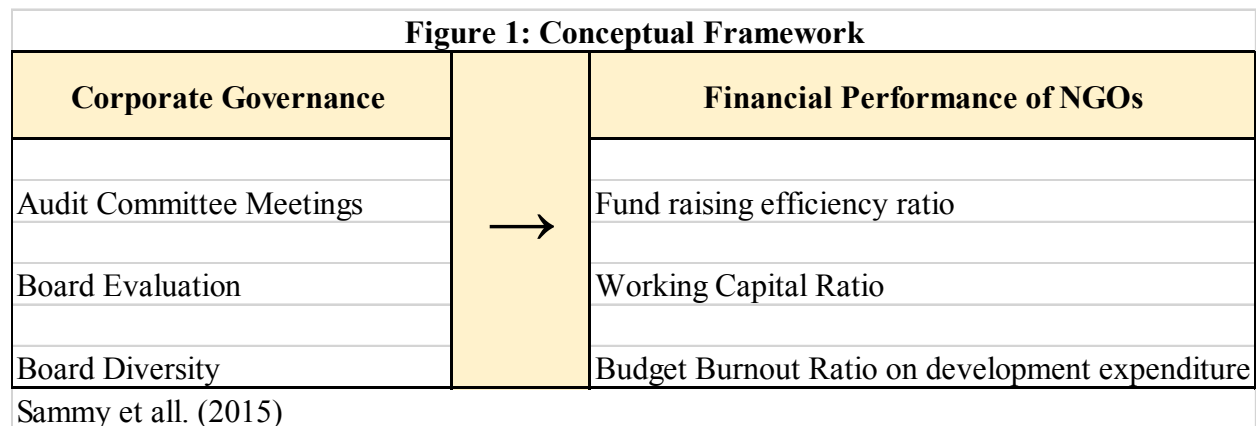
by specifying an effective whistle-blowing framework for reporting any illegal or unethical behaviour; by requiring companies to pay attention to sustainability issues including environmental, social, occupational and community health and safety issues, and; by promoting full and comprehensive disclosure and transparency to investors and stakeholders.

It could then be said that corporate governance is key to the success of corporate organizations because it creates a system of rules and practices that determine how a company operates and how it aligns the interest of all its stakeholders. Good corporate governance leads to ethical business practices, which leads to financial viability. This study attempts to contribute to the existing literature focusing the debate on corporate governance and financial performance of NGOs from a developing country perspective and examine the corporate governance practices and financial performance of Nigeria NGO with focus on Pro-Health International (PHI), an indigenous, faith-based, non-profit, non-governmental and community-focused organization that was established 30 years ago (1991). The establishment of PHI was in response to the dire health needs of Nigerians especially those in rural, hard-to-reach communities who cannot access health care due to the absence of a health facility in their community or remoteness of the nearest facility, ignorance or poor socio-economic background. PHI provides a platform that emphasizes and encourages voluntary, collaborative and resolute effort by fellow Africans to give back to society. the study also attempts to fill the gap in finance literature addressing the research question “How does corporate governance affect financial performance of NGOs in Nigeria”. The study is systematized as follows; section two provides literature review that examines theories of corporate governance; the methodology is developed in section three while section four provides analysis and discussion of the results. The last section provides Summary, conclusion, and recommendations.

**LITERATURE REVIEW**

**Conceptual Framework**

A conceptual framework is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation (Kombo and Tromp, 2009). It forms part of the agenda for negotiation to be scrutinized, tested, reviewed and reformed as a result of investigation and it explains the possible connections between the variables (Smyth, 2009). A conceptual framework for the study shows the relationship of corporate governance on financial performance of NGOs in Nigeria.



**Empirical Review**

Sammy et al., (2015) in their study of corporate governance on financial performance of NGOs in health sector in Kenya that was based on agency theory held that that corporate governance had significant influence on financial performance and the tests for significance also showed that the influence was statistically significant (r=0.342). Embracing corporate governance practices, therefore, positively influence financial performance of NGOs in health sector in Kenya. Kock et al., (2011) studied corporate governance based on stakeholder-agency paradigm in which the managers can be seen as the agents of

various stakeholders. The results of this research indicated that the corporate governance mechanisms employed affected the company's environmental financial performance by increasing the managers' sensitivity towards the stakeholders' environmental preferences. More specifically, the empirical evidence showed that companies that had a greater exposure to the market for corporate control also had a lower greater representation of pro-stakeholders' directors in their boards, and a superior level of financial performance. Hermalin and Weisbach (2003) argue in their paper that larger boards can be less effective than smaller boards. They further that too many members on a board may create agency problem, and some members may be considered free rider without corresponding impact to relevant decision making. More recent empirical studies have supported this finding (Jensen, 2003) and noted that large board size can be disadvantageous and expensive for the firm.

Chen (2008) in his studies of 923 large firms from 1998 to 2004 concluded that the multiple directorships have both cost and benefits to the firm. He found that firms with high growth opportunity and low agency conflict need multiple directorships which can be source of beneficial advising and can lead to improvement in firm financial performance. Kajola (2008) seeks to examine the relationship between four corporate governance mechanisms (board size, board composition, and chief executive status and audit committee) and return on equity (ROE), and profit margin (PM), of a sample of twenty Nigerian listed firms between 2000 and 2006. Using panel methodology as a method of estimation, the results provide evidence of a positive significant relationship between ROE and board size as well as chief executive status. Hermalin and Weisbach (2003) studied corporate governance on companies listed in the stock exchange rather than NGOs. The studies also focused on board size as a measure of corporate governance. Corporate governance is a wider concept that should be measured by many other variables such as board diversity, frequency of meeting and evaluation, independency and accountability. This study measures financial performance in terms of non-profitability ratios such as budget burn out rates on program expenses, fund raising ratio and working capital ratio. This is a divergent from previous studies that measured financial performance of organizations using profitability ratio analysis such as returns on investment and return on capital employed.

## **Theoretical review**

### **Agency Theory**

A theory is a systematic explanation of the relationship among phenomena that provide a generalized explanation to an occurrence (Kombo & Tromp, 2009, Smyth, 2009). This study was guided by agency theory. This is premised on the 1976 article on theory of the firm: Managerial Behavior, Agency Costs and Ownership Structure by Jensen and Meckling helped establish agency theory as the dominant theoretical framework of the corporate governance literature, and position shareholders as the main stakeholder (Lan et al., 2010). Berle and Means (1933) discuss issues surrounding the separation between ownership and control in large organizations and became widely accepted when Jensen and Meckling (1983) formulated the agency problem in the governance of organizations. The theory is defined as the relationship between the principals which may include Board of Directors/Trustees of NGOs on the one hand and the agents comprising Managers on the other hand. The principals usually dedicate their authority to agents. However, organization objectives may not be achieved because the agents with whom principals have entrusted the operations will act opportunistically to attain their own interest instead of the principals' interests thus creating the agency conflict. To mitigate the agency problems, the principal-agent risk bearing mechanism must be designed efficiently; and the design must be monitored through the nexus of organizations and contracts. This makes the firm incurs agency costs in ensuring that managers' activities are aligned to the organization's goals and activities. The theory was relevant to the study because it explains the principal –agent relationship between Board of directors/trustees and managers of NGOs and possible conflicts that may arise thereof.

### **Stewardship Theory**

Stewardship theory describes the role of management leadership in maintaining and developing the organization's value, although it works temporarily therein. According to this theory; Schoorman & Donaldson (1997) state that "an administrator protects and maximizes shareholders' wealth; thus, the shareholder's utility functions are maximized. From this perspective, directors and managers work for shareholders ensuring the growth of shareholders' wealth. In comparison with agency theory, where the managers are tempted to take decisions for their own advantage, not for the owners, the steward theory assumes that managers act not in their own interests, but in each conflict-of-interest situation they put the company's interests in front of the personal ones. The conceptual foundation of the theory is related to the development of work motivation theories by McGrigor in the '60s and more specifically to the Y Theory that assumes that managers are rational beings, so there isn't any need to excessively monitor their behaviour as the agency theory assumes (Nicholson & Kiel 2007).

According to Fulop (2011), because steward theory considers as an important factor the board director structure, it must be composed of company intern members because they know best the company's problems and can react accordingly. If the board of directors is composed only of external members, they don't react as promptly to the daily problems of the company. As Solomon (2007) highlights, the outside directors (outsiders directors) can monitor the maximizing of the business performance only on a short-term because their knowledge about the work activities is less compared to the directors coming from inside the company (the insiders) who closely know the daily company's problems.

### **Stakeholders Theory**

As a development of the agency theory the stakeholder theory rises up. The term "stakeholders" refers to all persons, groups or organizations that have an impact on the company's activity or are influenced by the company. It's about: the owners, shareholders, investors, employees, customers, suppliers, business partners, competitors, the government, local government, NGOs, pressure groups, communities, media and so on. Each of these parts somehow interacts and influences the business of a company. In the years 1980 -1990, Stakeholder Theory has changed the shareholders paradigm of Milton Friedman (1970) who considers that maximizing the financial results for shareholders is the highest concern of a company. Stakeholder theory was developed by Freeman (1984) and it is focused on the corporate responsibility's view related to various categories of stakeholders. Stakeholder theory rises from an increasingly acute need for corporate social responsibility in the current context of transition from an industrial society to a new society called "post-modern", "post-industrial", "post-capitalist", "post- structural", "post-traditional" society. The new economy is characterized by a complex and profound change in all fields, with major social and environmental implications in corporate social responsibility areas.

In the actual context of world economy globalization, the performing company is an "enterprise that creates added value for its shareholders, customers demand, taking into account the views of employees and protecting the environment. So, the shareholders are satisfied that the company has achieved the desired return, customers have confidence in the future of the company and the quality of its products and services. The company's employees are proud of where they work, and society benefits of environmental protection." (Jianu, 2006) The concept is based on the stakeholder theory and managers acting to maximize the company's value in order to avoid ignoring the interests of their social partners. The harmonization of these interests is ensured by the corporate governance system. (Robu, 2004). This theory of corporate governance based on maximizing the interests of all stakeholders has proved to be the most efficient in history, not only because it conducts to the economic success of the company, but also because it works to achieve a competitive advantage due to gain people's trust and consequently a goodwill on the market (European Commission, 2005)

### **Transaction Cost Theory**

Unlike agency theory, transaction cost theory explicitly uses the concept of corporate governance. (Fulop, 2011) This theory states that the company is a relatively efficient hierarchical structure that serves as framework to run the contractual relationships. The main concern in transaction cost theory is "to explain

the transactions conducted in terms of efficiency of governance structures." (Wieland 2005). The fatherhood of "transaction costs" was attributed to Ronald Coase, who in his famous article *The Nature of the Firm*, in 1937, has built the judgment regarding the firm's existence without using, explicitly, the concept of "transaction costs" but that of "cost of using the price mechanism" (Coase, 1988). Coase substantiates his argument about the nature of the firm by emphasizing that organizing the production through the market channels (contracting by market) involves some costs. So, by creating an organization which has the responsibility for resources allocation, some expenditure can be avoided. Going forward, transaction cost theory is developed by Kenneth Arrow who defines transaction costs as "operating costs of the economic system." (Arrow, 1969) Later, Williamson, founder of the transaction cost economics, believes that "the study of governance include: identifying, explaining and combating all types of risky contracts" (Williamson, 1996). Certainly, in addition to transaction costs, agency costs resulting from divergent relationship between manager and shareholder's interests and information asymmetry, must be taken into consideration, costs which are based on two sources (Fulop, 2011): the costs inherent due to an agent's use (e.g., the risk that agencies use the company's resources for their own purpose) and costs involved by protecting against the risks associated with the use of an agent.

## **METHODOLOGY**

This study is a longitudinal study that used secondary data covering the period of 2011 to 2020, the choice of this time frame is because it is the period within which financial data will be available considering that most donor funded projects have a period of 7 years for the maintenance of financial documents before it could be destroyed and coupled with the fact that Non-Governmental organizations have limited resources to archive/retain documentations for longer period of time due to its associated cost. The researcher adopted a time series research design. A time series is a sequence of data points, typically consisting of successive measurements made over a time interval. The technique comprises methods for analyzing data to extract meaningful statistics and other characteristics of the data to predict future values based on previously observed values. Kumar (2005) observes that research is the process of collection, analysis and interpretation of data in order to answer questions Several researchers have provided empirical evidence suggesting that organization that embraced corporate governance had a superior level of financial performance. Kock et al (2011) found out that those organizations that embraced corporate governance had a superior level of financial performance while Chen (2008) established that multiple directorship led to improved firm performance. Therefore, based on theoretical and empirical evidence reviewed on agency theory, the researcher formulates the following hypotheses;

**H01:** Board diversity has no significant effect on financial performance

**H02:** Frequency of meeting has no significant effect on financial performance.

The principal functions of financial performance measurement are to ensure that organizations are held accountable for their financial performance (Sharma, 2012). Ritchie and Kolodinsky (2003) concluded that fiscal performance and fund-raising financial ratios are reliable and appropriate to evaluate financial performance of NGOs. Sammy et al. (2015) The Charity Navigator in United Kingdom uses program service ratio and fundraising ratios as a means of measuring the financial health of NGOs. Program service ratio refers to budget burn out rates on development expenditure obtained by dividing development expenditure and the total expenditure. Fundraising expenses is a ratio of fundraising expenses over the total expenditures (Charity Navigator, 2006). Working capital ratio is the ratio of current assets to current liabilities. In this study, fiscal performance, fundraising efficiency, and working capital ratios are used. Corporate governance was measured as a weighted average of the number of audit committee meetings held per year, number of board evaluations per year and board diversity measured in terms of proportion of board members who were women, youth and disabled.

## **RESULT AND DISCUSSION**

### **Indicators of Corporate Governance in NGOs in Nigeria**

### **Audit Committees**

The findings indicates that the organization does not have an audit committee on the board, and therefore is not in agreement with the results as indicated in the works of Sammy et al. (2015) which states that most (55.9%) of NGOs in the health sector had independent audit committees in place, Meciking (1976) who observed that most organizations have audit committee as a means of providing credibility to a firm, boosting its image and reducing agency conflict.

### **Board attributes**

The result indicates that board diversity though positive has no significant effect on financial performance, as the t-value for the relationship between Board Diversity and Financial Performance, was found to be 0.5684, with an associated p-value of 0.6002. since the p-value of 0.6002 was found to be higher than 0.10, we thus accept the first null hypothesis. This study though not significant but positive agrees with the findings by Sammy et al. (2015) that Most of the respondents indicated that they had two (2) women in their board of directors. It can therefore be concluded that most of NGOs in the health sector have two (2) women board of directors. Their finding corroborates with a study by Dutta and Bose (2007) who established that though the presence of women on corporate boards was limited, there has been a slow but steady rise in the female presence in corporate boards. The results also indicated that most NGOs in the health sector had two (2) representatives' each for people with disability and the youth in their boards. This finding is in line with report on the National Validation Survey of NGOs (2009) that stipulates that NGOs in Kenya is expected to demonstrate values of probity, self-regulatory, justice, service, cooperation, prudence respect. findings from the study revealed that frequency of meetings and evaluation has a positive and significant effect on financial performance.

<b>S/NO</b>	<b>GENDER</b>
1	Male
2	Male
3	Female
4	Male
5	Female
6	Male
7	Female
8	Male

Source: <https://www.prohealthintl.org/about-us/#>. Accessed March 25, 2022

**Table 2: Meetings and Evaluations**

<b>Year</b>	<b>Frequency</b>
2011	1
2012	1
2013	1
2014	1
2015	1
2016	1
2017	1
2018	1
2019	1
2020	2

Source: Extract from PHI board minutes

## CONCLUSION AND RECOMMENDATION

The study concludes based on the findings that the board diversity has a positive, but an insignificant relationship with financial performance, however, the study revealed that frequency of meetings and evaluation has a positive and significant effect on financial performance. However, the study has thus recommended that government should develop a code of conduct that outlines proper corporate governance measures for NGOs in Nigeria considering the voluntary nature of the members of the board. Also, the significant nature of meeting frequency requires that boards meet at least quarterly to ensure extensive program performance and financial review and feedback. It is also recommended that the organization establish an audit committee for effective monitoring of assurance services and financial performance

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# **Effect of Financial Reporting Quality on the Performance of Nigerian Capital Market**

**AKINTUNDE, Adewale John**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: adewalejohn@gmail.com, Phone No: +234 8034512503

## **Abstract**

*Corporate information presented by an entity has developed to be an essential resource for stakeholders since it curbs information asymmetry amid directors, prospective investors, regulatory organizations, society as well as other stakeholders. This study examined the effect of financial reporting quality on performance of the Nigerian Capital Market. The specific objectives of the study were to determine whether financial reporting quality mechanisms have any effect on financial performance of quoted firms in the market. The study employed descriptive research design. The population of the study comprised all the listed companies operating Nigeria Exchange Group Market. As it is often impossible and generally accepted that the entire population of a study cannot be studied. Thus, the researchers used both purposive and convenient sampling techniques which strategically to reflect the characteristics of the population to select fifteen (15) companies listed in the market which cuts across three key sectors and data extracted from the annual reports of these firms from year 2016 to 2020. A panel data regression was used to analyse the data. Financial reporting quality was proxied with Accrual Quality (AQ) and Earning Quality (EQ) performance was proxied with Market to Book Value (MTBV) of Firm. Size of the Firm (FSize) and Leverage (LR) were equally deployed as control variables. The empirical results indicate that Accrual Quality (AQ) and leverage has insignificant relationship on financial performance while Earning Quality (EQ) and Firm. Size also exerts positive but insignificant effect on Nigeria capital market financial performance. The study recommends that corporate organizations in Nigeria should be directed towards employing greatly skilled capable accountants to prepare corporate financial information so as to boost financial reporting quality as this would give room for a positive effect of financial reporting quality on capital market value*

**Keywords:** Financial Reporting Quality; Earnings Quality, Accrual Quality and Market to Book Value

## **INTRODUCTION**

The quality of financial report is very crucial to every management since the only means by which outside shareholders and investors keep themselves informed about the performance of the firm is through the disclosure of these reports (Olumide, Tanko & Nyor 2016). In the present economic situation, the need for financial reporting quality becomes more sensitive as rising market economies and mono economies like Nigeria face uncertainties as they battle the challenges of unparalleled fall in oil prices. Accounting information system plays a vital role in firm's active flow and also in complex economic decision because many economic decisions are based on the information obtained from accounting information system so it is important to assess, maintain and improve the financial reporting quality (Owolabi, Okere & Adeleke, 2020). Today, the drive for preparing quality corporate financial reports has established pronounced consideration globally. Publishing high quality information is significant because it may positively impact key capital providers as well as other stakeholders in investment decision process, credit options as well as decisions promoting total market efficiency (Nwaobia, Kwarbai, Ajibade, 2016). The key indicators of corporate information quality with respect to accounting standards are relevance and reliability, which presents information relevant for decision makers as well as enhancing qualities such as comparability, verifiability, timeliness and understandability (Owolabi, Okere & Adeleke, 2020). Thus, one of the key debates that emerge concerning the quality of financial reporting is its impact on future performance of an entity, that is, how the stock market responds to this increased perceived quality. Recently, corporate reporting quality, earnings management as well as earning quality is a key emerging issue due to scandals like WorldCom, Enron and even in Nigeria like Diamond Bank, Skye Bank, Cadbury, etc.

Several financial as well as accounting scholars have affirmed the benefits as well as function of the quality of financial information (Owolabi *et al* 2020; Nwaobia, Kwarbai, Ajibade, 2016 & Olumide, Tanko & Nyor 2016. They also expressed that poor quality of financial reports may negatively affect

corporate performance as well as economic decisions. This strengthens the critical discuss and analysis of the link amid financial reporting quality and performance of Nigeria capital market. In view of the influence performance may have in restraining financial information preparers and managers of listed companies from manoeuvring the accounting figures which will eventually enhance the quality of reported accounting earnings, there have been inconclusive findings and divergent views in extant literatures as to whether effect on financial reporting quality have any effect on financial performance of the Nigerian Capital Market. Since the dramatic collapse of the Enron Corporation, an American company, in 2001, and the subsequent dissolution of Arthur Andersen, which was then one of the ‘‘Big five’’, audit and accountancy firms around the world have been seen as laughable organization, because of their inconsistency in reporting and poorly structured accounting standard. In fact, according to Bratton (2002), Enron failure was seen as the biggest audit failure of all time. WorldCom another American company in telecommunication industry with over US\$107 billion in assets, also collapsed just after one year of the Enron misfortune. This financial scandals and the financial crunch facing the economy of most nations have resulted in increased attention to improve and enforce quality financial reporting practices worldwide in order to reform the global economy, which made stock market regulatory body such as the Nigeria Exchange Group to direct all companies that are quoted on the exchange to ensure they adopt the International Financial Reporting Standards by December 2011 while the Central Bank of Nigeria has also directed Nigerian banks to adopt the IFRS by December 2010 (Egedegbe, 2009). But, despite all this financial regulation most quoted organization still evade this regulation through fraudulent mechanisms which involves them ensuring that the audited financial records sent to the central bank of Nigeria are usually profit-oriented since it is the audited account that would be published, and this often shows bogus profit to make them attractive to the capital market after a compromised approval have been obtained from the CBN. However, for the same accounting period, the audited account that would be forwarded to the Nigeria Deposit Insurance Corporation would have a depleted deposit base for the bank to pay an inconsequential 1% insurance premium to NDIC. This problem of this study is to examine why quoted organisations in Nigeria still involve themselves in sharp practices despite the sections and guidance put in place by various regulatory bodies in Nigeria, and the equally examine how these sharp practices can affect the performance of Capital market. Existing studies on financial reporting (Ferdy, Geert, & Suzanne, 2009; Mohammadi, 2014; Hassan, 2013) only consider financial reporting, investment, and qualitative characteristic, none of these studies have considered how quality financial reporting can affect performance of the Nigerian Capital Market. Consequently, the general objective of the study is to provide empirical evidence on the effect of financial reporting quality on performance of the Nigerian Capital Market. The basic hypothesis underlying the study includes

**Ho<sub>1</sub>:** Accrual quality has no significant impact on performance of listed firms in the Nigerian Capital Market.

**Ho<sub>2</sub>:** Earnings management has no significant impact on performance of listed firms in the Nigerian Capital Market.

**Ho<sub>3</sub>:** Firm size has no significant impact on performance of listed firms in the Nigerian Capital Market.

## **LITERATURE REVIEW**

### **Conceptual Review**

The conceptual framework of this study clearly examines the various variables that are germane to this study. To provide detailed insight to the issues in question, the conceptual framework will provide explanations to the concept of financial reporting quality, corporate performance and the concept of Nigeria capital market are discussed.

### **Financial Reporting Quality**

Accounting information system plays a vital role in firm's active flow and also in complex economic decision because many economic decisions are based on the information obtained from accounting information system so it is important to assess, maintain and improve the financial reporting quality. Various benefits of superior information and financial reporting quality have been considered: financial reporting quality decreases liquidity and information risk. It prevents management from using discretionary influence for their personal benefits or motives and guides them in making effective investment choices. Precisely, one of the key benefits of higher financial reporting quality is help in minimization of asymmetric information glitches which arise because of incompatible interest. Firms that report good quality financial information to the several markets agents enables entities to perform in the market with superior advantage as well as upper level of information.

Accounting information system plays a vital role in firm's active flow and also in complex economic decision because many economic decisions are based on the information obtained from accounting information system so it is important to assess, maintain and improve the financial reporting quality. Supporting this opinion, stated that companies with a greater quality of earnings enjoy lesser cost of debt. Reporting quality has been explored in many areas, and numerous authors have mentioned to its benefits, such as its affirmative impact from the financial viewpoint, by helping to minimizing information risk and increasing liquidity. Furthermore, information reported in financial statements is most essential in debt contracting. Financial reporting quality provides financial information about the reporting entity that will be useful to existing and potential investors, lenders and other creditors in making decision about providing resources to the entity (FASB, 2010). Among the way to measure financial reporting quality, the best employed dimensions of this theory in text are: earning quality and quality of accruals. Showing this concept, Dechow et al. (2010) describe three categories of the proxies of earnings quality, based on that "higher earnings quality shows the features of the firm's earnings process that are relevant to a specific decision made by a specific decision-maker". These proxies are: financial reporting quality eternal indicator, characteristic of earnings and earnings response coefficients. These researchers measured earnings quality determinants to be firm financial reporting practices, auditors, governance and controls, capital market incentives, characteristics, institutional factors, and external factors too. Accruals quality is grounded on mapping past cash flows, current and upcoming cash flow processes with accruals (Garrett et al. 2012).

### **Firm Size**

Firm's size is measured by taking logarithm of its total assets. It is common exercise to take company's size as determinant variable of financial performance, financial reporting quality and as well as determinant of economic. Larger companies are motivation to show the positive impact on financial performance (Prior et al., 2008; Surroca et al., 2010). Additionally, the company's size has been used widely in numerous research projects on FRQ, but this effect of size is uncertain.

### **Leverage**

Leverage of the company is risk or default of debt, and this risk is calculated as ratio debt to equity ratio. Debt variable is also used widely in preceding. It denotes the non-compliance risk or debt (Prior et al., 2008; Mahoney et al., 2008). As with magnitude of company's size, no consensus exists concerning the consequence of leverage level on financial reporting quality. Though, Tu (2012) concluded, debt/leverage ratios are the key determinants of earning management change.

### **Corporate Performance**

This is a subjective measure of how well a firm uses assets from its primary mode of business and generates revenues. Financial performance refers to a measure of the results of a firm's policies and operations in monetary terms. Concept of financial performance is a concept that reflects the level to which an organization has attained its desired goals. It demonstrates the organization effectiveness in its

operations over time (Saeidi, Sofian & Siti Zaleha, 2014). The performance of a business firm serves as signal that provides facts which aids the evaluation and assessment of the effectiveness of an organization in the course of its operation and the level of satisfaction the business serves its stakeholders (Antony & Bhattacharyya, 2010).

Corporate financial Performance is a measure of how well a firm uses assets from its primary mode of business and generates revenues. The purpose for which an organization is created can only be achieved if its operational performance is effectual. Business organizations in the quest to sustain financial performance and gain competitive advantage over competitors in the industry require an effective strategic business practice (Umar & Dikko, 2018). One way of managers controlling the financial affairs of an organization is the use of ratios. Ratios are simply relationships between two financial balances or financial calculations which establish our references so that we can understand how well an entity is performing financially. Among the several means of assessing the FP, in present study Market to Book (MTB) is employed as market to book ratio (Seifert et al., 2003). This variable of the study classifies market measures of financial performance in accordance with the previous indication from Hillman and Keim (2001). These authors claim in their research that the accounting activities are less successful in comparison with the market actions because of fact that those actions are not capable to depict the long-term value of firm, focused on previous FP and are also subject to the likelihood of manager's manipulation. FThe performance or value of a firm can be seen as the amount of utility or benefits derived from shares of a firm by the shareholders. Firms with high value from the sales of their shares can be said to be performing well financially.

### **Nigerian Capital Market**

According to Osaze (2007), the origin of the Nigerian capital market date back to colonial times when the British Government ruling Nigeria at that time sought funds for running the local administration. Most of these funds derived from agriculture, produce marketing and solid mineral mining. Aside from expanding its revenue base through taxation, the colonial master found it necessary to raise funds from the public sector to cover temporary shortfalls in funds availability. Odife (2000), asserted that the first step in this direction was to secure the necessary funds for the development of infrastructure and long-term capital projects. This led to promulgation of 10 years plan of Local Loan Ordinance of 1946 for the floatation of the first 300,000 pounds 3% Government stock 1956/61 with its management vested on the Accountant General of the Federation. In 1957, the Government and other Securities Act was enacted. This law specified the types of securities in which trust fund may be invested (Osaze, 2007). In addition, the colonial government set up the Professor Barback Committee to examine the ways and means of fostering a shares market in Nigeria. Part of the terms of reference of this committee included the possibility of establishing a capital market in Nigeria (Osaze, 2007). On September 15 1960, the Lagos Stock Exchange was incorporated as a private limited liability company, limited by guarantee under the provision of the Lagos Stock Exchange Act 1960. On June 5, 1961, the Lagos Stock Exchange opened for business with 19 listed securities made up of 3 equities, 6 Federal Government Bonds and 10 industrial loans (Osaze, 2007). The financial system consists of the money and capital market. The institutions that interact within the capital market are: Insurance companies, Pension fund Administrators, Central Bank of Nigeria, Nigeria Exchange Group, Professional bodies, Corporate Affairs commission, Financial Reporting council, Ministry of Finance, Investment and securities Tribunal, market intermediaries, Investors, media, etc.

### **Theoretical Review**

#### **Agency Theory**

Agency theory was propounded by (Jensen & Meckling 1976). The agency philosophy outlines the principal agent association. The principal referred to are shareholders whereas agents denote the managers. These factions have differing goals, thus creating agency costs (Jensen & Meckling 1976). Corporatedisclosures via financial reporting as well as regulation aid to alleviate the agency issues, as

It necessitates that administration of entities disclose mandatory as well as voluntary reports for the benefit of stockholders as well as other invested parties. By and large, as managers gain first-hand corporate information concerning activities of an entity, they are obligation bound in line with the agency theory to disclose as appropriate information to the owners of the entity. This research therefore adopts the agency theory as the theoretical backing for this research endeavor. Accordingly, agency theory holds that directors may take lead of the information they possess on their control in making accounting as well as reporting decisions to overshoot financial information. They generally do this by acting in what they perceive to be in their own interest (Jensen & Meckling 1976). Reducing agency costs by imposing internal mechanisms of control should therefore encourage managers to behave in the best interest of shareholders instead of in their own interests. However, because controls are imperfect, we would expect some degree of opportunism to remain (Jensen & Meckling 1976). Since managers are widely paid based on firm's performance, it is plausible to expect that active earnings manipulation will occur in order to enhance managerial compensation packages (Jensen & Meckling 1976). This approach is highly focused on bounded rational decision making around incentives, information and self-interest. Thus, it is a viewpoint that suggests that it may be necessary to limit managers' discretion with respect to accounting, since investors, as a consequence of asymmetrically distributed market information, cannot unravel the valuation effect of reported earnings in a timely manner under current reporting standards.

### **Empirical Review**

Owolabi, Okere and Adeleke (2020), studied the association amid financial reporting quality and market performance (TOBINQ) of quoted deposit money banks in Nigeria. Using panel methodology in addition to other econometric tests (descriptive statistics test, correlation analysis, and Hausman test), this study discovered a significant relationship amid financial reporting quality (earnings predictability, timeliness) and market performance (TOBINQ) in listed deposit money banks in Nigeria. Also, timeliness (TML) has a negative and insignificant relationship with market performance (TOBINQ) of quoted deposit money banks in Nigeria. Furthermore, earnings predictability has a negative and significant relationship with performance (TOBINQ) of listed deposit money banks in Nigeria. This study recommended that management of deposit money banks ought to guarantee that they implement best practices in the process of financial reporting. Bamidele, Ibrahim and Omole (2018) investigated the effects of financial reporting quality on investment decision making by Deposit Money Banks in reference to Zenith Bank Plc, Nigeria. Data obtained from the audited annual reports of Zenith Bank Plc that covered period of 2009 –2016. The study utilized both Descriptive and Ordinary Least Square Regression method with the aid of using E-view 9 to analyse the data. The findings showed that, there was a significant effect of variables of (Financial Reporting Quality FRQ measures as profit after tax, cash used in/ from investing and cash and cash equivalent) on investment. The result also shows that, Financial Reporting Quality has significantly influenced on investment of Deposit Money Banks with ( $R^2 = 0.98$ ;  $P < 0.05$ ). The study concluded that, higher financial reporting quality increases investment decision by Deposit Money Banks in Nigeria. It was therefore recommended that, DMBs should voluntarily produce quality report as this is shown to create positive market reaction and enhance investments.

Saliu (2018) studied the impact of financial reporting on financial performance of quoted companies in Nigeria. The essence of this research work is to determine the relationship between the quality of financial reporting and profit after tax, return on asset, and return on equity. Data collections were both form primary and secondary sources. The primary data was basically obtained by administration of questionnaire while that of secondary data was from annual reports of sampled/ selected quoted companies. The study adopted the survey research and cross-sectional research design. The sampled companies were obtained by using the stratified sampling technique while the sample size was obtained using the proportional sampling technique. Also, 450 copies of a well-structured questionnaire were also distributed but only 350 were returned and analyzed. The variables considered in the study were financial reporting and financial performance, which were represented by quality of financial reporting, return on

equity, return on asset and profit after tax. Two analytical methods were adopted for statistical analysis of the variables. They are descriptive and inferential statistics. Under descriptive statistics, variables were subjected to frequency and percentages. Data analyses were carried out using SPSS version 20 and E-views 7 statistical software, and the level of significance used to test the hypothesis was 5%. The findings show that there is a significant relationship between quality of financial reporting and profit after tax. It also establishes that quality of financial report has significant effect on return on asset. Based on these findings the study recommends that management of quoted organizations should ensure that they adopt best practices in financial reporting because there is direct relationship between quality of financial reporting and profit after tax, Also, quality of financial reporting has positive impact on return on asset of the quoted companies in Nigeria. The research studies cited above have made good contribution to knowledge in the area. However, none of these studies have focused specifically on the effect of financial reporting quality on performance of the Nigerian Capital Market. Some researchers examine only one sector, mostly manufacturing or deposit money banks as opposed to this study which cover firms from three key sectors (Banking, Industrial, and Health & Pharmaceutical) of the Nigeria Exchange Group market. Furthermore, the cited studies in the empirical review were conducted using different proxies and research methodology. In the empirical review the result obtained by various author also were conflicting. Thus, the present study examines the impact of financial reporting quality of the performance of Nigeria capital market.

## **METHODOLOGY**

The study captured listed companies in the Nigeria Exchange Group for the period of 5years from 2016 to 2020. The study also employed five variables, which were further broken into dependent, control and independent variables for analysis purpose. The population of the study comprised all the listed companies operating Nigeria Exchange Group Market. As it is often impossible and generally accepted that the entire population of a study cannot be studied. Thus, the researchers used both purposive and convenient sampling techniques which strategically to reflect the characteristics of the population to select fifteen (15) companies listed in the market which cuts across three key sectors (Banking, Industrial, and Health & Pharmaceuticals).

The data used for this study were secondary data derived from the annual financial statements of the selected companies and stock market published information with regards to share price. Panel data regression analytical technique was used to observe all variables for the period. The study utilized the Panel Least Squares (PLS) regression estimation. The reason for the PLS regression is that PLS regression has the additional advantage that it corrects for the omitted variable bias and it allows for the examination for variations among cross-sectional units simultaneously with variations within individual units over time (Baum, 2008).

### **Description of Variables**

<b>Variable Name</b>	<b>Variable Type</b>	<b>Measurement</b>
Accrual Quality (AQ)	Independent	Total accruals to assets = (Net Income – Operating cash flow) / Beginning total assets
Earning Quality (EQ)	Independent	Quality of earnings ratio = Net cash from operating activities / Net income
Size of the Firm (FSize)	Independent	Natural logarithm of Sales
Leverage (LR)	Control	Total Debt to Total Asset Ratio (DAR)
Financial Performance (PF) (Market to Book Value -	Dependent	Market Value divided by Book Value of Firm



MTBV)		
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Source: Author Compilation (2021)

**Model Specification**

$$FP = \beta_0 + \sum_{i=1}^n \beta_i X_{it} + \epsilon$$

Source: Panigrahi, Anita Sharma (2013)

Where:

FP<sub>it</sub>= Market to Book Value (MTBV) of a Firm i at time t; i = 1, 2, 3..., 15 firms respectively.

β<sub>0</sub> = the intercept of equation

β<sub>i</sub> = Coefficient of X<sub>it</sub> variables

X<sub>it</sub>=the different independent variables for Corporate Governance of firm i at time t

t = Time from 1, 2..., 5 years

ε = error term which account for other possible factors that could influence FP<sub>it</sub> that are not captured in the model.

The econometric models employed in this study were linear Multivariate Models which were develop as thus:

$$PFit = \beta_0 + \beta_1 (AQit) + \beta_2 (EQit) + \beta_3 (FSizeit) + \beta_4 (LRit) + \epsilon$$

**RESULTS AND DISCUSSION**

**Presentation of Results**

**Table 1: Descriptive Statistics**

. summarize MTBV AQ EQ Fsize LR

Variable	Obs	Mean	Std. Dev.	Min	Max
MTBV	75	1.087995	1.690904	-2.979792	11.63466
AQ	75	-.034698	.0958861	-.4348785	.1131745
EQ	75	1.711719	5.06042	-24.5778	18.06054
Fsize	75	5.486681	1.122352	3.252853	7.328283
LR	75	.6968394	.2022074	.3318867	1.344503

**Source: Stata 13 Output**

Descriptive statistics is always used for depicting the characteristics of sample size. From Table 1, MTBV has a mean value of 1.087995 with minimum and maximum values of -2.979792 and 11.63466 respectively. The standard deviation measuring the spread of the distribution stood at 1.690904. The mean value for AQ is -0.34698 which suggest accrual quality of 3%. The results above also showed that the average EQ-earning quality for our sampled companies is about 2% (1.711719). The mean for Fsize stood at 5.486681 and LR at 0.6968394. The common features of all this variable indicated that all the variables are positive, this means that each of the variables display increasing tendency throughout the sampling period except for AQ-accrual quality.

**Table 2: Correlation Matrix**

```
. spearman MTBV AQ EQ Fsize LR, stats(rho) star(0.05)
(obs=75)
```

	MTBV	AQ	EQ	Fsize	LR
MTBV	1.0000				
AQ	-0.1305	1.0000			
EQ	0.1096	-0.4840*	1.0000		
Fsize	0.4024*	0.0839	0.0198	1.0000	
LR	-0.3240*	-0.1341	0.0792	-0.2207	1.0000

**Source: Stata 13 Output**

The Pearson correlation analysis matrix shows the relationship between the explanatory and the explained variables and also the relationship among all pairs of independent variables themselves. It is useful in discerning the degree or extent of the relationship among all independent variables as excessive correlation could lead to multicollinearity, which could consequently lead to misleading findings and conclusions. The correlation matrix does not lend itself to statistical inference but it is relevant in deducing the direction and extent of association between the variables.

Table 2 shows that Market to Book Value (MTBV) is negatively related to Accrual Quality (AQ) and Leverages (LR). Thus, any increase in any of these factors will reduce the performance of selected companies listed on the Nigeria Exchange Group. Accrual Quality (AQ) and Leverages (LR) particularly shows a negative correlation coefficient of -0.1305 and -0.3240, as a result if it is increasing market to book value (performance) will be falling slightly. However, Market to Book Value (MTBV) is positively related to Earning quality (EQ) and firm size (Size). Thus, increase in earning quality and firm size will lead to a small increase in Market to Book Value (MTBV) for the selected listed companies in Nigeria. The relationship with firm size could also indicates that larger companies in this sector will report higher profit that smaller ones after probably enjoying economics of scale. It is equally good to note that from the table 2, the relationships between the variable’s correlations the exception of Market to Book Value (MTBV) are weak; thus, the change or impact will be small. According to Kennedy (2003), there is high correlation when the coefficient between the variables is greater than 0.80.

**Table 3: Multi-Collinearity Test**

```
. estat vif
```

Variable	VIF	1/VIF
LR	1.17	0.852110
AQ	1.14	0.875494
Fsize	1.10	0.911569
EQ	1.06	0.940672
Mean VIF	1.12	

**Source: Stata 13 Output**

From Table 3, VIF values for all the independent variables were consistently below the benchmark of 10 which is considered harmful for regression analysis. This is supported by a mean VIF value of 1.06 which is above the benchmark of 1 considered suitable for regression analysis. Also, the TV for all the variables was above 0 and close to 1 which is recommended for regression analysis. The table shows good indicators that multicollinearity is not a problem among independent variables. Panel regression analysis

was chosen to test the hypothesis of the study because the dependent variable is binary which is more appropriate for such type of study.

**Table 4: Hausman Specification Test**

```
. hausman fe re
```

	Coefficients		(b-B)	sqrt(diag(V_b-V_B))
	(b) fe	(B) re	Difference	S.E.
AQ	-.5789364	-4.132643	3.553706	1.770476
EQ	.0018749	-.010746	.0126209	.0181957
Fsize	.3140005	.11546	.1985405	2.223528
LR	-1.150524	-1.698278	.5477543	2.103422

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

Test: Ho: difference in coefficients not systematic

chi2(4) = (b-B)'[(V\_b-V\_B)^(-1)](b-B)  
 = 13.67  
 Prob>chi2 = 0.0084

**Source: Stata 13 Output**

**Decision Rule:**

**Ho:** The null hypothesis is that the preferred model is random (greater than 0.05)

**Ha:** The alternative hypothesis is that the preferred model is fixed (less than 0.05)

The result of the Hausman test in table 4 above does not provide sufficient evidence to accept this null hypothesis at 5% level of significance as can be seen that the probability value of the test is less than the critical value of 0.05. Therefore, the study upholds that difference in coefficients is systematic and hence, the fixed effect model is the most appropriate model. With that, the study adopted the result in which it controlled for fixed effect.

**Table 5: Regression estimates for financial reporting quality on financial performance**

```
. xtreg MTBV AQ EQ Fsize LR, fe
```

Fixed-effects (within) regression  
 Group variable: COY

Number of obs = 75  
 Number of groups = 15

R-sq: within = 0.0047  
 between = 0.0911  
 overall = 0.0355

Obs per group: min = 5  
 avg = 5.0  
 max = 5

corr(u\_i, Xb) = -0.1523

F(4,56) = 0.07  
 Prob > F = 0.9917

MTBV	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
AQ	-.5789364	2.793197	-0.21	0.837	-6.174381	5.016509
EQ	.0018749	.0428978	0.04	0.965	-.0840597	.0878095
Fsize	.3140005	2.232106	0.14	0.889	-4.157444	4.785445
LR	-1.150524	2.374133	-0.48	0.630	-5.906484	3.605437
_cons	.1436072	12.124	0.01	0.991	-24.14369	24.43091

sigma\_u = 1.0075225  
 sigma\_e = 1.5506367  
 rho = .29685016 (fraction of variance due to u\_i)

F test that all u\_i=0: F(14, 56) = 1.69 Prob > F = 0.0836

**Source: Stata 13 Output**

**Discussion of Findings**

In line with the panel nature of the data used in this study, the fixed effect regression model shows  $R^2$  within, between and overall, of 0%, 9% and 3% respectively. Within  $R^2$  means that independent variables explain 0% variations in the market to book value (financial performance) in this panel from year to year. Between  $R^2$  indicates that independent variables explain 9% variations in financial performance of the sample studies from firm (cross-sectional unit) to another firm. While overall  $R^2$  shows that independent variables explain 3% variations in the whole panel. The table also shows that the model is not fitted as evidenced by the F test of 0.07 (as indicated by the overall P-value of 0.9917) which is greater than 0.05%. From the Table above, for the fixed effect result, the coefficient of the intercept is positive. This indicates that at any given point of time where these explanatory variables are held constant, the market to book value (financial performance) of the selected companies improves by 0.1436072 (14%). The result presented in the above table revealed that all the explanatory and control variables of the study were found to be statistically insignificant with all the P- value of greater than 5%. The correlation as indicated by corr. (u\_i, Xb) of the model -0.1523, and rho of 0.29685016 shows that the model is not fit for policy formulations. The present study therefore accepts the three null hypotheses earlier stated and conclude that accrual quality, earning quality and firm size doesn't have significance relationship on financial performance. The present finding is consistent with the study of Owolabi, Okere and Adeleke (2020). Who found that financial reporting quality proxy by timeliness (TML) has a negative and insignificant relationship with market performance (TOBINQ) of quoted deposit money banks in Nigeria. The result however, contradicts the findings of Bamidele, Ibrahim and Omole (2018); and Saliu 2018 who in their study establishes that quality of financial report has significant effect on return on asset also indicates that, higher reporting quality increases investment decision by Deposit Money Banks in Nigeria respectively.

## **CONCLUSION AND RECOMMENDATIONS**

This research observed the link amid financial reporting quality and the performance of Nigeria capital market. Although the model was insignificant, it revealed a negative relationship amid financial reporting quality (accrual quality and leverage) and positive but insignificant relationship between financial reporting quality (earning quality and firm size) of Nigeria capital market. This depicts that when corporate reports embody qualities of the ability to predict earnings, it gives investors ample time and information to make informed decisions on whether to sell or keep their shares as well as what value to place on them for market transactions. Based on research outcomes, it is recommended that:

- i. Greater focus ought to be invested to the creation of improved quality accounting information in order to boost financial performance as current study indicated an insignificant effect between financial reporting quality and firm's performance.
- ii. Corporate organisations in Nigeria are directed towards employing greatly skilled capable accountants to prepare corporate financial information so as to boost financial reporting quality as this would give room for a positive effect of financial reporting quality on capital market value.
- iii. Quoted companies should provide opportunity for their staff to regularly attend financial reporting conferences and seminars within and outside the country so that controversies relating to certain reporting standards can be eliminated.

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## **Effect of Corporate Governance on the Performance of Quoted Agricultural Companies in Nigeria**

**AUGUSTINE, Olom Ogar**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: [ugbemaya70@gmail.com](mailto:ugbemaya70@gmail.com), Phone No: +234 8083809328

### **Abstract**

*The study investigated the effect of corporate governance on financial performance of quoted agricultural companies in Nigeria. Longitudinal panel research design was adopted in this study. The researchers employed purposive sampling technique to select the five (5) Quoted agricultural firms listed on Nigeria Exchange Group. The period considered for this study ranging from a period of ten years (2012 to 2021). The secondary data adopted in this study were gathered from financial statements published on the Nigeria Exchange Group Plc and the individual company's financial statements. The study employed descriptive statistics, correlation matrix and panel regression with the help of statistical tool (STATA 13). The random effect regression analysis found out that board size and board of director financial competence have no significant effect on financial performance of quoted agricultural firms in Nigeria. The study concludes that all the independent variable either positive or negative are statistically insignificant on performance of quoted agricultural firms in Nigeria. Therefore, the study recommended reduction of board sizes to the success and survival of corporate listed firms in Nigerian while firms should also increase their size through increase in liquidity and put these to efficient use in order to enjoy economies of scale. The size of the board must not be unwieldy so that company's businesses can be managed effectively and efficiently by the board members.*

**Keywords:** Corporate Governance, Board Size, Board of directors, Financial performance, Return on Equity (ROE)

### **INTRODUCTION**

The phenomenon of corporate governance in a going concern setting has always been an attempt to distinguish between ownership and control, so has to improve the shareholder's equity (Mayowa, Olusola & Olaiya, 2021). This aging problem in corporate governance has continually been a debatable issue among policymakers, regulators, and researchers who tend to find a distinguishing gap in the concept of thought in literature. Corporate Governance is a stringed leaflet that aid to coordinate the business process and system of a corporate organization, set up by the owners and managers. Corporate governance must entail the attribute of satisfying the interest of all internal and external stakeholders and shareholders in the affairs of a firm all around the globe (Mayowa, Olusola & Olaiya, 2021).

Corporate governance mechanisms is a system of structuring, operating, and controlling the activities of a company with a view to achieving long-term strategic goals of satisfying its shareholders, creditors, employees, customers and suppliers (Manukaji, 2020). It is a set of processes, customs, rules and regulations which determines the running of an organization towards achieving its objective. It is also a process, influenced by the board of directors or management and other personnel assigned to provide reasonable assurance and achievement of objectives in effectiveness and efficiency in all operations, reliability of financial reporting and compliance with applicable laws and regulations (Frank & Sundgren, 2012). The none implementation of corporate governance policies had led to the recent global high profile corporate failures, for example the Maxwell Communications Corporation and the Enron in United States of America. All these corporate failures have been accredited to meager corporate governance practices Ngwenze & Kariuki (2017). Since good governance of listed companies has become a priority and the pillar on which it rest are contained in the laws and regulations, regulations around the world have devoted significant time and resources to the development of legislations and policies related to corporate governance. Significant progress has been achieved in Nigeria over the past decade in establishing government frame work for listed companies in Nigeria for instance. The Nigerian latest Code of Corporate Governance (2018) seeks to put in place corporate governance best practices in Nigerian

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companies. This Code also promotes public awareness of essential corporate values and ethical practices that will enhance the integrity of the business environment.

An improve performance in agricultural sector is a vital element for economic growth of any nation. According to African development bank report (2016), Agricultural sector performance will propel economic growth, generate employment, reduce poverty and ensure the nation's food security. With the advent of oil some decades ago in Nigeria, the agricultural sector has been experiencing poor investment performance and low yield African development bank report (2016). The methodology adopted by this study distinguishes it from earlier studies as it was able to test for panel effect in the data series and whether the existence of it is fixed or random. Without testing for this and selecting the appropriate regression analysis, the result of the findings could be misleading or porous. Besides, the study is an extension of earlier ones as it covers the period up to 2021. No study on relationship between corporate governance and listed agricultural firms has covered up to this period. Therefore, it is against this background that this study seeks to examine the extent to which corporate governance mechanism affects firm financial performance in the agricultural industries in Nigeria. The major hypothesis underling this study is stated thus:

**H<sub>01</sub>:** Board size has no significant effect on return on equity (ROE) of quoted agricultural companies in Nigeria

**H<sub>02</sub>:** Board of Director Financial competencehas no significant effect on return on equity (ROE) of quoted agricultural companies in Nigeria

### **LITERATURE REVIEW**

#### **Conceptual Framework**

##### **Corporate governance**

Olayiwola (2018) defined corporate governance mechanisms as a system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among the major stakeholders/participants in the corporation, such as the board, managers, shareholders and even the other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. According to Ammar, Saeed, and Abid (2013), corporate governance is a mechanism through which management takes necessary steps to safeguard the interest of stakeholders. It is also the framework within which rules, relationships, systems and processes are controlled (Osundina, Olayinka & Chukwuma, 2016). Stability and good management can be achieved when firms incorporate corporate governance which is all about complying with stipulated standards, rules and regulations. Sound corporate governance increases the efficiency and value of a firm on the capital market rather than pulling it down and boost the confidence of all stakeholders. Good corporate governance enhances accountability, transparency, ensures efficient and effective use of limited resources, creates competitive and efficient managed companies, attracts and retains investors (Arinze, 2013).

Mayowa, Olusola and Olaiya (2021) defined corporate governance as “the structure by which an entity is controlled and directed. It is concerned with the function of a company's strategic level to successfully head the company and their consensus with its equity holders and other external and internal stakeholders. Corporate governance mechanism is a set of processes, customs, policies, laws and intuitions affecting the way a corporation is directed, administered and controlled. It represents the methods through which organizations are being administered, a structure through which the welfare of different parties with vested interests are harmonized, showing group of interaction between company's administration, its board, its shareholders and other interested parties (Cheema & Din, 2013). The principles of corporate governance mechanism acknowledge that an effective corporate governance system can lower the cost of capital and encourage firms to use resources more efficiently, thereby promoting financial performance.

##### **Board Size**

Board size refers to the total number of directors on board of each sample firm which is inclusive of the CEO and Chairman of each accounting year. This will include outside directors, executive directors and non-executive directors (Olayiwola, 2018). It is the responsibility of the board of directors to guarantee that the business is enjoying maximum benefits of prevailing occasions and ensuring that the economic worth of the organization is enhanced, being successful and its ability to make choices that affect the administrators incredibly strong (Uwuigbe & Fakile, 2012). The board should check the behaviors of managers for owners' welfare, decide on crucial issues, hire set of administrative officers and oversee that organizations adhere to the rule while taking responsibility for managing and supervising (Akinyomi, 2013). The Board of Directors uses its powers and responsibilities within the structure of legislation, main contract, regulations and policies, and represents the company in line with the authority given to it at the general meeting of shareholders (Dogan & Yildiz, 2013). The economic worth of an organization would further be enhanced as the board carries out its functions which include supervision of the operations of administrative officers and choosing the employees of an enterprise, appointing and monitoring the activities of an autonomous auditor to boost the worth of the company (Uwuigbe, 2011).

### **Board of Director Financial Competence**

Competence comes from experience, knowledge, skills, attitudes, values and beliefs. In the case of boards, which are the ultimate decision makers for most organizations, the competencies of directors are particularly important. Indeed, the Corporations Act (2001) requires every director to exercise reasonable care, diligence and skill in discharging their duties.

### **Financial Performance**

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

### **Return on Assets (ROE)**

Return on equity (ROE) measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested (Khatab, Masood, Zaman, Saleem, & Saeed, 2011). It is often viewed as a hybrid measure of firm performance because it incorporates profit which is accounting based and equity which is market based. Efficient management of the operation cost will be best reflected by its rate of return on the equity capital. Since managers are responsible for the operation of the business and utilization of the firm's resources, return on equity is a measure that allows users to assess how well a firm's corporate governance system is working in securing and motivating efficiency of the firm's management (Epps & Cereola 2008). Researchers like Tukur and Abubakar (2014), Aamir and Sajid, (2012) and Kumudinni, (2011) used this accounting measure.

### **Empirical Review**



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Mayowa, Olusola and Olaiya (2021) examined the impact of corporate governance on firm performance using the accounting measures based on the profitability status of the companies depending on cash flows and inflow from the income statement. The ex-post facto research design was employed. In a sample of selected consumer goods companies, the study revealed that board size has positive significant effect on return on sales. Board size and board independence has positive significant effect on profit margin. It also revealed that board size and board independence negative significant effect on operating cash flow. Based on the findings, it is recommended that the organization should take cognizance of its board size since it influences the rate of turnover which is an intrinsic component of the overall performance of the organization. The organization should make sure the board size is regulated on a low-cost reduction basis so it does not induce a negative impact on the profitability status of the organization. Manukaji (2020) examined the effects of corporate governance on the productivity of quoted agricultural firms in Nigeria. Specifically, the study examined the effect of director's remuneration on productivity of Agricultural firms in Nigeria; Assessed the effect of board size on productivity of quoted agricultural firms in Nigeria; Ascertained the effect of board duality on productivity of quoted agricultural firms in Nigeria and investigated the effect of board gender on of quoted agricultural firms in Nigeria. The study adopted Ex-post facto research design and descriptive, correlation and multiple regression analysis for the data analysis. The study revealed that corporate governance practices positively influenced productivity of agricultural firms in Nigeria. Again, the findings of the study indicate that companies with higher number of board size affected the productivity positively as measured by sales growth. The remuneration of directors had positive and significant influence on productivity, board gender and board dualities had positive influence on productivity although not statistically significant. The study therefore recommends that agricultural firms should determine the optimum payment for the directors that will not affect productivity and the size of board should be maintained in other to create equilibrium between the size of the board and the amount they will be able to maintain in other not to affect performance.

Olayiwola (2018) investigated the influence of corporate governance (CG) on the performance of companies. The objectives of this study were to respectively analyze and determine, individually and jointly, the influence of board size, board composition and audit committee size on corporate performance (CP). The study employed exploratory research design. Ten (10) listed firms were chosen through a purposive sampling technique and data extracted from the annual reports of these firms from year 2010 to 2016. A panel data regression was used to analyse the data. CG was proxied with board size (BS), board composition (BC) and audit committee size (ACS) while performance was proxied with net profit margin (NPM). Findings revealed that board size had a significant negative correlation with NPM, board composition had a significant positive correlation with NPM, audit committee size had an insignificant correlation with NPM and board size, board composition and audit committee size had a significant joint effect on NPM. Thus, it was concluded in the study that smaller board size will increase performance and the board composition should consist more of the non-executive directors while the audit committee also should be reviewed from time to time. Kajola, Onalapo and Adelowotan (2017) examined the relationship between corporate board size and financial performance of 35 non-financial firms listed on Nigerian StockExchange. The study covers the period 2003-2014. Using panel data regression analysis and Fixed effects model as estimation technique, result reveals a positive and significant relationship between board size (surrogated by the natural log of number of directors on the board) and the two financial performance proxies (Return on assets and Return on equity). The outcome of the study is consistent with some prior empirical studies and provides evidence in support of the argument that companies with larger board members do harness the divergent views of members, thereby coming up with informed decisions that will improve the financial performance of companies under their watch. It is also difficult for chief executive of companies to influence members of the board. For higher financial performance to be achieved, this study recommended an average board size of not less than 9 members for a listed company.

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Osundina, Olayinka & Chukuma (2016) examined corporate governance and financial performance of selected manufacturing companies in Nigeria. The objective of this study is to empirically investigate the relationship between corporate governance (measured by Board Structure index, Ownership Structure index and Audit Committee index) and firm's performance (measured by Return on Asset) of selected Nigerian manufacturing companies. The study adopted ex-post facto research design. Random sampling was used to select 30 companies out of a total population of 45 manufacturing companies listed on the Nigerian Stock Exchange, for a time period of 2010 to 2014. Secondary data (financial and non-financial) were collected from the annual reports and accounts of the selected listed manufacturing companies. Multiple regression analysis and descriptive statistics were used in analyzing the data. F-stat and t-stat were used to test the hypothesis. The results of the study show that Board structure index had a significant positive relationship with performance (ROA) of the sampled manufacturing companies. Also, it was found that Audit committee index had a positive but insignificant relationship with the performance (ROA) of the sampled manufacturing companies, while Ownership structure index had an insignificant negative relationship with performance (ROA) of the sampled manufacturing companies. In conclusion, the study revealed that the performance indicator (ROA) related with each component of the Corporate Governance Index in a peculiar manner. It is therefore recommended that reform efforts should be directed towards improving the corporate governance of listed Nigerian manufacturing companies, especially emphasis should be devoted to the variables of Ownership Structure and Audit Committee.

### **Theoretical Review**

Corporate Governance theories range from the agency theory and expanded into stewardship theory, stakeholder theory, resource dependency theory, transaction cost theory, political theory and ethics related theories such as business ethics theory, virtue ethics theory, feminist's ethics theory, discourse theory to postmodernism ethics theory. For the purpose of this study Agency theory and stakeholder theory was considered relevant.

### **Agency Theory**

The Agency theory having its roots in economic theory was expounded by Alchian and Demsetz in (1972) and further developed by Jensen and Meckling in (1976). The 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, hire the agents to perform the work. Principals delegate the running of business to the directors or managers, who are the shareholder's agents (Clarke, 2004). Meanwhile, Daily, Dalton and Canella (2003) argued that two factors could influence the prominence of agency theory. First, the theory is conceptual and simple theory that reduces the corporation to two participants of managers and shareholders.

Second, agency theory suggests that employees or managers in organizations can be self-interested. The agency theory states that shareholders expect the agents to act and make decisions in the principal's interest. On the contrary, the agent may not necessarily make decisions in the best interests of the principals (Padilla, 2000). Such a problem was first highlighted by Adam Smith in the 18th century and subsequently explored by Ross in 1973, and the first detailed description of agency theory was presented by Jensen and Meckling in 1976. Indeed, the notion of problems arising from the separation of ownership and control in agency theory has been confirmed by Davis, Schoolman and Donaldson in 1997. With agency theory, the agent may be succumbed to self-interest, opportunistic behavior and falling short of congruence between the aspirations of the principal and the agent's pursuits, even with 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). It has been argued that instead of providing fluctuating incentive payments, the agents would only focus on projects that have a high return and have a fixed wage without any incentive component. Although this will provide a fair assessment, but it does not eradicate or even minimize corporate misconduct (Muogbo, 2013). Here, the positivist approach is used where the agents are controlled by principal-made rules, with the aim of maximizing shareholders value.

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Hence, a more individualistic view is applied in this theory (Clarke, 2004). 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.

### **Stakeholder Theory**

The Stakeholder theory was embedded in the management discipline in (1970) and was gradually developed by Freeman in (1984), which incorporated corporate accountability to a broad range of stakeholders. Wheeler, Colbert and Freeman (2003) argued that the stakeholder theory is derived from a combination of the sociological and organizational disciplines. Indeed, stakeholder theory is less of a formal unified theory and more of a broad research tradition, incorporating philosophy, ethics, political theory, economics, law and organizational science. Donaldson and Preston (1995) opined that this theory focuses on managerial decision making and the interests of all stakeholders have intrinsic value, and no sets of interests are assumed to dominate the others. Unlike agency theory in which the managers are working and serving the stakeholders, stakeholder theorists suggest that managers in organizations have a network of relationships to serve the like of the suppliers, employees and business partners. It argued that this group of networks is important other than owner-manager-employee relationship as in agency theory (Wheeler, et. al, 2003). On the other end, Sundaram and Inkpen (2004) contend that the stakeholder theory attempts to address the group of stakeholders that deserve and require the attention of the management. Since the purpose of all stakeholders in business is to obtain benefits, it has been argued that the firm is a system, where there are stakeholders and the purpose of the organization is to create wealth for its stakeholders. Also, since the network of relationships with many groups can affect decision-making processes, as the stakeholder theory is concerned with the nature of these relationships in terms of both processes and outcomes for the firm and its stakeholders (Babalola, 2014).

### **METHODOLOGY**

Longitudinal panel research design was adopted in this study as it provides the support needed for collection of information on the existing nature of the phenomenon under study so as to provide and describe the nature of the relationship between the study variables. The population of the study consists of all the five (5) listed agricultural firms on the Nigeria Exchange Group as at 31<sup>st</sup> December, 2021. The researchers employed purposive sampling technique to select the Five (5) Quoted agricultural firm (Livestock Feeds Plc, Ellah Lakes Plc, FTN Cocoa Processors Plc, Okomu Oil Palm Plc and Presco Plc.). The choice of the study is guided by the availability of relevant data. The data used for this study were secondary data derived from the annual financial statements of the selected companies. The period considered for this study is from 2012 to 2021 i.e., ten (10) years. The study involves time series and cross-sectional data. Descriptive statistics and panel data regression analytical technique was used to observe all variables for the period with the help of STATA 13 package. The study adapted the model of Ngwenze and Kariuki (2017).

#### **The Model is stated thus:**

$$ROE = f(BSZ, BDFC) \text{-----}(i)$$

#### **Where:**

ROE = Return on Equity

BSZ = Board Size

BDFC = Board of Director Financial Competence

#### **The Econometric Equation Form of the Model is:**

$$ROE = \beta_0 + \beta_1 BSZ + \beta_2 BDFC + e_{it} \text{-----} (ii)$$

## RESULT AND DISCUSSION

### Descriptive Statistics

The descriptive statistics of the dataset from the sampled consumer goods companies are presented in Table 4.1 where the mean, standard deviation, minimum and maximum values of the data for the variables used in the study are described.

**Table 1: Descriptive Statistics**

. summarize ROE BSZ BDFC

Variable	Obs	Mean	Std. Dev.	Min	Max
ROE	50	.0564	.6406369	-3.6471	1.001
BSZ	50	9.76	2.55199	6	15
BDFC	50	.44598	.1445913	.167	.667

**Source: Stata 13 Output**

The results from the analysis of the Return on Equity (ROE) shows that the maximum Return on Equity of 1.001 and the minimum of -3.6471 with a standard deviation of 0.64%. The mean board size (BSZ) is about 0.0564 suggesting that agricultural firms listed on the Nigerian Exchange Group (NGX) have relatively moderate board sizes. There is a maximum board size of fifteen (15), minimum board size of six (6) and standard deviation of 2.55, implying that quoted agricultural firms in Nigeria have relatively similar board sizes. The statistics on BDFC- Board of Director Financial Competence has average mean value of 44% (0.44598) with standard deviation of 14% (0.1445913) and minimum value of 17% (0.167). This implies that the board of director in the study area are not too financially competent with the average mean value of 44% as shown from the table.

### Correlation Matrix of the Study Variables

The Pearson correlation analysis matrix shows the relationship between the explanatory and the explained variables and also the relationship among all pairs of independent variables themselves. It is useful in discerning the degree or extent of the relationship among all independent variables as excessive correlation could lead to multicollinearity, which could consequently lead to misleading findings and conclusions. The correlation matrix does not lend itself to statistical inference but it is relevant in deducing the direction and extent of association between the variables. Table 2 presents the correlation matrix for all the variables.

**Table 2: Correlation Matric**

. spearman ROE BSZ BDFC, stats(rho) star(0.05)  
(obs=50)

	ROE	BSZ	BDFC
ROE	1.0000		
BSZ	-0.1280	1.0000	
BDFC	0.0991	0.0638	1.0000

**Source: Stata 13 Output**

From table 2, it can be seen that all the correlation coefficients among or within the independent variables are below 0.80. This points to the absence of possible multicollinearity.



parameter estimates, it can be concluded that the estimate is statistically significant. Having carried out a standard error test on the parameters estimated and as also indicated by their respective probability values, the parameter estimate for board size (BSZ) and board of director financial competence (BDFC) are statistically insignificant, given that the individual probabilities are 0.779 and 0.602 respectively. When taken collectively the value of F-statistics is 0.35. The value of the probability is 0.8423. This result implies that the overall regression is both positive and statistically insignificant at 5%. The coefficient of board size (BSZ) is 0.0127337, while that of board of director financial competence (BDFC) is -0.4321304. This shows that ROE is positively related to board size but negatively related to director financial competence such that a unit increase in board size (BSZ) will have a substantial positive effect on ROE and that a unit increase in board of director financial competence (BDFC) will have a substantial negative effect on ROE respectively. Consequently, when taken collectively and based on the F-statistics value of 5.35 and the probability value of 0.35, which is greater than 0.8423, the two null hypotheses of the study are hereby accepted.

### **Discussion of Findings**

It can be deduced that board size has a positive and insignificant impact on the performance of quoted agricultural firms which provide support for the hypothesis. Theoretically, findings are not consistent with agency theory that proposes that larger board corporate boards improve monitoring function of the board and accordingly improve firm performance. The implication of the results is that large number of directors in the board has positive impact on the performance of the selected firm. It is therefore advised that board size appropriate for firm size for significant impact should be advocated for. This result was in line with the work of (Said, Zainuddin & Haron, 2009) that evidenced a insignificant positive relationship between board size and corporate performance. This work advocates that large board size result to ineffectiveness in communication, coordination and decision making. However, more recently, (Sadou, Alom & Laluddin, 2017) highlighted that larger boards are more effective and have greater influence over companies' performances. Also, the work of Siregar and Bachtiar (2010) found a non-linear relationship between board size and improved corporate performance. The study noted that a large board would be able to exercise better monitoring, but too large board will render the monitoring process ineffective. As result of the relationship that exists between board size and quoted firm performance as indicated above, the null hypothesis was accepted. The regression result of board of director financial competence beta value shows -0.52 with a insignificant value of 0.602. This implies that the higher the board of director financial competence, the higher the reported return on equity. This result indicates that for every one-point increase in board of director financial competence, performance (ROE) reduces by -0.52. The reason for this negative effect between board of director financial competence and firm performance could be as a result of the cost involved, the higher the educational background and wealth of knowledge of the directors the higher the take-home salary and allowances.

### **CONCLUSION AND RECOMMENDATIONS**

The study examined the effect of corporate governance mechanism on the performance of quoted agricultural firms in Nigeria. It specifically investigated the effect of board size and board of director financial competence on firm performance. The study concludes that all the independent variable either positive or negative are statistically insignificant on performance of quoted agricultural firms in Nigeria. Based on the findings of this study, the following recommendations are made for efficient performance of quoted agricultural companies on the Nigeria Exchange Group:

- i. Reduction of board sizes will be critical to the success and survival of corporate listed firms in Nigerian while firms should also increase their size through increase in liquidity and put these to efficient use in order to enjoy economies of scale. The size of the board must not be unwieldy so that company's businesses can be managed effectively and efficiently by the board members.
- ii. Agricultural firms should make appointment of board of directors with financial wealth of knowledge and skills so as to enable the firms to maximally reap the benefits of board of directors.

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# **Impact of Equity Issuance Digitalization on Capital Market Development in Nigeria**

**BEIDA, Philip Ozovehe**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: philipbeida@yahoo.com, Phone No: +234 7037885439

## **Abstract**

*The paper seeks to understand the impact that automation of equity issuance has on the overall development of the capital market in Nigeria. In December 2021, The Nigerian Exchange Limited evolved an automation process for issuing shares. For the first time in the Nigeria Exchange's history, an offer for sale was made using a digital platform called 'Primary offer'. The offer of MTN Nigeria Communications Plc was the pivot for these feet. This achievement was part of a long-term plan for digitalising the capital market. The major objective of the study was to determine if the automation impacted the prize of MTN shares in the capital market and, by extension, whether this impact affected the capital market development in any significant way. Data was assembled pre and post subscription, and Ordinary least square (linear regression) was used to regress the data. The study's major limitation was the availability of sufficient data to act as proxies to manage the variables identified. While the result revealed an increase in the prize of shares subscribed and traded in the exchange following the automation, no significant effect on the prize was detected, making us conclude that digital automation, though an effective tool in improving the efficiency of the market but may not have impacted on the All-share index. The study therefore recommends more players needs to be encouraged to participate in the exchange in other to achieve the desired depth for the market and, by extension, develop the capital market.*

Keywords: Equity, Automation, Digitalisation, Nigerian Exchange Group (NGX)

## **INTRODUCTION**

The increase in data collection and analysis recorded in the global markets presents an opportunity for Nigeria's capital market to achieve key sustainable development targets across other sectors of the economy via digital transformation (Popoola, 2021). Therefore, it is a consensus that automation and digital identity have come to improve the efficiency of the Nigerian capital market. Today, capital market activities are driven by new technology that is expected to synchronise its operations with the global trend so that the Nigerian Capital Market can effectively compete in the global markets. (Odeleye, 2010). According to Popoola (2021), the Managing Director of The Nigerian Exchange, 'digital transformation is a required step for Nigeria's capital market to deepen financial literacy further and increase the contributions of the capital market to national development. He said, "Having a digitally inclusive capital market structure would save time and resources, sustain the symbiotic relationship and strengthen partnerships among stakeholders.

MTN Nigeria's offer to sell stock options available to investors via a digital platform is one of its kind concerning such innovation and or technological disruptions that can be available in deepening the financial framework and structure of the capital market. There has been a remarkable feet experienced with the MTN Nigeria offer for sale stock options recently experienced in Nigeria. The objective of the exercise is to enhance the share offerings for the company. Public reports available were that the stocks were oversubscribed. An indication that might mean that investors were happy with the process rather than the offer, as it is widely known that an offer for sale is less attractive than an offer for subscription. The fundamentals of the company drive the latter. The seminar paper seeks to determine if there is a causal relationship between the democratisation of shares issuance and the Nigerian Exchange (NGX) activities, as demonstrated in the traded price.

## **LITERATURE REVIEW**

### **Conceptual Framework**



## **Capital Markets**

Activities in the Nigerian Capital Market have been driven by disruptive technologies that are expected to align its operation with the international best practice so that the Exchange can favourably compete in the global markets to attract local and international investors (Odeleye, 2010). This section is a modest attempt to bring up to speed on these innovations. The literature review will explain the variables in the study. The major problem confronting most emerging economies includes the ‘lack of finance’ either for the construction of new enterprises facilitating economic development or carrying out expansion plans (UNCTAD, 2012). Several studies have defined Capital Market as a major and important factor in developing and growing any country, whether the economy is emerging or advanced. In his book, Lambe (2021) explained that the difference between Savings and investment in any economy is a measure of the economy’s growth. He explained that any economy seeking to improve the difference between its spending and its investment favourably must ultimately develop its capital market. One possible determinant of financing availability choices for economics is the level of development of financial markets, especially equity markets. (Adediran, 2015). According to Pant & Bishnoi (2003), most finance literature assumes the existence of liquid, well-functioning stock markets. However, economies without an expansion are more attractive; such an expansion could be financed either through additional debt or equity. A fourth possibility is that, by facilitating the flow of information and improving corporate governance, well-functioning stock markets may lower the cost of raising capital. In this case, external finance—both debt and equity— would become less costly, although it is not clear which would increase more. (Adediran et al., 2015)

## **Digital Innovations in the Nigerian Capital Market**

Nigerian Exchange (NGX), a wholly-owned subsidiary of the Nigerian Exchange Group (NGX Group), is a top listing and trading venue in Africa, with its history dating back to 1960. It is an open, professional, and vibrant exchange connecting Nigeria, Africa, and the world (Nigerian Exchange, 2022). The exchange deployed innovative capital market solutions that provide a globally competitive platform for Issuers to raise capital and investors to meet their financial objectives across markets and geographies. NGX is licensed under the Investments and Securities Act (ISA) and is regulated by the Securities and Exchange Commission (“SEC”) of Nigeria (Nigerian Exchange, 2022). The Nigerian Exchange is owned by shareholders and individual Nigerians of high integrity. The Nigerian Exchange has enjoyed increasing prominence since the country embraced a free market economic system upon independence. The Exchange provides a secondary market for investors to buy and sell securities (Odeleye, 2010). The trading mechanism that operated on the floor of the Exchange conformed itself to what is known as the “Call over the system”. Under this system, stockbrokers congregated each working day on the floor of the Exchange at the regular stipulated time, usually 11.00 a.m., prompt for business. (Odeleye, 2010). In April 1997, the Central Securities Clearing System (CSCS) was introduced for certificate depository preparatory. To improve the difference between its spending and its investment favourably) came into the scene in 1999. All listed securities have since then been traded individually through the computer system using the Nigerian Exchange price list. (Odeleye, 2010). A summary of innovation includes the setting up of the Central Securities Clearing System (CSCS), the computerisation of the Nigerian Stock Exchange, the introduction of the Reuters Electronic Contributor System, which beams the capital market operations to the world through the Reuters International Information Network.

## **Overview of MTN Nigeria**

MTN Nigeria is part of the MTN Group, i.e. a multinational telecommunications group which operates in 21 countries in Africa and the Middle East. The company has evolved from an ambitious start-up in 2001 into a market-leading communications provider. (MTN Nigeria, 2019). MTN Nigeria Communications Plc was listed on the Nigerian Exchange by introduction on May 16, 2019. MTN Nigeria became the first Mobile Network Operator listed on the Nigerian Stock Exchange. With an initial Offering of 20,354,513,050 Ordinary Shares of ₦0.02 Each at a premium prize of ₦90 per Share. The objective of the

listing at the time was to promote better liquidity of its ordinary shares in the secondary market and have access to a platform for raising long term capital from a wide range of local and international investors if and when required. (MTN Nigeria, 2019). On 31 December 2015, the Group acquired 100% share capital of Visafone Communications Limited, a company licenced to provide telecommunication service in Nigeria, operating Code Division Multiple Access (CDMA) network for a purchase consideration of N43.78 billion (MTN Nigeria, 2019). As of the 30th of March, 2022, the share price of MTN Nigeria on the exchange stands at ₦210 (Nigerian Exchange, 2022).

### **First Public Offer via Digital Platform in Nigeria**

Nwachukwu (2022) reported the offer on *businessday*, a business Newspaper. According to him, The MTN Public Offer marked the first time a digital application platform was used to democratise investing in a public offer, thus maximising investor participation. He reported that the Offer resulted in 114,938 new CSCS accounts, representing new market participants. The offer was to sell 575 million shares held by the MTN Group in MTN Nigeria (the Offer) to Nigerian investors. The Offer was implemented by way of a bookbuild to qualified institutional investors and a fixed price offer to retail investors.

661.25 million MTN Nigeria shares were allotted because the offer was oversubscribed; it activated the 15% oversubscription clause. A total of 126,720 retail investors submitted valid applications and received a full allotment. The offer also included the Nigerian pension funds administrators who subscribed on behalf of approximately 6.5 million Nigerian contributors.

Following the successful completion of the Offer, MTN Group's shareholding in MTN Nigeria reduced by 3.25 percentage points, from 78.83% to 75.58%. MTN Group adopted a unique structure in this offering by determining a fixed price of N169 per share for the retail offer through a Bookbuild to Qualified I completed on 26 November 2021. The fixed price offer to Retail Investors was at a discount of 11% to the closing price of MTN Nigeria stock on the day the Bookbuild was completed. The Offer commenced on 1 December 2021 and was completed on 14 December 2021. Nigerian investors across the country supported the Offer through multiple channels - Receiving Agents, Issuing Houses and Primary Offer (a digital application platform). (Nwachukwu, 2022). Ralph Mupita, CEO of MTN Group, confirmed that the Offer was the first Nigerian public offer to use the digital application platform, PrimaryOffer, which enabled wider investor participation across Nigeria. It is pertinent to mention that this has come to broaden the inclusion of innovative technologies in the operations of the Nigerian Capital Market.

### **Empirical Framework**

In their study, Sioux & Hmaeid, 2003, *Impact of Automation on Liquidity, Volatility, Stock: Evidence from Tunisian Marke*, concluded that the electronic trading system uses a single screen for prices permits transparent price discovery, thus minimising the 'noise' associated with price determination. Odeleye {2010}, in citing the work of Green et al. (2002) and Ngugi et al. (2003), explained that their study on *The Impact of Microstructure Innovations in Emerging Stock Markets* provided evidence from Stock Markets in India and Africa, respectively, that shows that markets there with advanced trading technology have greater efficiency. Anderson & Vahid (2001) investigated the impact of electronic trading on the pricing efficiency of the London and Australian Stock Exchanges by using smooth-transition error-correction models. These two studies focus on the arbitrage between spot and futures markets of stock indices and report a significant decrease in transaction costs by arbitrageurs. Both conclude that these markets have become more efficient under electronic trading.

Ezirim et al. (2009) utilise the modified Gompertz technology diffusion model to investigate the effects of information and technology on the growth and development of the capital market in Nigeria. The results reveal that growth in the capital market is affected by the interaction between stockbrokers and investors brought about by ICT in the form of internet access, telephone (mainlines and mobile), and access to the websites of stockbrokers. Growth in the total volume and value of shares traded is significantly affected

by communication technology (telephones). Generally, Information Technology has contributed to the growth of the Nigerian Capital Market, with the effect mostly seen in the availability of information to investors and the improvements in the trading patterns of the Nigeria Stock Exchange. It should be noted that between the time of the study and the time of this study, significant innovations and improvements have taken place in the exchange beyond technologies used for communications to real-time automation. However, the study may be significantly true in its form.

## **Theoretical Framework**

### **Efficient Market Hypothesis**

The theory most relevant to this study is the Efficient Market Hypothesis. A market is said to be 'efficient' where large numbers of rational, profit-maximisers are actively competing, each trying to predict future market values of individual securities, and where important current information is almost freely available to all participants (Lambe, 2021). The efficient market hypothesis holds that when new information comes into the market, it is immediately reflected in stock prices; neither technical analysis (the study of past stock prices in an attempt to predict future prices) nor fundamental analysis (the study of financial information) can help an investor generate returns greater than those of a portfolio of randomly selected stock (Logue, 2003). The implications of the hypothesis are truly profound. Most people buy and sell stocks under the assumption that the securities that they are selling are worth less than the selling price (Lambe, 2021)

## **METHODOLOGY**

The study relied on secondary data to assess the impact of equity issuance digitalisation of the MTN Public offer in December 2021 on the capital Market Development In Nigeria. The study relied on the trend of daily prize level changes of the MTN Nigeria on the Market vis a vis the daily NSE all prize index pre and post the issuance. However, the Month of December 2021 was not analysed because it represents the month of Issuance between the 1st of December 2021 to the 15th of December 2021.

The data are drawn from the Daily Official List of the Nigerian Exchanges sourced from Trading Economics and Greenwich Sock Exchange Data reciprocity. Generally, financial research uses estimation techniques such as the GARCH model, ARCH model, VAR model, etc. This study employs the Ordinary Least Square (OLS) estimator. OLS estimator is preferred when estimating a problem characterised by linear regression based on its properties. The following models are specified:

$$\text{NSE ASI} = P(\text{Xit})$$

Where:

$$\text{NSE ASI} = 2 \text{ Months Before the use of Automation}$$

$$P(\text{Xit}) = \text{Prices of shares of MTN Nigeria, 2 Months before Automation.}$$

and;

$$\text{NSE Asia} = P(\text{Xita})$$

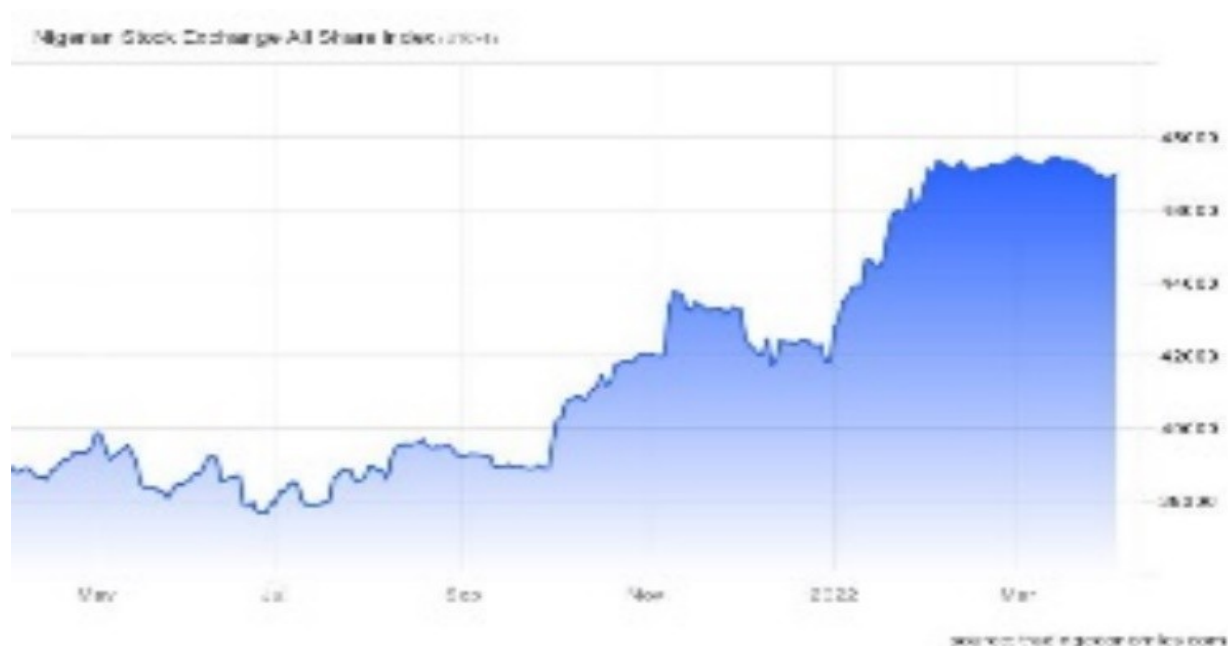
Where:

$$\text{NSE Asia} = 2 \text{ Months after the use of Automation}$$

$$P(\text{Xita}) = \text{Prices of shares of MTN Nigeria, 2 Months after Automation.}$$

**RESULT AND DISCUSSION**

This section begins with a presentation of the summary of the Data analysed. Afterwards, it attempts to explain the empirical results and their analysis. Data are arranged in Pre-Automation (October and November 2021) and Post-Automation (January and February 2022) eras. Detailed results have been provided as an Appendix to this study. Below is a chart that illustrates the linear curve of the growth of the capital Markets All Share Index



**Summary statistics: Post Automation**

**Table 1:** Summary of Secondary Data

Variable	Observations	Obs. with missing data	Obs. without missing data	Minimum	Maximum	Mean	Std. deviation
MTN N Share Prize (post)	39	0	39	185.500	202.500	195.262	4.909
NSE-All Share (post)	39	0	39	43607.940	47482.730	46247.824	1248.427

This table summarises the data analysed, showing the Minimum values, Maximum values, and the extent to which the data deviates from the mean values.

**Table 2:- Correlation matrix Post-Automation**

	NSE-All Share (post)	MTN N Share Prize (post)
NSE-All Share (post)	<b>1</b>	0.538
MTN N Share Prize (post)	0.538	<b>1</b>

This table demonstrates how the all-share index and MTN Shares are correlated. A 54% correlation is observed between the All-share price index and The Prize of MTN Post Automation.

**Table 3: Regression of variable MTN N Share Prize (post):**

Goodness of fit statistics (MTN N Share Prize (post)):

Observations	39
Sum of weights	39
DF	37
R <sup>2</sup>	0.289
Adjusted R <sup>2</sup>	0.270
MSE	17.598
RMSE	4.195
MAPE	1.807
DW	0.454
Cp	2.000
AIC	113.791
SBC	117.118
PC	0.788

This table shows the results of the regression. It indicates that the variables are not significantly regressed. This May signify that the Prize of MTN N post automation does not significantly impact on the All Share Prize Index.

**Summary statistics: Pre Automation**

**Table 4:** Summary of Secondary Data

**Summary statistics: Pre Automation**

Variable	Observations	Obs. with missing data	Obs. without missing data	Minimum	Maximum	Mean	Std. deviation
<b>MTN N Share Prize (pre)</b>	<b>41</b>	<b>0</b>	<b>41</b>	<b>169.900</b>	<b>201.000</b>	<b>181.451</b>	<b>9.082</b>
<b>NSE-All Share (pre)</b>	<b>41</b>	<b>0</b>	<b>41</b>	<b>40243.050</b>	<b>43730.550</b>	<b>42210.466</b>	<b>1054.848</b>

This table gives a summary of the data analysed, showing the Minimum values, Maximum values, and the extent to which the data deviates from the mean values

**Table 5 - Correlation matrix: Pre Automation**

	NSE-All Share (pre)	MTN N Share Prize (pre)
NSE-All Share (pre)	1	0.855
MTN N Share Prize (pre)	0.855	1

This table demonstrates how the all-share index and MTN Shares are correlated. An 86% correlation is observed between All share prize index and The Prize of MTN Post Automation.

Regression of variable MTN N Share Prize (pre):

Goodness of fit statistics (MTN N Share Prize (pre)):

Observations	41
Sum of weights	41
DF	39
R <sup>2</sup>	0.731
Adjusted R <sup>2</sup>	0.724
MSE	22.790
RMSE	4.774
MAPE	2.006
DW	0.543
Cp	2.000
AIC	130.129
SBC	133.556
PC	0.297

This table shows the results of the regression. It indicates that the variables are indeed significantly regressed. This may signify that the MTN N post automation Prize significantly impacts the All Share Prize Index.

### **Discussion of Findings**

The regression suggests well the price of the shares of MTN Nigeria impact the general improvement of the Capital Market (proxied by the All-share index) when the Automation of the Equity Issuance was introduced. At face value, the All share price index was not significantly regressed towards the share prize level of MTN Nigeria Post Automation, especially when compared to the same data and period pre- Automation. However, in interpreting Linear regression, it is important to understand that the values indicate how much of the model can be explained by the data provided., A 29% regression may suggest that we can only explain 29% of the data and that 71% of the data cannot speak to the impact Equity issuance via automation has on the capital market in the period Post automation. Therefore, results suggest that other factors need to be considered in determining if the digitalisation of Equity issuance improves the overall efficiency of the capital market.

### **CONCLUSION AND RECOMMENDATIONS**

Equity Issuance Digitalisation is a new innovation and a worthwhile development in the Nigerian Capital Market. Its first happened in Nigeria on 1st of December 2021. Noteworthy is the fact that the identities of new subscribers are tracked digitally, and as such, the development is pioneering in the history of the Nigerian Capital Market. The use of the application 'Primaryoffer' brought wide publicity and awareness to the market, thus credibility. This is an indication that the introduction of Equity Issuance Digitalisation is contributing to the growth of the Market. Therefore, it is recommended that further studies be conducted into measure this growth holistically. This would improve the general knowledge as to the impact of Digitalisation on the capital Market Development in Nigeria.

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## **Effect of ICT Infrastructure on Audit and Assurance Performance in Nigeria**

**AGBOLA, Oyeniyi Joshua**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: agbolaoyeniyi@gmail.com, Phone No: +234 8034446183

### **Abstract**

*The objective of this study is to determine the effect of ICT infrastructure on audit and assurance performance in Nigeria. The study is to increase the understanding of the effects digitalization has on the tools and working methods of the audit profession. This journal assesses the technologies having most impact on the audit profession as we know it today. Drawing on existing research and exploring the views of leading practitioners, it provides an understanding of how the changing business environment is shaping technological change in auditing. It also provides a unique summary of how different technologies could be expected to impact its future. The study provides insights for both businesses and auditors themselves on how they may adapt most effectively in the face of this significant change. The technology has caused a lot of disruption in the business which auditor is expected to embrace in order to perform their duties as expected.*

Keywords: ICT infrastructure, Disruption, Audit and Assurance, Digitization

### **INTRODUCTION**

The technology has changed the way we interact with the rest of the world. This change reflects in the way we work, communicate, shop, bank, travel, learn, govern, manage our health and enjoy ourselves. The advent of innovation like the Web and digitized content led this change. The concept of digitalization is not necessarily new. Some organizations have used technology to gain unprecedented levelsof operational efficiency and improve profitability. This technology has also led to the increase in market share of some companies. Organizations across sectors are being revolutionized by the digital transformation bug. For the auditors to cope with this technological transformation there is an urgent need for the auditors to embrace these technologies in order to remain relevant in today’s world. It would not be possible to audit a company that you do not understand their mode of operation. The disruption in the business sector is currently being triggered by the advent of the technology like Robotic process automation, data analytics, artificial intelligence, machine learning, distributed ledger technology to name but a few: These ICT infrastructures are already having and will continue to have an indelible impact on the audit process. Technology of course is never the panacea to resolving all the current challenges in audits, or conversely seizing all of its future opportunities. These ICT infrastructures are catalyst that will help shift the focus of the audit process from a retrospective view to one which is prospective, enabling much deeper insights to clients and anenriched narrative on corporate performance and its sustainability for the future. Yet it is the nexus of emerging technology with human endeavour, skill and judgement where real future value from auditing will be unlocked. Digitalization could have profound implications on how auditors conduct their activities, as well as potentially raising new ethical and moral considerations.

This article assesses the ICT Infrastructures having most impact on the audit and assurance. Drawing on existing research and exploring the views of leading accounting and auditing professionals, it provides an understanding of how the changing business environment is shaping technological change in auditing. It also provides a unique summary of how different technologies could be expected to impact its future. We hope it also provides insights for both businesses and auditors themselves on how they may adapt most effectively in the face of this significant change. The advent of Covid-19 disrupted most professions across the globe with accounting and auditing being no exception. Mandatory lockdown measures were imposed by governments to control the spread of the virus, with individuals having to work from home

where possible. For auditors, this means they can no longer travel to perform their auditing task, nor to their own offices and this implies that their audits will have to be completed remotely. If there is a positive side to this significant challenge for auditors, it is that the audit profession was already on a journey to becoming more digital, and the investment in digital capability has allowed many firms and practitioners to adapt to the new circumstances relatively more quick than other industries. Notwithstanding this, a number of practical challenges have emerged. The paper also refers to useful links published by regulators, standard setters and by other relevant stakeholders.

## **LITERATURE REVIEW**

### **Conceptual Clarifications**

#### **Audit and Assurance**

In its modern sense according to Emile woolf, 1997, an audit is a process (carried out by suitably qualified auditors) whereby the auditors of business entities, including limited companies, charities, trusts and professional firms, are subjected to scrutiny in such details as will enable the auditors to form an opinion as to their truth and fairness. The opinion is then embodied in an audit report, addressed to those parties who commissioned the audit or to whom the auditors are responsible under statute. Auditing can also be defined as a systematic and a scientific examination of the books of accounts and financial statements of a company. It is a critical review of the system of accounting and internal control. Auditing is performed with the help of source documents, vouchers and explanations received from third parties. Auditing is undertaken by an independent qualified accountant. An auditor must be a qualified accountant who has a thorough knowledge of general principles of law, taxation and computer information systems. An auditor is recommended by directors but appointed by shareholders.

Assurance is defined by Merriam-Webster as the state of being assured: such as being certain in the mind, confidence of mind or manner, easy freedom from self-doubt or uncertainty. The key difference between Audit and Assurance is that Audit is the systematic examination of the books of accounts and the other documents of the company to know that whether the statement shows true and fair view of the organizations, whereas, the assurance is the process in which the different processes, procedures and the operations of the company are analyzed.

#### **Deep Learning (DL)**

Deep Learning is a subset of Machine Learning. This technology closely mimics human learning through the use of artificial neural networks to perform more complex tasks such as visual object recognition. The best known example is Google's AlphaGo, which mastered Go, a game which exceeds chess in intellectual complexity and where it was thought that computers could never match the best human players. Unlike previous programs, which learned winning strategies from databases of previous games, AlphaGo taught itself and not only defeated its human opponent but also used highly inventive winning moves, which –according to Demis Hassabis, CEO of the Google subsidiary DeepMind, which created AlphaGo ‘were so surprising they overturned hundreds of years of received wisdom’ (Hassabis 2017). DL systems are commercially available and have already been deployed by the Big Four accountancy firms: KPMG uses IBM's Watson to analyse commercial mortgage loan portfolios, while Deloitte works with Canadian-based legal AI company, Kira Systems to ‘read’ thousands of complex documents, such as contracts, leases and invoices, extracting and structuring textual information such as key words or phrases. In the era of Big Data, the structured information accessible to auditors is only a fragment or an abstraction of the much wider universe of data. But this ‘dark matter’ exists in unstructured formats: the ability of DL to analyse a range of internal and external sources means that Big Data can potentially supply complementary audit evidence and feed into the narrative requirements of audit.

For instance, content analysis of social media postings and news articles could inform auditors of potential litigation risk, business risk, internal control risk, or risk of management fraud...auditors may

identify troublesome products or services by analyzing customers' reviews sentiment scores of the Q&A section of earnings conference calls can help the auditor predict internal control material weakness' (Sun and Vasarhelyi 2018). Used in audit, DL potentially goes beyond merely extracting set words or phrases or even what has been explicitly said: 'auditors interview management, internal auditors, employees, predecessor auditors, bankers, legal counsel, underwriters, analysts, or other stakeholders. The language that subjects use and how they respond to questions over the course of the interview can be just as important as the answers themselves, because they may indicate deception. For example, the use of terms that suggest uncertainty, such as "kind of," "maybe," or "sort of," as well as response latency, could be signs of concealment or falsification' (Sun and Vasarhelyi 2017).

### **Drone Technology, Internet of Things and Sensor Technologies**

Drones are machine like technology used for surveillance and others special functions. Unmanned drones are used in a variety of commercial projects, such as power line inspection, and the Big Four accountancy firms have spotted the potential for their use in inventory inspection, particularly where physical scale or distribution is an issue. For example, PwC recently announced its first stock count audit – of an open cast mine – using drone technology (PwC 2019). Drones are the aerial component of the Internet of Things, the constantly growing number of devices and sensors connected via IP (internet protocol). An example of a sector that is ripe for the adoption of such technologies in audit and assurance is agriculture.

### **Distributed Ledger Technology (DLT)**

DLT, is part of technologies like blockchain, which is of great interest to both auditors and businesses. Distributed Ledger Technology ensures that 'in a distributed ledger all participants are looking at a common view of the records (ACCA 2017), which are validated without the need for a central authority for this purpose. 'So if the majority of participants agree that an update has been correctly validated, that becomes the basis for the updated entry to be added to the ledger.' (ACCA 2017a). For businesses, the attraction of DLT is that it greatly enhances performance in areas where inefficiencies are introduced by the so-called 'efficiency visibility' and 'trust' deficits. Examples include the inefficiencies and delays involved in setting up trade finance, the need to establish trust via 'know your customer'/'customer due diligence' (KYC/CDD) requirements in finance and banking or the lack of visibility in the global garment supply chain are all key areas for distributed ledger applications. For the auditor, distributed ledgers become a sort of universal bookkeeping service, removing the need to reconcile multiple databases of records and providing a perfect audit trail. A key principle of DLT is immutability: historical entries cannot be changed, only corrected with a balancing entry. While this may help auditors to test audit assertions such as occurrence and cut-off, it does not remove the need for higherlevel auditor judgements. Transactions may exist outside the ledger and, while those recorded are unlikely to be false, they still may not be legitimate. The auditor therefore needs to combine the ledger information with judgements based on accounting principles and an understanding of the nuances applicable to ownership and valuation. For auditors, DLT offers the possibility of generating exception reports that are based on all transactions rather than on using sampling techniques – a return to the roots of auditing. Today's audit cycles could potentially be replaced by more frequent or even continuous, real-time, audit. This is likely to release resources and provide the material for a deeper and more contextual understanding of the business, as required for the production of extended audit reports. However, this is also likely to increase resources with specialised skills in DLT, at least in the short-term. While DLT may be supported by standardisation and automation of data collection – possibly via 'accounting-as-a-service' platforms – the removal of mundane tasks will bring the contribution of the auditor's judgement into stronger focus.

The report concludes that the auditor role may pivot towards non transaction management elements requiring human judgement, business context and knowledge of technical accounting policy and of the outputs created by the application of these elements to specific questions within the audit, for example the fair value of assets' (ACCA 2017a). As noted in CA ANZ's and Deloitte report *The Future of Blockchain*, 'Distributed ledger technology and blockchain are important innovations in themselves. But

there are many potential uses ahead, as augmenting these technologies with others can create novel applications' (CA ANZ and Deloitte 2017). The implications for audit as an industry suggest a reversal of the current model, in which largely predictable, high-volume work is charged on an input basis, with the attendant risks of commoditisation and low margins. Instead, the audit model could move towards a value-based charging model based on outputs: higher margins, fewer people and more high-end skills. It has even been claimed that blockchain will become the industry standard for accounting and reporting. According to Jon Raphael, audit chief innovation officer at Deloitte & Touche LLP: 'Blockchain has the potential to be very transformative. By itself, blockchain will likely change how records are maintained and how value is transferred between counterparties... 'Most compelling, however, is blockchain's potential for transformative analytic capabilities. One of the beneficial outcomes of blockchain is easy access to structured data which can then be used to generate advanced analytics and accelerate machine learning. This will enable tools to get smarter and drive us further and faster toward more continuous auditing and assurance' (Deloitte 2018).

### **Smart Contracts**

Although DLT has mainly come to prominence for its use in underpinning cryptocurrencies such as Bitcoin, it originated in relation to smart contracts. A smart contract is self-executing: the terms are written into code which, like a Bitcoin, exists in a blockchain network and therefore shares the same characteristics. Smart contracts are literally anarchic in that they do not require external enforcement by any kind of central authority. Smart contracts therefore allow transactions to take place without any underlying basis of trust, or even anonymously. Suggested uses include land registers and trade finance. From this perspective, a cryptocurrency such as Bitcoin is just a minimal instance of a smart contract to transfer value from one person to another. More generally, a smart contract is just an instance of more general ability to generate code that executes exactly as its originators intended. For example, Ethereum, a smart contract platform that enables developers to build new decentralised applications ('dapps'), is a programmable blockchain that potentially has uses in many areas of finance, including audit. Of course, just because an app executes as intended does not mean that the intentions of those using it are good or correctly expressed, or that there may not be unintended consequences as programs automatically execute, as has happened on trading platforms. The audit of smart contracts themselves is a requirement, and is already a nascent industry. Blockchain is a system for dealing with information, and the effectiveness and resilience of platforms such as Ethereum is very much a factor of their size. The Big Four firms could conceivably set up blockchains for businesses or for entire industries; however, that would have potential implications for example, on auditor's rotation and independence. In regards to distributed ledger technology, we are not there yet in terms of real implementation in audit' Lukas Caputa, Senior Manager Risk Assurance, PwC Czech Republic

## **METHODOLOGY**

In a bid to assess the effect of ICT Infrastructure on Audit and Assurance performance in Nigeria, the study utilized an exploratory approach, by focusing on some critical discussions on ICT Infrastructure on the one hand as well as Audit and Assurance performance in Nigeria on the other hand, so that the study objective can be clarified.

## **RESULT AND DISCUSSION**

### **Effect of Change in The Technology to the Auditor**

The auditor has to change some processes and procedures in order to cope successfully in this changing technological age. The operating model for the assurance function has to continually evolve to meet the needs of the "digital organization". This will require the leveraging of new technologies for optimized outcomes and equipping professionals with the requisite skills and knowledge to identify and manage emerging risks. Key digital trends such as cloud computing, APIs & ESBs, large data, robotics & analytics amongst other trends are areas that will require focus and knowledge acquisition for the assurance professionals.

## **Reason for Technological Change in Audit**

### **Changes in Business Models**

The changes in business models across most industries are the first hand disruptive changes that are affecting their auditors. These changes need to be distinguished from innovation and technology. The disruption was caused by technology and it creates innovation in business models, new ways of working in markets and new sources of value. Disruption can be enabled by technology. For example, a food delivery app such as JustEat or Deliveroo rests on some very basic underlying technology – kitchens, bicycles and a smartphone app – but puts them together in a way that radically changes the way users order food. There is disruption in transportation sector caused by technology which has revolutionized the sector. The application like uber, bolt and so on caused disruption in transportation business in Nigeria and the auditors of those company need to brace up to the challenges imposed by the technology. In order to remain relevant, auditors must be able to adapt to the changes in business models of their clients. These technological changes in businesses require the attention of audit professionals. Understanding how technologies such as Blockchain [and] Machine Learning work is necessary to enable auditors to assess and respond to the current and prospective risks of the organisations that place their trust in us the organization.

### **Increase in Volume of Data**

The increase in the volume of transactions and data in businesses has increased over the period and is expected to keep increasing in the future. It has been estimated that over 90% of the world's data has been generated since 2016, and significant amounts of it are financial data (Marr 2018). This rapid increase in the volume of data requires auditors to be equipped with the latest available technological tools to analyse a much higher volume of data in their audits than has previously been the case.

### **Change from Manual Processing to Automation**

Most companies have automated their processes. The most immediate impact of technology on the profession is in the automation or even elimination of manual and routine tasks. The movement is accelerated because it has multiple drivers. The movement to cloud-based accounting systems and the attendant standardisation of processes has made data more easily and more widely available, easier to move between systems, easier to manipulate and analyse, and less prone to corruption and errors. For example, where data cannot move seamlessly between systems, the use of robotic process automation (RPA) can remove the need for manual intervention to cover the 'last mile'. Despite this, there seems to be little appetite for 'human-free' audit – automation can reduce errors and spot patterns, but that merely provides the opportunity for individuals to exercise thought and judgement, and to bring into play other skills such as communication, persuasion and empathy. Auditors may find they are asked to look into fewer anomalies – but these will be the ones that count. It seems that the role of the auditor as filter, narrator and independent challenging voice remains secure.

### **Need For a Proactive Approach in Audit**

The use of advanced technologies such as AI and ML, blockchain and data analytics promises a transformation in the audit profession, changing audit from a reactive and backward-looking exercise to a proactive, constant source of forward-looking insights that can be used all the time, with the auditor as the custodian and interpreter of the underlying data foundation. Even in its traditional context, technology now offers an opportunity to produce higher-quality audits that better serve for their existing purpose.

## **ICT Infrastructures that are Causing Disruption in Audit and Assurance**

Businesses across almost every industry are experiencing disruptive changes that are also affecting their auditors. Find below the advanced technologies that are impacting the audit and assurance profession.

In April 2019, ACCA surveyed members and affiliates about their understanding of terms such as artificial intelligence (AI), machine learning (ML), natural language processing (NLP), data analytics and robotic process automation (RPA). On average, 62% of respondents had not heard of it, or had heard the term but did not know what it was, or had only a basic understanding. On average, only 13% of respondents claimed a 'high' or 'expert level' of understanding of these terms. There's a need for greater awareness of what these technologies are and their implication for the audit profession.

### **Artificial Intelligence (AI)**

AI is often described as 'an evolving technology' that is equipping computer systems with something akin to human intelligence, but it is better seen as an umbrella term for a group of technologies that can be combined in different ways, whether for driving your car, controlling your central heating, or managing your investment portfolio. It is also the subject of a large amount of hype, with 'humanlike intelligence' predicted to appear in 2029 (or whatever the current date is plus ten years) and either drastically reducing the workforce or destroying us all. The 'intelligence' in AI often constitutes a combination of processing power and access to data: for instance, a computer will play a game such as chess by analysing all the possible outcomes of a move, using datasets from past games and selecting the winning option. But that fact alone makes AI highly useful to people: it enables the analysis of entire populations of data to identify patterns or exceptions. Auditors are freed from mundane tasks and can focus their time on deploying their skills, training and judgement: although technology is making progress in areas such as speech processing and sentiment analysis, professional judgement is much harder to apply technology to.

### **Robotic Process Automation (RPA)**

RPA is a software routine that are more like very sophisticated Excel spreadsheet macros than genuine AI. As highlighted in ACCA's joint report with CA ANZ and KPMG; Embracing robotic automation during the evolution of finance, 'RPA is software that can be easily programmed or instructed by end users to perform high-volume, repeatable, rules-based tasks in today's world where multiple loosely integrated systems are commonplace (ACCA et al. 2018). RPA is commonly used when the output of one financial process needs to be input into another, or where multiple sources of information need to be consulted. As a result, it is sometimes referred to as 'swivel chair automation', conjuring up the image of an employee swivelling their chair around as they consult multiple systems and re-key and check information. Such work is repetitive, mundane, time consuming and, when done by individuals, prone to error. It is also difficult to scale to cope with variations in workload. A classic example would be processing timesheet information from seasonally employed temporary staff.

One solution is to deploy or lease a 'robot', a software routine that precisely mimics the actions of the chair-swivelling person shifting between systems. Looking back to the timesheet example, the robot would take the information gathered by optical character recognition (OCR) from the paper records and feed it into the payroll system. Because it mimics a process rather than analysing data, RPA itself is not AI, which could be used later to look for the anomalies that previously a human operator might have had to spot. RPA offers many benefits: the robots work non-stop and are faster, more accurate and scalable. Nonetheless, there are also questions about accountability and ownership of the RPA process and security of the data that passes through. There is also the question of whether RPA simply perpetuates inadequate processes that should have been overhauled. We can distinguish between 'good RPA', which closes gaps and contributes to straight-through data processing and 'bad RPA', which simply disguises the flaws in obsolescent or badly implemented systems. In short, fix the process first before applying RPA.

### **Data Analytics**

Data Analytics is an improved technology that allows the auditor to test 100% of the transactions. Some firms are already using data analytics as part of their transactions testing, gradually moving away from traditional sampling techniques. Analytical tools have long been applied to the data derived from accounting and operational systems. The use of Data Analytics makes the analysis of the past more insightful. Rather than sampling transactions data to test a snapshot of activities, we can now analyze all transactions processed, allowing us to identify anomalies and drill down on the items that show the greatest potential of being high risk. Our systems automate this process, increasing its ability to produce high quality audit evidence (KPMG 2015).

However, the UK Financial Reporting Council (FRC) has found that ‘the use of data analytics in the audit is not as prevalent as the market might expect’ (FRC 2017) and it is not yet used consistently across the entire ledger. Even where it is used – such as in journal entry testing, auditors will still need to consider the issue of completeness, as well as the increasing amount of corporate reporting that does not derive from transactions in the ledger. ‘Being able to test 100% of a population does not imply that the auditor is able to provide something more than reasonable assurance opinion or that the meaning of “reasonable assurance” changes.’ (IAASB 2016) The next step for auditors and finance is to apply AI and ML algorithms to improve the quality of analysis and forecasting, and increase the rate of fraud detection.

### **Machine Learning (ML)**

With this technology, the entire transactions could be reviewed to assist the auditor to test for items that are outside the norm’ (ACCA 2019b). Machine Learning uses statistical analyses to generate predictions or make decisions from the analysis of a large historical dataset. The major issue of the audit profession is the extreme proliferation of data, accompanied by a less extreme but nonetheless rapidly expanding volume of regulation. The rapid growth in the volume of financial transactions, if not properly managed, could pose a threat to the work of accountants. For auditors, this may relate to the sample they need and its ability to be representative of the population, enabling them to form conclusions that can be generalized beyond the sample’ (ACCA 2019). A classic example would be credit scoring decisions for loans. The accounting software company Xero has implemented ML to make coding decisions for invoices. Machine Learning can achieve surprising levels of accuracy quite quickly: in the case of Xero’s software, the system achieves 80% accuracy after learning from just four invoices. ML ‘predictions’ can be both backward and forward-looking. It has clear applications in risk management and the detection of fraud and inaccuracy by comparing historical data sets with current data, which can help with risk assessment. Or it can look forward, predicting, for example, the likely future value of an asset.

In practice, the usefulness of ML is crucially dependent on the data it ‘learns’ from. This means the possibility of bias is ever present. Examples have come to light where ML has introduced bias into areas such as credit-scoring and CV assessment. The machine correctly sees that a previously excluded group had not completed many successful loan transactions or risen very high in management and wrongly concluded that the defining characteristics of those groups, such as gender, were predictors of poor future performance. An example using ML in audit can be found in PwC’s report *Confidence in the future: Human and machine collaboration in the audit report*. As per this example ‘company A was way out of line with the peer group benchmarks on a particular point. This data is then shared with the audit team, who can decide whether that variance is really an anomaly and if so, what caused it. The team’s decision about the anomaly and its cause is then fed back to the machine, which is ‘taught’ how to respond to similar relationships in future. And the more this exercise is carried out, the better the machine will get at spotting real anomalies — meaning we’ll be better able to identify unusual patterns and anomalies in huge amounts of data in an instant (PwC, 2017). The self-instructing nature of ML means that decision-making can often be a ‘black box’, with no one able to say precisely how decisions have been arrived at. There is also the danger that during the learning stage – when ML is shadowing human auditors – it will pick up any human errors and repeat them eternally. ML therefore needs to be validated in some way: it is a risk as well as a tool. This raises the possibility that the challenging and testing of internal algorithms may become part of the external auditor’s role, with a much wider remit than assessing accuracy: as the

Harvard Business Review comments: ‘the auditor’s task should be the more routine one of ensuring that AI systems conform to the conventions deliberated and established at the societal and governmental level’ (Guszcza et al. 2018).

### **Natural Language Processing (NLP)**

Natural Language Processing refers to the ability of the computer to recognise and understand human speech. These data and information may not be financials but could have impacts on the organization. This data could be anything from recordings of phone calls to board minutes or postings on social media, which are unstructured and therefore require an understanding of natural language. The most immediate impact is speed. NLP has been shown to achieve orders of magnitude improvements in due diligence exercises involving very large numbers of documents. In 2017 Forbes reported that Deloitte’s use of NLP took contract review from a task keeping ‘dozens’ of employees occupied for half a year to one which six to eight members could complete in less than a month (Zhou 2017). Deloitte’s Audit of the Future Survey found that 70% of audit committee members and other stakeholders believed that auditors should not only use advanced data analytics but consider information beyond traditional financial statements (Deloitte 2016).

### **Cloud Technologies**

The rise of cloud-based systems goes back a long way: arguably, a mainframe computer connected to dumb terminals in regional offices represented an early form of ‘cloud’. Now, a cloud system will be hosted remotely and accessed remotely by generic devices such as tablets, PCs or smartphones. The attractions of cloud systems are summed up in the ACCA report, *The Race for Relevance*: ‘Compared with an organisation’s own legacy physical infrastructure, cloud technologies provide high functionality at a low price point. The associated maintenance costs are also reduced cloud technology costs may be classed as operating expenditure rather than capital expenditure.’ (ACCA 2017b). ‘As well as the cost benefits, cloud storage can provide seemingly infinite capacity, with the business only paying for the space that it uses (ACCA 2017). ‘One benefit of cloud is that it allows employees to work from anywhere in the world, which means that geographically dispersed teams can work on the same project in real time (ACCA 2017). However, cloud systems also force the organisation to adopt standardised processes: ‘they need to adapt their business models and processes to suit these applications, rather than adapting the applications to suit their business models. Arguably, this is a benefit, preventing finance functions from unnecessarily overcomplicating their work and reducing the complexity for auditors when dealing with entities comprising different or multinational companies: even companies that have standardised their functions around a common ERP system are generally running multiple variations and lack the skill or the resource to create appropriate APIs between them. For cloud to be useful it must contain critical data, and a key benefit for audit is that organisations will increasingly be referring to a single data source, which updates for everyone, everywhere with no time lags or inconsistencies. This also comes with risks arising from the need to protect critical data and comply with relevant regulation. ‘Cyber risk is one of the most talked-about business risks. In our increasingly disrupted world it is at the forefront of our minds.’ (ACCA et al. 2019) While implementation of appropriate risk-mitigation strategies rests with the cloud provider, the risk itself remains with the data owner. In practice, however, many smaller entities argue that cloud vendors offer better security than, say, an in-house server. According to KPMG, auditors need to integrate more cyber security capability in the audits and rethink and re-evaluate their approach in providing assurance around cloud systems. ‘This can be achieved by transforming audit approaches leveraging data analytics-driven procedures in order to address the less preventive controls in the system. In addition, the processing and storing of data in the cloud for cloud bases systems introduces new challenges around third party management and data security and confidentiality.’ (KPMG 2018)

## **CONCLUSION AND RECOMMENDATION**



It is very clear that ICT infrastructures have an indelible effect on Audit and Assurance performance in Nigeria. The recent technological advancement raises many questions about the future of audit, a number of which reflect some long-standing tensions. Technology offers the ability both to improve the quality of audit and to add value to it. The effect of ICT infrastructure is moving audit from being reactive and backward looking exercise to a proactive, predictive, forward-looking one, working in real time. As such, it provides further opportunity to help businesses through timely insights. Nonetheless, if Artificial intelligence, deep learning, machine learning and other related technologies mentioned in this journal are fully implemented, it could raise questions about the auditor's independence. 'A quality audit requires the auditor to maintain independence at all times when performing the audit. At the same time, audit quality is enhanced by the closeness to an audited entity that is acquired through repeated involvement in the engagement.' (ACCA 2018). Data analytics seems to be the most mature of the advances in technology and is currently used in audit practice, particularly in journal entry testing. The Big Four accountancy firms are already expanding their use of data analytics in risk assessment as well as in testing revenue, receivables, payables, and salaries. Data analytics tools are also easily accessible by SMPs at a reasonable cost. Given the foregoing, the following recommendations are put forward;

- i) Auditors need to adapt to the changes in business models in order to remain relevant.
- ii) Auditor should strive to exploit the opportunities brought about by the technology,
- iii) The audit profession is still at a very early stage with AI and has not embedded it as deeply as it could.
- iv) In this technological advancement era, auditors need to maintain good relationship with the clients as everything can be replaced by technology.
- v) Auditors will need to be more adaptable to change in future.
- vi) Auditors need to be more technologically inclined and seek for training and retraining.

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## **Impact of Central Bank of Nigeria (CBN) Cashless Policy on Financial Liberalization of the Nigerian Economy**

**GBADAMOSI, Y. Adesanya**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: usefulesanya@gmail.com, Phone No: +234 8034227235

### **Abstract**

*Financial repression, as argued by McKinnon and Shaw (1973) is the existence of interest rates ceilings, high reserve ratios, regulated lending, restriction to entry and exit in the banking activities, restriction of foreign currency transactions, and directed ceilings in an economy. In summary, it is when the government imposes control over financial sector activities causing decrease in savings, discourage investment, lack of investment in an economy will lead to a retarded economic growth. This paper looked at the impact made by the cashless policy on the financial liberalization of Nigerian economy. It was observed that from available information, the policy of cashless transaction has greatly impacted on the financial liberalization of the Nigerian economy. The writer aligned with the view of McKinnon-Shaw 1973 in this explorative review and concluded that the components policies necessary for the effective application of cashless transaction society is yet to be fully implemented. The government needs to follow strictly the initiative and reduce regulatory restriction in the operation of a cashless society to attract private operator in order to have free market interaction necessary for adequate financial liberation and economic growth.*

Keywords: Cashless Policy, Financial Liberalization, Nigerian Economy

### **INTRODUCTION**

The Central Bank of Nigeria (CBN) has made several reforms to make the Nigerian financial system formidable. These reforms were meant to move the economy forward and to place Nigeria on the right track in line with global trends. This paper will examine the impact CBN cashless policy has made in respect of the economic and banking reforms policies targeted at financial liberalization in Nigeria. When we talk about financial liberalization, we refer to the removal of controls and restrictions placed on the financial sector by a governing authority. Financial repression, as argued by McKinnon (1973) and Shaw (1973) is the existence of interest rates ceilings, high reserve ratios, regulated lending, restriction to entry and exit in the banking activities, restriction of foreign currency transactions, and directed ceilings in an economy. In summary, it is when the government imposes control over financial sector activities and it will cause a decrease in savings, discourage investment, and lack of investment in an economy will lead to a retarded economic growth. They argued that financial liberalization is the way forward in an economy, especially a developing economy.

The emergence of cashless policy, the systems where transactions function and operate without the use of coins or banknotes, which was introduced by the CBN in 2012 as a pilot scheme in Lagos has increased the extent of economic activities in Nigeria contributing immensely to the financial liberation of the economy. Among many other provisions, the policy stipulated a cash handling charge on daily cash withdrawals in excess of N500, 000.00 for individuals and N3m for corporate bodies. The goal of the policy was to reduce the amount of physical cash (coins and notes) circulating in the economy and encourage more electronic-based transactions for goods, services, transfers, and other purposes. The new cash policy was implemented for several reasons, including;

- i. To promote the development and modernization of our payment system in keeping with Nigeria's Vision 2020 goal of being one of the top 20 economies by 2020. Economic progress is strongly connected with an efficient and contemporary payment system, which is a major enabler for economic growth and financial independence.
- ii. Provide more efficient transaction choices and a wider reach to reduce the cost of banking services (particularly the cost of credit) and foster financial inclusion.

## *Impact of Central Bank of Nigeria (CBN) Cashless Policy on Financial Liberalization of the Nigerian Economy*

iii. To make monetary policy more effective at controlling inflation and promoting economic growth. Furthermore, the cash policy seeks to mitigate some of the negative repercussions of the widespread use of physical currency in the economy, such as:

High cost of cash: The cost of cash is high throughout the value chain, from the CBN and banks to corporations and traders; everyone bears the high costs of volume cash handling.

High risk of paying with cash: Robberies and other cash-related crimes are encouraged by cash. It can also result in financial loss in the event of a fire or floods.

High subsidy: According to the CBN, just 10% of daily banking transactions exceed N150,000.00, but those 10 % accounts for the majority of high-value transactions. This implies that the entire banking population subsidizes the costs incurred by the tiny minority 10% of the population who use a lot of cash.

High cash usage leads to a large amount of money being spent outside of the formal economy, reducing the effectiveness of monetary policy in controlling inflation and stimulating economic growth and financial liberation.

Inefficiency and Corruption: The widespread use of cash facilitates corruption, leakages, and money laundering, as well as other cash-related illegal acts.

From the foregoing, this paper seeks to elucidate on the impact the cashless policy has made on the financial liberalization of the Nigerian economy. It is believed that the cashless policy must have an impact on the financial liberalization of the Nigerian economy. Is the impact positive or negative and to what extent is the rate of the impact of the policy on the financial liberalization of the Nigerian economy? The major aim of this study is to identify the contributions of a cashless economy to the Nigerian payment system and the financial liberalization of the Nigerian economy. The specific objectives are to ascertain how the cashless policy of the CBN has impacted on the reduction on the restrictions in the financial system in exchange for greater participation by private entities to achieve an increase in savings, encourage investments, and induce economic growth as postulated by McKinnon (1973) and Shaw (1973). The study will enable policymakers to decide whether the enabling environment has been created for the cashless policy to have a positive or negative impact on the financial liberalization of the Nigerian economy and payment system. The period of investigation is delineated from the inception of the cashless policy regime from 2010 to 2020.

### **LITERATURE REVIEW**

#### **Conceptual Framework**

According to the classical theory, the process of industrial production evolves into higher and more sophisticated levels of production as a result of internal and external economies of scale, resulting in further specialization, new products, and quality improvements, leading to the technology acquisition and economic growth. Adapting to a larger market, which has been extended by international commerce, promotes industrial production and adds to the acceleration of economic expansion. The importance of international trade has given rise to the current global challenges. The export-led economic growth concept is based on the stimulation of production as a result of increased demand generated by international commerce, which results in economies of scale. Much earlier trade-led growth expositions by classical economists such as Adam Smith and David Ricardo inspired this idea. As a result, the industrialization-driven resource utilization process is critical to economic growth, as it ensures output and provides positive externalities to propel the economy forward. However, as a result of globalization, there is more competition for markets and investments. Economic development arises from economic growth in the sense that the process of creating economic growth leads to the achievement of financial liberalization.

According to neo-classical theorists such as Alfred Marshall, Friedrich Von, and W.S Jevons, financial liberation will lower the cost of capital while increasing productivity and output. This does not occur in reality. Following financial deregulation, the non-traded goods sector's real interest rate and credit supply both grow. Liberalizing financial markets, according to neoclassical theory, would increase savings and

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improve physical capital formation (Kapur, 1976; Mathieson, 1980). This hypothesis aims to affect the financial system's ability to provide enterprises with the financial capital they require at a reasonable cost. According to this analysis, financial liberalization should make it easier for new businesses to start-up and expand, as well as help existing businesses develop and expand. McKinnon (1973) and Shaw (1973) postulated that in a developing country When interest rates are liberalized, it will lead to an increase in the real interest rate, which will lead to an increase in savings, greater investments, and eventually economic growth in developing countries. (McKinnon & Shaw 1973) focused their initial framework on financial repression and the need to alleviate it by allowing the market to determine real interest rates and removing credit controls, among other things. According to McKinnon (1973) and Shaw (1973), repression will result in low savings, high consumption, low investments, and slowed economic progress. Financial repression occurs when an economy has interest rate ceilings, high reserve ratios, regulated lending, restrictions on entry and exit in banking activities, restrictions on foreign currency transactions, and directed ceilings. As a result, it occurs when the government exerts control over financial sector operations, resulting in a reduction in savings, discouragement of investment, and a slowdown in economic growth. They maintained that in any economy, particularly a developing nation, financial liberalization is the way to go.

Muhammed (2012); Klee (2004); Swartz (2016) shows that a cashless policy for payment system has led to the development of a cashless society. There have been various methods of payment before this new policy, such as the barter system. You can purchase goods and services by exchanging them through barter systems. In the past, people used to trade commodities with one another (barter), and then soon after goods were introduced. The barter system solves the problem of double coincidence of wants by using a “double coincidence of wants” to exchange items that cannot be divided, such as two cows, for two chickens. Paper money and coins were introduced to solve the various challenges associated with trade. Many people in the world still use cash and cheques, but it would be better if they were replaced by electronic payment methods. The Central Bank of Nigeria's cashless policy, according to Adurayemi (2016), is intended to provide mobile payment services, break down traditional barriers to financial inclusion for millions of Nigerians, lower costs, and provide convenient financial services for urban, semi-urban, and rural services across the country. This is in line with the financial liberation theory as propounded by McKinnon (1973) and Shaw (1973). Nigeria currently has up to seven different electronic payment channels. Alternative payment methods that will have an impact on the cashless economy include:

- i. Cheques: The use of cheques is expected to increase. Third-party cheques cannot be cashed across bank counters, and all cheques issued in favor of a third-party must travel via the CBN clearinghouse and have a value of no more than N10 million.
- ii. Bank Drafts and Other Bank Instruments: Most merchants that handle significant transactions under N10 million would utilize bank drafts instead of personal cheques since, unlike personal cheques, bank drafts are paid over the counter but are still subject to the CBN's three-day clearing regulation.
- iii. Automated Teller Machines (ATM): These are increasingly being utilized to make online payments such as utility bills, cable subscriptions, airtime, and data recharges, among other things. Customers are repeatedly instructed by their banks to keep their ATM cards (both debit and credit) safe and to never reveal their ATM card pins.
- iv. Fund Transfers via the Nigerian Interbank Settlement Scheme (NIBSS): The Nigerian Interbank Settlement Scheme (NIBSS) is an interbank internet transfer platform that allows banks to exchange value from one customer to another. It consists of two components: NIP (NIBSS Instant Payment) and NEFT (NIBSS Electronic Funds Transfer), and it facilitates the transfer of funds between banks for single or multiple beneficiaries for amounts up to N10 million.
- v. RTGS: Real-Time Gross Settlements is a transfer technique used by Nigerian banks to transfer amounts greater than N10 million to a single beneficiary.

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vi. Mobile Money: This is a mobile application that allows users to send a code or text over their mobile network to successfully transfer funds, make or receive payments, and even check their bank balance via their mobile devices.

vii. E-transactions: These are electronic financial transfers that are typically carried out over the internet utilizing personal computers (PCs), laptops, smartphones, and other internet-connected devices. Nigerian banks require its consumers to sign up for online banking in order to use this service.

viii. Point of Sale (POS) Terminals: POS terminals are used by merchants on a daily basis. Customers can use their ATM cards to make payments by inserting them into the POS terminal. Because the POS terminals, like the customer's bank cards, are linked to the merchant's bank account online in real-time, once payment is successfully made via the POS account, the customer's bank account is debited immediately, and the merchant's bank account is credited for the value of purchases made or services enjoyed (Oyetade and Ofoelue, 2012).

### **Empirical Review**

Policymakers have debated the impact of financial liberalization on economic growth, as well as other economic phenomena. The impact of financial liberalization on economic growth is a point of contention among economists. The majority of theoretical literature supports financial liberalization as having a positive influence on economic growth, while some empirical evidence contradicts this. Theoretical perspectives on the function of financial liberalization in economic growth can be split into five categories in this context: Financial liberalization gained attention in the early 1970s due to the seminal work of (McKinnon & Shaw 1973) in which they argued that liberalization of the financial sector will lead to an increase in savings, encourage investments and induce economic growth. Hence, many countries especially developing countries have embraced financial liberalization as the way forward for their economies. Financial liberalization became a useful and important monetary policy in many countries following the directive from the “Washington Consensus” or “Bretton Woods.

Economist John Williamson coined the term “Washington Consensus” in 1989, in reference to a set of 10 market-oriented policies that were popular among Washington-based policy institutions, as policy prescriptions for improving economic performance in Latin American countries. These policies centered around fiscal discipline, market-oriented domestic reforms, and openness to trade and investment. In African countries, the Washington Consensus inspired market-based reforms prescribed by international financial institutions (IFIs) like the World Bank and the International Monetary Fund (IMF), under “structural adjustment programs” (SAP), often as prerequisites for financial assistance.

Some of the key policy reforms of the Washington Consensus/SAP period of the 1980s and 1990s included privatization, fiscal discipline, and trade openness that were introduced by IFIs as conditions for debt relief to highly indebted, economically constrained African countries. The expectation was that market-oriented reforms would correct domestic policy-induced distortions in prices, such as overvalued exchange rates, subsidies that led to artificially low agricultural commodity prices, high wage rates, low interest rates, and subsidized agricultural input prices, which introduced inefficiencies in resource allocation, worsening shortages and reducing economic output. Several African countries adopted these policies, often under conditionality, in the 1980s and 1990s. Most early literature finds that the policies failed to improve economic conditions in these countries as the politics of IFI conditionality worked to undermine the role of local ownership in shaping domestic economic policy. In addition, reductions in government spending often reduced spending on pro-poor programs, and the removal of agricultural subsidies made it difficult for African farmers to compete on international markets. The results were increased unemployment and sociopolitical unrest in several African countries over this period. More recent literature has highlighted that reforms were successful in improving economic growth when policymakers had the state capacity to implement them, and when, crucially, reforms were paired with pro-poor policies, spearheaded by governments.

## **Theoretical Discussions**

The IMF and the World Bank made it a part of their economic policy prescription by developing a "structural adjustment program (SAP)" aimed at liberalizing distressed economies. Prior to financial liberalization, Nigeria had a repressed financial sector in which the government and the Central Bank of Nigeria (CBN) restricted and controlled the financial sector's activities. Nigeria, on the other hand, liberalized its economy in August 1987 after adopting SAP. The interest rate liberalization was the first step in this policy initiative. Aside from interest rate liberalization, the reform included promoting a market-based credit allocation system, increasing competition, and improving the regulatory and supervisory framework's efficiency (Jegade and Mokulolu, 2004; Agu et al., 2014). The necessity to put the Nigerian banking industry and the economy as a whole on the path to global competitiveness drove the adoption of this economic package. Liberalization of interest rates. The primary goal of the first financial reform was to improve banks' ability to charge market-based loan rates and so ensure the optimal allocation of scarce resources (Ikhide and Alawode, 2001).

## **METHODOLOGY**

The study adopted explanatory assessment method to review research work done by other writers and provide a causal explanatory view on the subject matter. The explanatory research method is chosen because the Cashless Policy is a new system in Nigeria which was introduced in 2012. It is a preliminary study that can be adopted for further examination. Data were sourced from secondary sources such as the World Bank statistical index and macro trends data bank on Nigeria economic growth, investment, and savings over the period of 2000 to 2020.

The hypothesis supporting McKinnon (1973) and Shaw (1973) theory proposed that financial development and economic growth were strongly attached. The more liberalization of financial systems, the more growth in economic development. As it were, the performance of the Nigerian economy which is reflected by the growth rate of the Nigerian gross domestic product (GDP) shows that the economy has been fluctuating since 1960 when Nigeria got her independence. For example, from 1960 to 1980, GDP grew at an average of 5.0%. However, Nigeria experienced some negative growth rates of -6.80% and -10.92% in 1982 and 1983 respectively. This was before the period of the liberalization or SAP. A negative growth rate of -2.04% and -1.81% was also observed between 1993 and 1994 respectively after some years of positive growth while the SAP was in operation. There was relative improvement in the growth rate of the GDP in the years following the implantation of the SAP. Thus, the Nigerian GDP grew at 7.33% and 11.78% in 1988 and 1990 respectively. However, between 1991 and 1999, the growth rate of the GDP nosedived and recorded some negative rates and unimpressive positive rates. This was basically as result of several unpopular economic policies adopted by the military government. Following the return to democratic governance, the real GDP (RGDP) growth of the Nigerian economy experienced some level of improvement with the growth rate peaking at 15.33% in 2002. Interestingly, the growth rate has been relatively stable from 2006 to 2012. See Table 1 for detail GDP, Per Capital income and Economic growth rate analysis form 1960 to 2020: Source Marcotrends data bank.

Table 1

<b>Year</b>	<b>GDP</b>	<b>Per Capita</b>	<b>Growth</b>
2020	\$432.29B	\$2,097	-1.79%
2019	\$448.12B	\$2,230	2.21%
2018	\$397.19B	\$2,028	1.92%
2017	\$375.75B	\$1,969	0.81%
2016	\$404.65B	\$2,176	-1.62%
2015	\$486.80B	\$2,687	2.65%

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2014	\$546.68B	\$3,099	6.31%
2013	\$508.69B	\$2,962	6.67%
2012	\$455.50B	\$2,724	4.23%
2011	\$404.99B	\$2,488	5.31%
2010	\$361.46B	\$2,280	8.01%
2009	\$291.88B	\$1,891	8.04%
2008	\$337.04B	\$2,243	6.76%
2007	\$275.63B	\$1,883	6.59%
2006	\$236.10B	\$1,656	6.06%
2005	\$176.13B	\$1,268	6.44%
2004	\$136.39B	\$1,008	9.25%
2003	\$104.91B	\$795	7.35%
2002	\$95.39B	\$742	15.33%
2001	\$74.03B	\$590	5.92%
2000	\$69.45B	\$568	5.02%
1999	\$59.37B	\$498	0.58%
1998	\$54.60B	\$469	2.58%
1997	\$54.46B	\$480	2.94%
1996	\$51.08B	\$462	4.20%
1995	\$44.06B	\$408	-0.07%
1994	\$33.83B	\$321	-1.81%
1993	\$27.75B	\$270	-2.04%
1992	\$47.79B	\$477	4.63%
1991	\$49.12B	\$503	0.36%
1990	\$54.04B	\$568	11.78%
1989	\$44.00B	\$474	1.92%
1988	\$49.65B	\$549	7.33%
1987	\$52.68B	\$598	3.20%
1986	\$54.81B	\$639	0.06%
1985	\$73.75B	\$883	5.91%
1984	\$73.48B	\$902	-1.12%
1983	\$97.09B	\$1,223	-10.92%
1982	\$142.77B	\$1,844	-6.80%
1981	\$164.48B	\$2,180	-13.13%
1980	\$64.20B	\$874	4.20%
1979	\$47.26B	\$662	6.76%
1978	\$36.53B	\$527	-5.76%
1977	\$36.04B	\$536	6.02%
1976	\$36.31B	\$557	9.04%
1975	\$27.78B	\$438	-5.23%
1974	\$24.85B	\$403	11.16%



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1973	\$15.16B	\$252	5.39%
1972	\$12.27B	\$209	3.36%
1971	\$9.18B	\$160	14.24%
1970	\$12.55B	\$224	25.01%
1969	\$6.63B	\$121	24.20%
1968	\$5.20B	\$97	-1.25%
1967	\$5.20B	\$99	-15.74%
1966	\$6.37B	\$124	-4.25%
1965	\$5.87B	\$117	4.89%
1964	\$5.55B	\$113	4.95%
1963	\$5.17B	\$108	8.58%
1962	\$4.91B	\$104	4.10%
1961	\$4.47B	\$97	0.19%
1960	\$4.20B	\$93	

Economic liberalization (or economic liberalization) is the lessening of government regulations and restrictions in an economy in exchange for greater participation by private entities. In politics, the doctrine is associated with classical liberalism and neoliberalism. In the interaction of the market forces in the money and capital market, (McKinnon & Shaw 1973) theory concluded that as an increase in interest rate will increase the efficiency of investment and increase in investment leading to an increase in economic growth. When an economy is in extreme repression as when the interest rate is set at a ceiling, the amount saved and invested will be low and the economy will be stagnated. The interest rate ceiling will cause a shortage of funds and credit in the market thus leading to credit rationing. If this ceiling is on deposit rates, then banks will profit from the margin. When the economy experiences a bit of financial liberalization the interest rate moves according to demands, savings and investment increase thus leading to a rise in economic activities causing growth and the economy will experience credit shortage at a smaller magnitude but when full financial liberalization is realized i.e. when market forces are given free hand to operate the economy will experience rapid growth with increase in savings and investment.

Figure 1 explains the interaction of the market forces in the money and capital market. As can be seen, an increase in interest rate will increase the efficiency of investment and increase in investment causes an increase in economic growth. When an economy is in extreme repression as when the interest rate is set at ceiling 1, the amount saved and invested will be  $I_1$  at A and the economy will be at  $S(g_1)$ . The interest rate ceiling will cause a shortage of funds and credit in the market i.e., the distance between A and B, thus leading to credit rationing. If this ceiling is on deposit rates, then banks will profit from the margin between  $r_1$  and  $r_3$ . When the economy experiences a bit of financial liberalization when interest rate moves to  $r_2$  and interest rate ceiling to ceiling 2. At  $r_2$ , savings and investment increase to  $I_2$  at point C, thus leading to a rise in economic activities causing growth and the economy will be at  $S(g_2)$ . At  $r_2$ , the credit shortage has a smaller magnitude (i.e., from C to D) in relation to when at  $r_1$ . When full financial liberalization is realized i.e. when market forces are given free rein to determine interest rate. The equilibrium interest rate will be at  $r^*$  causing the amount of savings and investment is at  $I^*$  which is at point E. The increase in investment will give rise to an increase in the volume of economic activities causing economic growth at  $S(g_3)$ .

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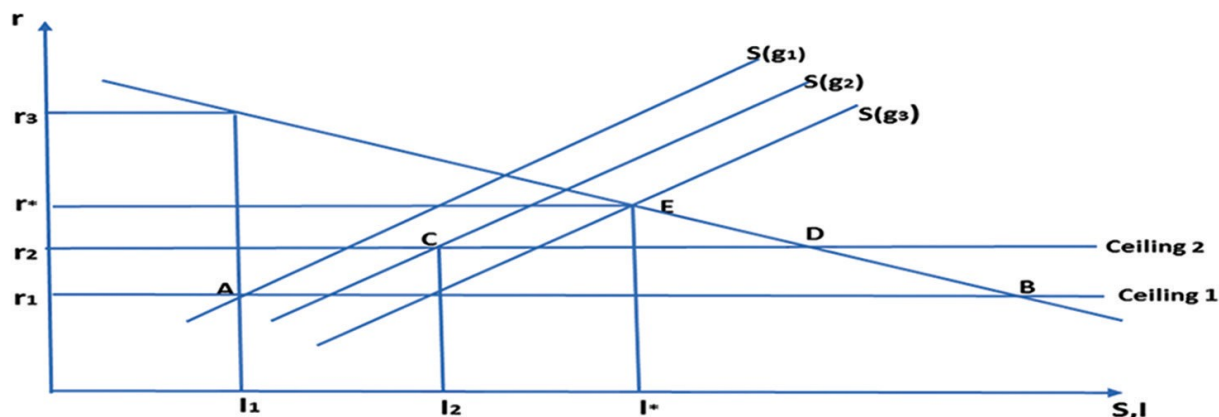


Figure 1

Thus, McKinnon–Shaw framework argue that in order for an economy to experience economic growth via greater efficiency in capital accumulation and allocation, interest rate and ceilings, credit control and other restrictive financial legislations should be removed.

According to Rehman and Gill (2013), the important point of McKinnon’s hypothesis is that an increase in the desired rate of capital accumulation (private savings) at any given level of income leads to an increase in the average ratio of M/P to income implying that a rise in return on capital leads to an increase in the need of real cash balancing holding for accumulation purpose. Thus, money is not a competing asset; rather money is the conduit through which accumulation takes place in developing countries. This implies that an increase in real return on money can sharply raise investment saving propensities in developing countries. Shaw (1973), proposed the “debt-intermediation hypothesis” whereby expanded financial intermediation between savers and investors resulting from financial liberalization (higher real interest rate) and financial development increases the incentive to save and invest, stimulates the investment due to increased supply of credit and increased level of average efficiency of investment. For Shaw, the investment (I) is a decreasing function of real interest rate (r) and the saving is an increasing function of economic growth rate (g) and real interest rate (r). i.e.,  $I = I(r)$  and  $S = S(r, g)$ . He further argued that increased financial intermediation provided the impetus for growth more directly. Liberalization would result in an expanded, improved, and integrated financial sector that would lead to an increase in the savings rate, an increase in the rate of investment (by facilitating more lumpy investment); and a direct enhancement to growth (by improved financial technologies). Hence, McKinnon–Shaw (1973) viewed financial liberalization as; Market-determined interest rates; Greater ease of entry into the banking sector to encourage competition; The elimination of directed credit programmes; Reduced fiscal dependence of the state on credit from the banking system (to allow for greater expansion of credit to the private sector); The integration of formal and informal markets and; A movement towards equilibrium exchange rates and, eventually, flexible exchange rate regimes with open capital accounts (Serieux, 2008).

The paper studies the impact of cashless policy transactions on economic growth and financial liberalization in Nigeria. The policies were evaluated using different data and information extracted from different sources such as the World Bank growth index, CBN bulletins and other reliable data index bodies. The data used ranges from Gross Domestic Product (GDP), Gross savings percentage, investment percentage of Nominal GDP, and GDP growth in Nigeria. The figures below indicated the graphical depiction of movement in the economics indices of Nigeria growth index. In Figure 2 The Investment percentage of nominal GDP was relatively stable between 2010 to 2017 averaging 15.54%, it however started moving upward rapidly from year 2018 to a the highest 29.4% in 2020. Similarly, in Figure 3 the Savings % of GDP which has been unstable increased in the year 2012 when the Cashless policy was introduced but nosedived the following year, it got a marginal boost in the year 2014 and slow down the following year again before it starts moving up gradually from the year 2017.

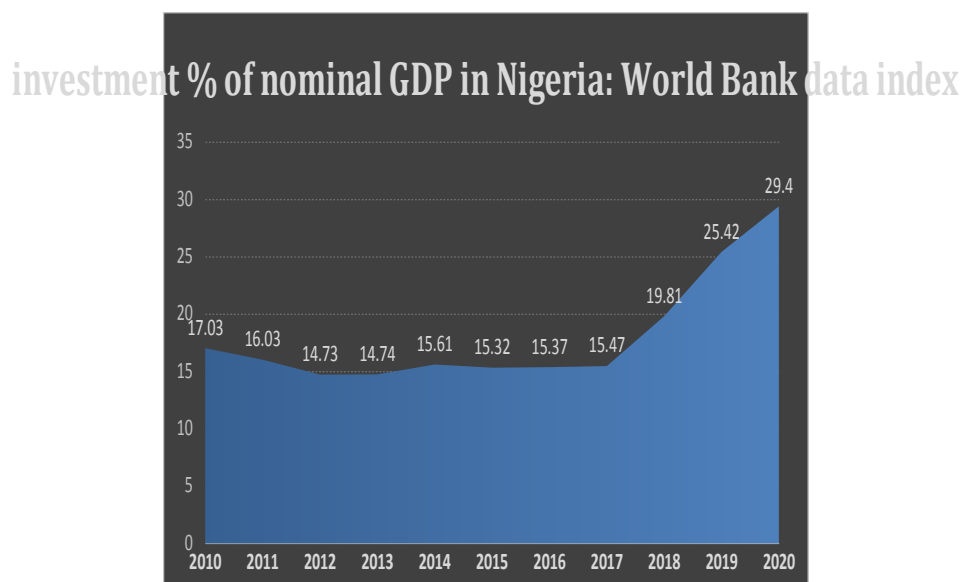


Figure 2

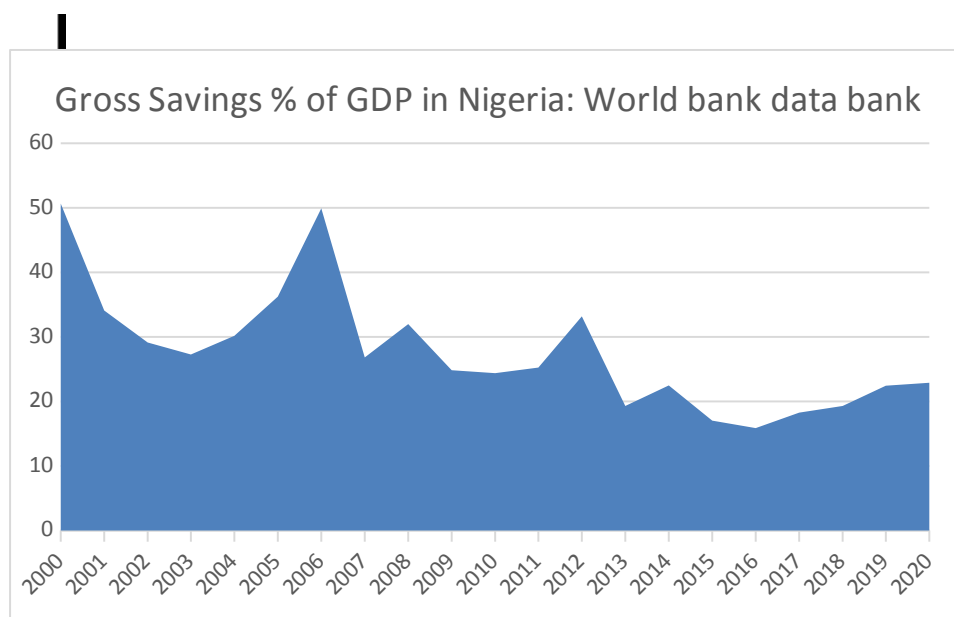


Figure 3

## RESULTS AND DISCUSSIONS

The indication from these pictorial statistics is that actually, the Cashless Policy has impacted positively on the Nigerian economy; however, financial liberation still remains a big challenge due to inadequate implementation of the component policies and support from relevant government bodies. The Central Bank of Nigeria's projections for the country in 2020 has led it to shift towards a more cashless payment system. Nigeria's cashless policy has had an enormous impact on the country's financial liberation and economy growth through the benefits of the block chain, reduced banking costs, mitigating the risk of carrying huge sums of money for businesses, and improved security. However, It is important for a country to manage the monetary policy to make sure the inflation is at a moderate level and the economy

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can keep growing. There have been many hiccups, such as the machine not handling physical cash well, and high charges by banks. There are still people who are unbanked in this region. The slow adoption of a cashless takes as well slowed down the inculcation, or adoption, of it by the rural populace. According to the Central Bank of Nigeria, the cashless policy was implemented in order to support the development and modernization of the Nigerian payment system, which is in accordance with the country's Vision 2020 aim of being one of the top 20 economies in the world. However, in Nigeria, the use of cash for transactions has remained quite significant. This is due to inadequate network connections while using point-of-sale and bank transfers, which frequently results in clients' accounts being debited multiple times, excessive transaction fees charged by banks, and security and technological issues. These are some of the obstacles that remain in the way of a cashless society.

Payment systems in Nigeria are primarily cashed-based before the introduction of the cashless policy. Though the country still have to improve on the cashless policy implementation, new systems such as Copymatic have been created to improve its opportunities with the electronic payment system, Korea is taking the lead over other countries. The Cashless policy is becoming more prevalent, and transactions work without the use of cash. This study found that banks should provide further options of Point of Sale (POS) payments. Invest in information communication technology to improve the efficiency of e-payment systems. Banks will be able to make more money by using various financial transaction applications. They will also improve the economic growth in Nigeria. Although the bank should educate people about its policies, it should also use other methods, like public education to teach people about how to be responsible with money. Cashless policy has increased the share of total investment to GDP Increased the efficiency of the financial sector, thereby enhancing financial liberalization of the economy. Higher real interest rates more accurately reflect the scarcity of financial resources and increase the real return to investors. Effort must be made to increased the ability of firms and individuals to invest by reducing credit constraints Cashless policy has decreased the share of gross domestic savings to GDP Lower credit constraints make it easier to borrow for consumption / investment rather than save and also enhancing financial liberalization.

### **CONCLUSIONS AND RECOMMENDATIONS**

Many nations, including Nigeria, have undertaken financial sector reforms as a result of the harmful consequences of rigid financial sector rules, particularly on savings and hence on the process of financial intermediation. The reform increased dependence on market forces, resulting in changes in interest rate policy and the expansion of financial activities. This also demonstrates that Nigeria is still lagging behind in terms of obtaining the efficiency and depth of a fully functional market-based financial system. The financial sector's intermediation function and investment are not aimed at the long term, causing the real sector of the economy to stay weak and, as a result, lowering the economy's productivity level. The study's key finding is that Cashless policy in Nigeria has aided financial liberalization of the economy. Despite the fact that we believe that financial development is important for output growth, financial liberalization has not improved the depth of the financial system, which would have a positive influence on the economy. In addition, when studying the influence of Cashless policy on financial liberalization of the economy, it will be useful to look for structural cracks. The first step in reclaiming and rebuilding 'project Nigeria' is to adopt improved policy procedures as a means of monitoring and controlling it. Mismanagement of the financial system is a threat to Nigeria's economic progress. Although macroeconomic stability is critical prior to change, structural reform and institutional development in the financial sector, particularly prudential financial regulation, are as important as liberalization progresses. If policy is to be successfully developed and implemented, it is critical to measure the consequences of reform. The first step in reclaiming and reinventing 'project Nigeria' is to implement improved policy procedures as a means of preventing financial system mismanagement, which threatens Nigeria's economic progress. Although macroeconomic stability is critical prior to change, structural reform and institutional development in the financial sector, particularly prudential financial regulation, are as important as liberalization progresses. If policy is to be successfully developed and implemented, it is

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critical to measure the consequences of reform. The impacts of liberalization may skew the conclusions gained from traditional measurements of financial deepening about reform's performance. As a result, authorities should keep an eye on a variety of performance metrics.

To consolidate the gains of the reform program, the government should avoid drastic policy reversals and instead focus its efforts on fine-tuning existing policy measures that will not only compel prudence on the part of major financial market participants but will also encourage all economic agents to save. This will significantly improve fund mobilization in the country. Additionally, private sector investment should be boosted through financial sector credits and a combination of macroeconomic stabilization policies, financial sector deepening, improved governance and accountability, and increased trade openness, all of which would undoubtedly improve Nigeria's economic growth performance. Following are the policy measures that should be followed based on the previous discussion:

- i. When formulating monetary policy, monetary authorities must take into account the amount of growth and development in the domestic sector. Advancing policy prescriptions designed for highly developed economies and adopted locally may not perform best unless they are adjusted to our particular degree of growth. It's also a good idea to use forward-looking monetary policy initiatives.
- ii. As we can see from our findings, cashless policy has measured by private credit has a detrimental influence on financial liberalization. Banks and other financial institutions must change their lending methods to the private sector in order to reverse this tendency. Those with viable company plans and a willingness to invest in the home economy should be eligible for loans. This is one way to stimulate economic growth.
- iii. Monetary authorities should build and maintain a stable macro-financial environment based on stable macroeconomic policies, low inflation, and flexible interest rates to aid the liberalization process.
- iv. Finally, the government should work to create an environment that encourages investment. This can be accomplished by introducing a financial incentive framework and a business climate supportive of entrepreneurship and private sector development. When this is done, economic growth will be enhanced.

Given the foregoing, the study therefore recommends that;

- i. Business models of any financial service institutions that would enhance financial liberations policies such as cashless system should be encouraged and the potential benefit of such models be made known to the users.
- ii. Intensive and consistent education about the electronic channels on financial services should be carried out in the country to enhance general awareness including those outside urban centres.
- iii. Service charges and cost of transaction should be made affordable or free where necessary because unnecessary charges may discourage the unbanked population to increase.
- iv. Financial institutions and government should ensure that enabling environment should be provided where the users of cashless policy will be stranded at the time of financial services need.
- v. Lastly, legal framework that will aid financial liberation, such as free entry to financial market, support to relevant organization in the industry should be regularly reviewed and updated to enhance efficiency.

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## **Effect of Corporate Social Responsibility on the Financial Performance an Organisation**

**KALU, Malthus Kalu**

Department of Accounting  
Bingham University  
Karu, Nasarawa State

E-Mail: kalgra2000@gmail.com, Phone No: +234 7066892173

### **Abstract**

*The study examined the effect of corporate social responsibility in the listed oil and gas companies in Nigeria for the period of (2010-2020). The study uses secondary sources of data. E-view version 9 statistical package was use to analysize and test the relationship between the independent variable (corporate Social responsibility proxy by ROA) and dependent variable(financial performance) Findings from the study indicates that there is a positive relationship between the research and development and financial performance proxy by return on asset. Also there is significant relationship between the social responsibility and return on equity. Based on the findings the study recommends that firms should reserve funds from return on equity as corporate social responsibility, firms are also to establish research and development funds for corporate social responsibility purposes since the result is positive.*

**Keywords:** Corporate Social Responsibility, Financial Reporting, Performance, Organization

### **INTRODUCTION**

Corporate social responsibility relates to defining unilaterally and voluntarily social and environmental policies through alternative instruments which are collective agreements. Organizations operate in an environment that harbors human beings that make up that society. The survival of any organization depends largely upon the successful interaction with the critical elements of that environment. The speed at which the organization responds to the needs of that society is called Social responsibility (Inegbenebor & Osaze, 1999). To sacrifice profit for social interest is social responsibility as opined by Echauge (2005). The sacrifice is ethical so as to remedy some unexpected social qualms that may hinder the smooth operation of the firm in that society. Firms operate in ways that are consistent with the profit motive while simultaneously ensuring maintenance of a wholesome relationship with the host community it operates. Social responsibility is important as it helps firms to remedy social and environmental crisis, productivity loss, drop in sales, health hazards and other anomalies that may stand against the firm's current activities in the future

Firms are the socio-economic agents that have the greatest impact on the environment; they accordingly have a significant role to play in actualizing the enviroental sustainability objectives. To actualize this, the firm would voluntarily integrate this additional role and execute social oriented programmes that serve to increase the net benefit of the relationship between the firm and the community European commission( 2006) Given that the contract between firm and its host community does not define such expanded responsibility, justification for such added burden, remains arguable Babbie (1990). This is in view of the fact that actions taken to protect the environment and promote the interest of the host community comes with substantial underlying cost and for most firms costs are decisive in corporate performance. Therefore, as pressure to behave in a socially responsible way heightens, its effects on the financial performance of firms continue to generate debate Jensen (2002). Corporate social responsibility is defined as achieving commercial success in ways that honor ethical values and respect people, communities and the natural environment by a leading Global partner in a forum in 2006. CSR means addressing the legal, ethical, commercial and other expectations society has for business and making decisions that fairly balance the claim of all key stakeholders. It is defined as other stated objectives by business which are significant relations between corporate social responsibility and a firm's risk adjusted return on assets. Narrowing the focus of this CSR in this context, the research explores the avenue in which enviroental problems within a host community is considered a point of interest to the firms

understanding. To be precise, environmental degradation that forms ecological problem in a large scale is a concern to firms within the community. Environmental degradation constitutes issues not only to the host community but also to the firms operating life, as well as affecting the financial performance of the organizations. In search of the remedy, firms establish research and development cost/fund to enable them find solution to the environmental degradation as part of Corporate Social Responsibility. This paper is interested in finding out whether the research and development project of firms contribute to the corporate financial performance. Recognizing that solving environmental degradation problems can both serve as corporate social responsibility and enable firms operate in a higher capacity that will enhance financial performance.

This research is conducted to find out how firms manages environmental degradation and the effect of this action on the financial performance of the firm. The precise nature of this relationship is a subject of argument and conflicting interpretations. Corporate Social responsibility (CSR) affecting environmental degradation and what are the social and environmental solutions resulting into avoidance and amendments into degradation anomalies. However, firms have put efforts in the same vein. Researchers, authors have been writing on social and corporate responsibilities affecting environmental management. But this paper focuses on environmental degradation This study is interested in linking into research and development efforts of some registered oil firms in talking environmental degradation management. Many researchers have written on corporate social responsibilities. This study is to look at the management of environmental degradation and the effects on the financial performance of some listed oil firms in Nigeria. The hypothesis underlying this study is stated thus;

**HO1:** Research and Development (R&D) has no significant impact on the environmental degradation management and financial performance.

**HO2:** Return on Equity (ROE) has no significant impact on financial performance.

## **LITERATURE REVIEW**

### **Conceptual Framework**

#### **Corporate Social Responsibility**

This is a responsibility of-profit and non-for-profit organizations for their impact their impact on stakeholders, natural environment and wider accountability and transparency of corporate actions that include social,ethical,environmentaland economic efforts, which are often voluntary and placed within and outside market and commercial transactions. Organisation for economic Co-operation and development views CSR as the business contribution to sustainable development. Corporate behavior must not only ensure returns to shareholders, wages to employees, and products and services to consumers, but they must respond to the social and environmental concerns and values. OECD (2001). The concept of CSR was born in discussion about the role of business in society (Bowen, 1953).

#### **Return on Equity**

Return on equity is a strong measure of how well the management of a firm creates value for its shareholders. It is the amount of net income returned as percentage of shareholders' equity. It is one of the all time favorites and perhaps most widely used overall measure of corporate financial performance.Rappaport (1986) which was also confirmed by Monteiro(2006).Return on equity is popular among investors because it links the income statement (net profit/loss) to the balance sheet (Shareholders equity).

#### **Return on Asset**

This is a measure of how efficiently a company uses the assets it owns to generate profit' managers, investors and analysts use return on asset to evaluate a company's financial health. It is used to how a company's asset is in generating revenue. It measures how efficient a firm's management is in earning a



profit from their economic resources or asset on their statement of financial position. ROA is shown as a percentage, and the higher the number, the more efficient a company's management is at managing its balance sheet to generate profits.

### **Firm's Financial Performance**

This refers to work well done in financial matter. How effective and efficient has a firm performed financially. Liquidity refers to the firm's ability to convert its short-term assets into cash in order to meet their current maturing liabilities (Okwoli & Kpelai, 2006).

### **Environmental Degradation**

This talks about the deterioration of the environment through depletion of resources such as quality of air, water and soil. The destruction of eco-systems, habitat destruction, the extinction of wild life and pollution. It is defined as any change or disturbance to the environment perceived to be deleterious or undesirable. Environmental degradation is one of the ten threats officially cautioned by high level on threats. It comes in many types. When natural habitats are destroyed or natural habitats are depleted, the environment is degraded. Efforts to counteract this problem include environmental protection and environmental resources management. Mismanagement that leads to degradation can lead to environmental conflict where communities organize in opposition to the forces that mismanaged the environment.

### **Empirical Review**

Some researchers have been conducted relating to corporate social responsibilities and organizational performance in developing countries as enunciated by Makk (Makk, 2004, Krishnan and balachandran, 2005; pohle and hittner, 2008). Much of the work on relationship between corporate social responsibilities and organizational performance has been done by and is being applied to industrialized nations. Within the Nigerian context, Corporate Social Responsibilities and organizational performance refers to business contributions to the immediate community and the economy as a whole, for development and progress though extraneous to their normal business activities (Dandago, 2008). The research conducted in Africa has come to a general conclusion that, the proportion of resources committed to corporate social responsibilities expenditure rises with the firms' sales Adeolu and Afolabi, (2010). The expenditure on corporate social responsibilities development initiative are greater as observed by Eweje (2007).

### **Theoretical Framework**

#### **Stakeholders Theory**

The stakeholders' theory suggests that since people voluntarily associate in a firm, their cooperation towards achieving organizational goals when they successfully develop quality relationship with these stakeholders .Generating this positive relationship will naturally include the provision of social projects and other actions that are normally costly for the firm, at least in the short run. Profits may be the outcome of this association, once value is created (Freeman, Wicks & Parmar, 2004). The positive association found between corporate social responsibility and financial performance by Cochran and wood(1984)Preston and O'Bannon (1997) and Spencer and Taylor (1987) partly serve to reinforce and justify the logic of the Stakeholder's theory.

#### **Social Contract Theory**

Social contract is of the view that it is someone's political/moral responsibility to improve the society in which he lives whether written contract or by agreement. This theory is as old as the philosophy itself. Jean-Jaques Rousseau, John Locke and Thomas Hobbes are the best known proponents of this theory, which has influenced the development of several other philosophical, economic and political arguments

in the ancient and recent past. It is one of the dominant theories within moral and political theory throughout history.

**METHODOLOGY:**

The study makes use of Annual financial reports of some listed oil firms for its secondary data. The sample period is for ten (10) years from 2010-2020. The data are amounts of expenditure on corporate social responsibilities activities, management of degradation activities.

The study assess whether there is a relation between the two variables.

**Model specification**

$$ROA = \beta_0 + \beta_1 RD + \beta_2 ROE + \epsilon \dots\dots\dots 1$$

ROA = Return of Asset

ROE = Return on Equity

RD = Research & Development

**RESULT AND DISCUSSION**

**Descriptive Statistics**

**TABLE ONE: Descriptive Statistics**

Date: 03/28/22

Time: 16:17

Sample: 2011 2020

	ROA	ROE	R_D
Mean	1.558250	17.20900	42022.03
Median	2.750000	9.710000	5593.200
Maximum	173.5100	938.5900	364814.0
Minimum	-144.3800	-256.2100	100.0000
Std. Dev.	23.93954	109.0869	78296.30
Skewness	0.877520	6.224127	2.458276
Kurtosis	35.37284	50.95832	8.388292
Jarque-Bera	5255.406	12274.80	266.0309
Probability	0.000000	0.000000	0.000000
Sum	186.9900	2065.080	5042643.
Sum Sq. Dev.	68199.07	1416094.	7.30E+11
Observations	120	120	120

The descriptive statistical result presented in table 1.0 above indicates that Return on Asset (ROA) during the period under study has minimum and maximum percentage values of -144.3800% and 173.5100% respectively. The average amount of mean to ROA disbursed during the period is 1.558250% with standard deviation of 23.93954%, implying that, the data deviated from the both sides of the mean by 23.93954%. This suggests that, the data on ROA is quite widely dispersed from the mean during the sample I period, as the standard deviation was also found to be high. The co-efficient of skewness of 0.877520 suggests that the ROA data is positively skewed and did not comply with the symmetrical distribution assumption. With a kurtosis value of 35.37284, it implies that, ROA is platykurtic (fat or short-tailed), suggesting that the distribution for ROA is flat relative to normal distribution. The p-value of 0.000000 for Jarque-Bera implied that the Gaussian distribution assumption of normality was met for ROA at 5%. Also, as it can be observed from Table 1.0, the descriptive results for ROE showed that it has minimum and maximum values of -256-2100% and 9.710000% respectively. The average value of the

RSV during the period is 9.166203% with standard deviation of 17.20900%, implying that the data deviate from the both sides of mean value of 17.20900%. This suggests that, the ROE in Nigeria is not widely dispersed during the period under study, as the standard deviation was found to be more than the mean value. The skewness co-efficient value of 6.224127 suggests that the data on ROE is positively skewed and did not comply with the symmetrical distribution assumption. The kurtosis value of 50.95832 (which is greater than three) implied that, ROE is leptokurtic (slim or long tailed) implying that, the distribution peaked relative to the normal distribution. The probability value of Jaque-bera captured to be 12274.80, also implied, that the Gaussian distribution assumption of the normal data on ROE was not met; and thus, indicates that, the data on ROE did not follow the normal curve.

More so, with regard to R&D to ROA, it could be observed from the descriptive results that R&D has a minimum and maximum percentage values of 100c.0000% and 364814.0% respectively. The mean value of R&D during the period is 42022.30% and with a standard deviation of 78296.30% (which is relatively high); implying that, the data deviated from both sides of the mean. This suggests that the data for the R&D variable is relatively widely dispersed from the mean of the sample. The skewness co-efficient value of 2.45876 indicates that the data is slightly skewed (or tailed) to the right of the mean, and did not comply with the asymmetrical distribution assumption. It implied that, the R&D data, deviated from normal distribution. The kurtosis value of 8.388292 showed that R&D is leptokurtic (slim or long tailed) which implied that R&D distribution is peaked relative to the normal distribution. The p-value of 0.000000 for Jarque-Bera implied that the normal distribution assumption was also not met for R&D.

**Correlation Analysis**

**TABLE TWO: CORRELATION MATRIX ANALYSIS**

Covariance Analysis: Ordinary  
 Date: 03/28/22 Time: 16:21  
 Sample: 2011 2020  
 Included observations: 120

Correlation Probability	ROA	ROE	R_D
ROA	1.000000 -----		
ROE	0.726756 0.0000	1.000000 -----	
R_D	0.058697 0.5242	0.023691 0.7973	1.000000 -----

Correlation analysis is used to describe the strength and direction of the linear relationship between two or more variables. Correlation, like covariance, is a measure of the degree to which any two variables vary together. In other words, two variables are said to be correlated if they tend to simultaneously vary to the same direction. If both the variables tend to increase (or decrease) together, the correlation is said to be direct or positive, for example, the length of an iron bar will increase as the temperature increases. If one variable tends to increase as the other variable decreases, the correlation is said to be negative or inverse. For example, the volume of gas will decrease as the pressure increases. It is worth remarking that in correlation, the econometrician assumes the strength of the relationship (or interdependence) between two variables; both the variables are random variables, and they are treated symmetrically, that is, there is no distinction between dependent and independent variable. In regression, by contrast, the econometricians are interested in determining the dependence of one variable that is random, upon the other variable that is non-random or fixed, and in predicting the average value of the dependent variable by using the known values of the other variable. Correlation analysis between two variables is called

simple correlation, while the correlation analysis between three or more variables is known as multiple correlations. The square of equals for a regression where one of the two variables is the dependent variable and the other is the only independent variable. Correlation can take on only values from +1 to -1, and the closer the absolute value of  $r$  is to 1, the stronger the correlation between the two variables. The sign at the front (that is, + or -) indicates whether there is a positive correlation (as one variable increases, so too does the other) or a negative correlation (as one variable increases, the other decreases). Thus, the sign indicates the direction of the correlation between two variables. The size of the absolute value (ignoring the sign) provides an indication of the strength of the relationship.

The result in Table 2.0 indicates that negative and signifies correlation exists between ROA and ROE. This relationship was also found to be *moderate* as indicated by the correlation coefficient value of 0.726t56, and with a p-value of 0.0000. The inverse correlation between ROA and ROE implies that an increase in ROE would lead to a corresponding increase in ROA. Furthermore, positive and strong correlation was found to exist between ROA and R&D. This was captured by the correlation coefficient value of 0.58697; which was also found to be statistically significant. However the p-value is 0.5242.

Lastly, the correlation between ROE and R&D is found an insignificant and positive as indicated by the correlation coefficient value of 0.023691 (with a p-value of 0.7973). Therefore, among the three correlations of interest, using ROA as the outcome variable, the correlation between ROA and R&D was found to be the strongest; and in summary showed that environmental disclosure cost on financial performance of listed 0.1 companies in Nigeria has a relatively strong and significant correlational association.

### Regression Result

TABLE THREE: REGRESSION ANALYSIS

Dependent Variable: ROA

Method: Panel Least Squares

Date: 03/28/22 Time: 16:25

Sample: 2011 2020

Periods included: 10

Cross-sections included: 12

Total panel (balanced) observations: 120

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.715935	1.730691	-0.991474	0.3235
R_D	1.27E-05	1.94E-05	0.654559	0.5140
ROE	0.159274	0.013915	11.44656	0.0000
R-squared	0.529896	Mean dependent var		1.558250
Adjusted R-squared	0.521860	S.D. dependent var		23.93954
S.E. of regression	16.55363	Akaike info criterion		8.475770
Sum squared resid	32060.64	Schwarz criterion		8.545457
Log likelihood	-505.5462	Hannan-Quinn criter.		8.504070
F-statistic	65.94060	Durbin-Watson stat		2.067986
Prob(F-statistic)	0.000000			

Regression Result in this table, the research is interpreting R-square and Adjusted R-square which were used to show explanatory power of the model and the reliability of the estimates. It indicates how the model was reasonably fit in prediction. The coefficient of determination (R-Square) gave a value of 0.529896 and for adjusted-R-squared has a value of 0.521860. The R-square which measures the goodness of the estimated model, indicates that the model is reasonably fit for prediction. The R-squared showed that 52.98% changes or variations in R&D were *collectively* due to ROE and R&D; while 52.18%, which is the unaccounted variations was captured by the (white noise) error term.

The ANOVA (F-statistic) was used to examine the overall significance of regression model. The finding further confirms that the overall regression model is significant for the data, and this was captured by the F-statistic value of

65.94060 and its associated probability value of 0.000000 ( $F = 65.94$ ,  $p < 0.05$ ) that was found to be significant at 5% level.

Durbin-Watson (DW) statistic was used to test for the presence of autocorrelation or serial correlation among the error terms. The closer the DW is to 0, the greater the evidence of positive serial correlation, and the closer the DW is to 4, the greater the evidence of negative serial correlation (and the acceptable DW range of none serial correlation is between 1.45 and 2.44). Thus, the fitted regression line result showed that there is no evidence of autocorrelation as indicated by DW statistic of 2.067986. Statistical Significance. The three hypotheses were tested by using p-values of the t-statistics (or t-value) generated from the regression results in Table 3.0. The level of significance for the study is 5% (or 0.05), for a two-tailed test The rejection or acceptance criteria were that, if the p-value is less than 0.05 ( $p < 0.05$ ), reject the null hypothesis, but if it is greater than 0.05 ( $p > 0.05$ ), the null hypothesis is not rejected.

### **Test of Hypothesis One**

**H<sub>01</sub>:** Research and Development (R&D) has no significant impact on the environmental degradation management and Financial Performance (ROA)

From regression result in Table 3.0, the calculated t-value for the relationship between Research and Development (R&D) and performance Return on Asset (ROA) is given as 0.654559, with an associated probability value of 0.5140. Since the probability value (pv) is greater than 0.05 at 5% level of significance, it therefore falls in the acceptance region and hence, the first null hypothesis (H<sub>01</sub>) was accepted. The result thus showed that research and Development (R&D) have significant impact on financial performance proxied by Return on Asset (ROA)

### **Test of Hypothesis Two**

**H<sub>02</sub>:** Return on equity (ROE) has no significant impact on financial performance.

The estimates from the regression result in Table 3.0 revealed that, the calculated t-value for the relationship between Return on equity (ROE) and Return on asset (ROA) was found to be 11.44656 and its probability value was 0.0000. Since the probability value (pv) is less than 0.05 or 5 percent ( $p < 0.05$ ) level of significance (and fell in the rejection region), the second null hypothesis H<sub>02</sub> : was rejected. It also concludes that return on equity (ROE) has significant impact on social responsibility proxy by ROA

## **CONCLUSION AND RECOMMENDATION**

The estimates from the regression result, recognizing the level of significance, the research and development, return on equity reflects significant effect on the financial performance of the firms while the test shows that return on equity does not have significant relationship with the return on asset which represents firm's financial performance. The estimate shown above is for the t-statistical value but the probability value display significant level between ROE and ROA with the probability value of 0.0000 which is below the significant level of 0.05 by so doing return on equity have a significant relationship with return on asset. Therefore the two variables representing corporate social responsibility as independent variables have a significance with dependent variables which is return on asset proxy firm's financial performance.

The study found out that corporate social responsibilities perform by oil and gas firms through establishing research and development fund research on return on equity can contribute in the construction and management of environmental degradation perform to host community as CSR. Given the foregoing, below are the specific recommendations:

- i. Firms should reserve funds from return on equity for corporate social responsibility for it has been tested and yield positive result.
- ii. Also firms should establish research and development funds for corporate social responsibilities purposes.
- iii. Consequently, Firms should continue to undertake Corporate social responsibility to have a friendly environment to operate for better financial performance.

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## **Effect of Internal Control Systems on Financial Reporting of Corporate Organizations in Nigeria**

**MUFUTAU, Adewale M.**

Department of Accounting  
Bingham University,  
Karu, Nasarawa State.

E – Mail: mufadem@yahoo.com, Phone No: +234 7030124655

### **Abstract**

*The purpose of this study is to establish the relationship that exists between internal control activities and the financial reporting of corporate organizations in Nigeria. The literature review is based on agency theory and stakeholder theory. An exploratory research design was carried out. The study used the secondary method of data collection basically sourced from journals, the internet, and other relevant publication. The study had the following research questions: is there any relationship between internal control and quality report? does board size have any significant impact on financial reporting, and if there is a significant difference between internal control and financial reporting? The study shows that there is a significant relationship between internal control and quality financial reporting. The study recommends that more studies of internal control be undertaken as this will have an impact on financial reporting. The investigation recommends proper checks and balances in all financial transactions. There should be an effective and efficient security network to reduce frequent theft, a threat to life and property. The study also recommends that the management of every corporate organization should organize regular training for staff on the control mechanism.*

Keywords: Internal control, control activities, financial reporting, corporate organization

### **INTRODUCTION**

Internal control is the system or mechanism rules, and procedures implemented by a company to ensure the integrity of financial and accounting information, promote accountability and prevent fraud by which companies are directed and controlled. The quality and the way the internal control is either effective or ineffective have significant effect in the financial reporting of the organizations. The management should ensure that control put in place is strictly adhered to by staff and ensure, this can be effect through proper training and stiff penalty for deviants. Corporate governance involves a set of association amongst a company's board, its shareholder and other stakeholders. Corporate governance also provides the arrangement through which the objectives of the company are set, and the way of attaining those objectives (Cadbury, 1992). Good corporate governance is a product of high financial reporting quality that would reduce the fraudulent disclosures of report from the annual financial statements (Norwani et al. 2011). Corporate governance cannot be separated from financial reporting quality Cohen et al. [2004]. Financial reporting quality is defined as the financial disclosure statements that will disclose the financial status in the annual report and strengthen the investors' confidence in making credible decisions about their organizations. The chief objectives of financial reporting is to portray the position and performance of the entity in question so that investors in equity and debt, among other stakeholders, can make credible and economic decisions based on accurate information regarding potential risks and returns (Deloitte, 2012; FRCN, 2015). Board of directors' responsibility is to render service on how the economic resources of the shareholders were used. The shareholders thereafter, used an external auditor to provide assurance service to confirm that the financial reports put together by Management show a true and fair view of financial dealings of the organization for the indicated duration. One of the major responsibilities of auditors is that, they assure confidence to financial statements users about the reported information. Audit services have been crucial to the quality of financial reporting since industrial revolution. To be noted that information provided to the auditor is a function of internal control, if the control activities of the organization is poor, this will definitely affect the outcome of the auditor report.

Internal control as defined by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) is a process, affected by an entity's board of directors (trustees), management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the

following categories: Effectiveness and efficiency of operations, reliability of financial reporting compliance with applicable laws and regulations. They include a wide range of activities that occur throughout the organization, by supervisory and front-line personnel. Typically, management is responsible for developing an appropriate system of internal controls, but every employee is responsible for following and applying those practices. Key Internal Control Activities in the workplace. All employees fit into the organizational picture of internal control, whether or not their job responsibilities are directly related to these example activities. Segregation of Duties, Authorization and Approval, Reconciliation and Review, Physical Security. Turnbull (2020) explanation focuses on the positive role that internal control has to play in an organization. Facilitating efficient operations implies improvement, and, properly applied, internal control processes add value to an organization by considering outcomes against original plans and then proposing ways in which they might be addressed. At the same time, Turnbull also conceded that there is no such thing as a perfect internal control system, as all organizations operate in a dynamic environment: just as some risks recede into insignificance, new risks will emerge, some of which will be difficult or impossible to anticipate. The purpose of any control system should therefore be to provide reasonable assurance that the organization can meet its objectives. The main objectives of internal control are: Efficient conduct of business, Safeguarding assets, preventing and detecting fraud and other unlawful acts, completeness and accuracy of financial records, timely preparation of financial statements (ACCA, 2014).

Internal control failures are what happens with the internal controls a company has are flawed, so flawed “that a material misstatement in a company's financial statements will not be prevented or corrected.”, Financial reporting is considered as being of high quality if it possesses three attributes which include transparency, full disclosure, and comparability. Transparency is referred to as therevealing of information about events, transactions, judgment, and estimates which allows users to see the result and implication of decisions, judgment and estimates of preparers. Full disclosure is related to the provision of all information necessary for decision-making while comparability means that similar transactions are accounted for in the same manner both cross-sectional arising among companies as well as over time (Barton & Waymire, 2004). Several factors could influence the quality of financial reporting among which are the the control system that produces the report. The effectiveness of the control in the financial reporting process could depend on its effectiveness and efficiency. (Klein, 2002). The management opportunist conduct which could influence the quality of reporting may likely be moderated or reduced by an effective internal control (Chandar, Chang, & Zheng, 2012; Liao & Hsu, 2013). The existence of control in an organization is beneficial to management, external and internal auditors since it enhances the quality of the internal control system (Musa & Oloruntopa, 2014). Internal control tends to provide a positive signal about financial disclosure and help enhance shareholders' confidence in financial reporting quality (Islam et al. 2010). Recent research documents that effective control system could be fundamental to high financial reporting quality (Fodio et al. 2013; Hassan, 2012). The aim of this study is to ascertain whether effective internal control system could lead to high financial reporting quality. The significance of the study of internal control system is that they help in monitoring and overseeing the financial statements. Also, it assists the firm in maintaining the goal and objectives of meeting the shareholders wealth and increasing the investor confidence in the financial reporting quality. The theoretical and contextual contribution of the study is that there is a positive relationship between internal control and financial reporting quality in the annual report and this agrees with the agency and stakeholder theory viewpoint. This can be attributed to the fact that large firms demand and use better corporate governance mechanisms in disclosing information to the advantage of the stakeholders (Barbu et al., 2014)

## **LITERATURE REVIEW**

### **Conceptual Framework**

#### **Internal Control**



An internal control is a procedure or policy put in place by management to safeguard assets, promote accountability, increase efficiency, and stop fraudulent behavior. In other words, internal control is a process put in place to prevent employees from stealing assets or committing fraud. Since the accounting scandals in the early 2000s, there has been an increasing importance placed on internal controls in every level of an organization. In fact, the Sarbanes Oxley Act requires management to design, implement, and personally evaluate the effectiveness of internal controls within the business. Executives found guilty of not properly managing the internal control structure of their companies can face fines and even prison time now. Needless to say, internal controls are a big deal. They protect the company assets and even help streamline the operations.

According to Adedoyin (2012), The seeming obscurity of the internal audit is reinforced by the fact that the form its reports should take, is not expressly provided for in the Companies and Allied Matters Act 1990. Even Sections 63-65 of the Investment and Securities Act (ISA) 2007 which require external auditors to provide assurance on the internal control system of corporate entities did not also specify the format of reporting. Yet these pieces of legislation strictly confer on the Board of Directors the responsibility for evolving internal control measures that will guarantee the security of corporate assets, which is one of the main duties of the internal audit department. In spite of these legal inadequacies, the role of internal audit in value creation deserves to be acknowledged. Thus, efforts by an organization to seek and adopt best practices in internal control and audit efficiency, is most commendable. Internal Control System (ICS) is a process affected by an organization's board of directors and all the levels of management designed to provide reasonable assurance regarding the effectiveness and efficiency of operations, reliability of financial reporting and compliance with management policies (COSO, 2009; 2013). The board of directors retains oversight responsibility for management's design, implementation, and conduct of internal control. Studies have examined the effectiveness or quality of ICS from different perspectives Kinney and McDaniel, 1989; DeFond and Jiambalvo (1991); Krishnan; Bryan and Lilien (2005) used characteristics such as firm size and beta, Frankel, Johnson & Nelson, 2002; Chan, Farrell, & Lee, (2005) employed firms reporting material weaknesses, earnings management and lower return-earnings associations, Doyle, Ge, & McVay (2006) took accruals quality of material weakness firms.

### **Quality Financial Reporting**

Whittington & Pany (2001), talk about the comprehensiveness of internal controls in addressing the achievement of objectives in the areas of financial reporting, operations and compliance with laws and regulations. They further note that "Internal control also includes the program for preparing, verifying and distributing to the various levels of management those current reports and analyses that enable executives to maintain control over the variety of activities and functions that are performed in a large organization" They mention internal control devices to include; use of budgetary techniques, production standards, inspection laboratories, employee training and time & motion studies among others. According Bakibinga 2001, corporate law requires a divorce between ownership and management of an entity. Owners normally entrust their resources in the hands of managers. Managers are required to use the resources entrusted to them in the furtherance of the entity's objectives. Managers normally report to the owners on the results of their stewardship for the resources entrusted to them through a medium called financial statements. It is these financial statements that reveal the financial performance of an entity. John J. Morris (2011) believes that Enterprise Resource Planning systems provide a mechanism to deliver fast, accurate financial reporting with built-in controls that are designed to ensure the accuracy and reliability of the financial information being reported to shareholders.

### **Empirical Review**

Mansur and Muhammad (2020) carried out a study on the Empirical investigation of Financial Reporting Quality And Internal Control System Of Nigerian Stock Exchange Lotus Islamic Index. This research study is based on Ex-post factor research design, is a non-experimental research technique, and secondary

## *Effect of Internal Control Systems on Financial Reporting of Corporate Organizations in Nigeria*

source of data collection was used and financial reporting and the internal control system of the 15 companies that made the Lotus Islamic Index for period of 2012-2016 were obtained. Data was analyzed using the Regression and Correlation Results. The primary objective of the study is to examine the financial reporting quality and the internal control system of the 15 companies that made the Lotus Islamic Index for period of 2012-2016. The aim of analysis used is to determine the relationship that exist between variables for the same time frame. The major finding of the study was that the Control Environment Control Activities & Monitoring aspect of Internal Control System significantly relates to Financial Reporting Quality. Ejoh and Patrick (2014), in their study, *The Impact of Internal Control Activities on Financial Performance of Tertiary Institutions in Nigeria*. Their study provides evidence of a link between internal control and quality financial reporting disclosure. The study establishes the relationship between internal control activities and financial performance in Tertiary Institutions in Nigeria. The study area is Cross River State College of Education, Akamkpa. Data was collected using questionnaires and interview guide as well as review of documents and articles. The method of analysis employed was survey design while the stratified sampling procedure was adopted in administering the questionnaires. The data were analyzed using simple percentages, tables, correlation coefficient and z-scores. The study revealed that all activities of the College are initiated by the top management. Regarding control activities, the study found that there is clear separation of role in the institutions' finance and account department and that superior officer in the College supervised regularly work done by their subordinate. Also, the study found that the institution financial statements are audited annually by external auditors. However, there is a possibility for a single staff to have access to all valuable financial information without the consent of other staff. On the budgetary control, the study revealed that the institution adhere strictly to the provisions of annual departmental budget and that control are in place to exclude incurring expenditure in excess of allocated fund. Also, there is poor security network in the College. The study result further showed that there is no significant relationship between internal control activities and financial performance of Cross River State College of Education. The investigation recommends proper checks and balances in all financial transactions. There should be effective and efficient security network to reduce frequent theft, threat to life and property. The study also recommends that management of the institution should organize regular training for staff on control mechanism.

### **Theoretical Framework**

#### **Agency Theory**

Agency theory discusses the separation of ownership from control in the modern enterprise, the agent-principal relationship and the consequential conflict of interest that has emerged. Ideally, managers as agents are expected to monitor corporate affairs in a most profitable manner so as to maximize the value of the owners as principals and protect the interest of other stakeholders. Under the theory, managers are responsible for managing the business profitably and are also responsible for preparing the financial statement of the organization at the end of the period. While the control and the running of the day-to-day affairs of corporate entities is with the managers, there are two major factors that usually give rise to agency problems; self-serving interest and incentives/managerial discretions. For instance, the interest of management usually conflicts with the interest of the owners, in which the managers try to meet their goals at the expense of the firm, and this can affect the performance in many ways. On the other hand, managers are usually given incentives to meet or to beat earnings target and hence receive bonuses that are tied to the firm's earnings (i.e. performance related). Considering the influence of managers and possibilities of information asymmetry between managers and owners, the managers are likely to use the discretion they have on accruals and manipulate firm performance through accounting earnings.

#### **Stakeholder Theory**

The word "stakeholder", the way we now use it, first appeared in an internal memorandum at the Stanford Research Institute (now SRI International, Inc.), in 1963. The term was meant to challenge the notion that stockholders are the only group to whom management need be responsive. By the late 1970's and

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early 1980's scholars and practitioners were working to develop management theories to help explain management problems that involved high levels of uncertainty and change. Much of the management vocabulary that had previously developed under the influence of Weberian bureaucratic theory assumed that organizations were in relatively stable environments. In addition, little attention, since Barnard (1938), had been paid to the ethical aspects of business or management, and management education was embedded in a search for theories that allowed more certainty, prediction and behavioral control. It was in this environment that Freeman (1984) suggested that managers apply a vocabulary based on the "stakeholder" concept. Throughout the 1980's and 1990's Freeman and other scholars shaped this vocabulary to address these three interconnected problems relating to business.

### **METHODOLOGY**

This study adopted the exploratory assessment method by reviewing research work done by other researchers in related work. The data for this research study were adequately sourced using the secondary method of data collection basically sourced from the internet, articles by researchers and other relevant publications.

### **RESULT AND DISCUSSION**

Samuel, Mudzamir and Mohammad (2017) carried out a study on; Empirical Analysis on the Financial Reporting Quality of the Quoted Firms in Nigeria: Does Audit Committee Size Matter? This paper examined the relationship of audit committee size and financial reporting quality in Nigeria. The empirical study has performed using a sample of 189 companies and 664 year observation from the period of 2011-2015. One of the desirable features of corporate governance is to enhance financial reporting quality for facilitating efficient and effective resources allocation of economic decision making by corporate managers. Panel data regression was adopted and audit committee size was found positive and significant with financial reporting quality. Our results underscore the importance of the corporate governance recommendation as a mean of strengthening the monitoring and oversight role of audit committee plays in the financial reporting process. Finally the study offered recommendations to enhance financial reporting quality disclosure. Owolabi, Babarinde, Thomas (2020), the study examined the Effect of Corporate Governance on Audit Quality in Nigerian Banks. This paper examined the effect of corporate governance on audit quality in deposit money banks (DMBs) in Nigeria. This research also examined and determined the impact that the gender diversity, size of the board, Non-Executive in the Board, foreign directorship and board composition have on the audit quality in Nigeria IDMBs. Secondary data were gathered from fifteen (15) listed banks covered the duration of twelve years (2007 - 2018). The data were processed using panel data estimator which was based on pooled regression model, fixed effect model and random effect model while the hausman test were used to choose the better model. The result showed that gender diversity ethnic diversity, board composition and board size are significant variables that can explicate on audit quality of the deposit money banks in Nigeria, but foreign diversity cannot significantly explicate on audit quality. Surge in ethnic representation on the board of directors will have substantial effect on the audit assurance of the Banks in the country.

Enekwe, Chike and Udeh conducted a study on the effect of audit quality on financial performance of listed manufacturing firms in Nigeria from 2006-2016. The study specifically investigated the effects of auditor's independence, audit committee and audit fee on return on assets of listed manufacturing firms. Ex- post facto research design was adopted for the study. Stratified purposive sampling technique was used to select 24 firms from the 80 listed manufacturing firms in Nigeria. Secondary data were gathered from the published annual financial statements of the companies. Ordinary Least Square method of regression was employed in the analysis of data. The study revealed that auditor's independence has a positive and significant effect on financial performance of listed manufacturing firms, among others. It was concluded that attributes of audit quality influence financial performance of manufacturing firms in Nigeria. The study recommended, among other things, that auditor's independence should be increased through improved internal control, integrity tests and adequate utilization of auditor's experience in order

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to enhance financial performance of manufacturing firms. Several researchers have reached the conclusion that there is a significant relationship between internal control and quality financial reports. Management's attitude towards internal control has a very wide impact on staff compliance, they are expected to be a perfect role model to the staff in compliance to the internal control system.

### **CONCLUSION AND RECOMMENDATION**

Based on the findings of the study, it is concluded that the quality of internal control determines the quality of financial report in Nigeria. There is a strong link between internal control and financial report, the effectiveness of internal control and financial report is highly correlated and the quality of information provided by internal control system is fundamental for the report. Based on the findings and conclusion from the study, the following recommendations are made;

- i. Future research should be conducted on how internal control system affects financial reporting.
- ii. A study should be conducted on the measurement of transparency, accountability and quality financial reporting.

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## **Effect of Inflationary Trends on Capital Market Performance of Fast-Moving Consumer Goods Companies in Nigeria**

**NWORAH, Stanley O.**

Department of Accounting  
Bingham University,  
Karu, Nasarawa State

E – Mail: stnworah@gmail.com, Phone No: +234 7065222888

### **Abstract**

*This study investigates the effect of inflationary trends on capital market performance of fast moving consumer goods in Nigeria within the data set of 2010-2020. The guiding objectives of the study are (i) to ascertain the effect of consumer price index on market value/capitalization in fast moving consumer goods companies in Nigeria. (ii) to ascertain the effect of interest rate on capital market value in fast moving consumer goods companies in Nigeria. The study adopts the Ex-post Facto research design and the Ordinary Least Square (OLS) Estimation Technique in analyzing times series data on market share, consumer price index and interest rate for a period of 12 years generated from the Central Bank of Nigeria statistical bulletin and the researcher's computations. The findings of the study this study reveals that consumer price index has a positive and significant relationship with the market share, this implies that an increase in the units of consumer price index will lead to a significant increase in the market share in the period analysed. More so, the study reveals that interest rate have negative and significant relationships with market share, which implies that an increase in the units of interest rate will lead to decrease in the market share in the period analysed. The researcher recommends that government should make necessary and informed trade policies capable of attracting more investors into the country that will bring down the level of consumer price index. This would go a long way in enhancing the Nigerian economy.*

**Keywords:** Inflationary trend, Interest rate, Capital market, Consumer Goods

### **INTRODUCTION**

Inflation has been a persistent problem in Nigeria. There has been a consistent rise in the prices of goods and services over the years, bringing untold hardship to the people and with no end in sight. Recent data published by the National Bureau of Statistics (NBS) reveals that the Nigerian inflation rate surged to a 33-month high, as it rose further to 16.47% in January 2021 from 15.75% in December 2020. This marks 17 consecutive months of continuous increase in prices of goods. "As of April 2021, the inflation rate was the highest in four years. Food prices accounted for over 60% of the total increase in inflation. Rising prices have pushed an estimated 7 million Nigerians below the poverty line in 2020 alone" (Nasir 2021).

Inflation causes untold hardships to both individuals and organisations alike. The purchasing power of money drops and people have to spend more to have the same minimum standard of living they had before. Meanwhile their incomes have not increased especially those that earn fixed salaries like civil servants and pensioners. Wage earners and businesses are not better off either. In as much as they can increase the prices of their products or services as prices increase, patronage would be low as fewer people have the desire and ability to pay due to the fall in purchasing power of money. A couple of years back, a 50kg bag of rice was going for about N8,500 in the Nigerian market. Today, that same bag of rice goes for about N25,000. Likewise, a 50kg bag of cement that was going for about N1,500 about a year ago, now goes for about N5,000. Crime rate has increased on all fronts from big crimes like kidnapping, ritual killing, and advance fee fraud to smaller crimes like stealing pots of food while it was still on fire, all these are due to inability to make ends meet due to high inflation. Inflationary trends cause lots of problems in the society, it affects the livelihood of low income earners as the fall in the purchasing power of their money causes a drop in their ability to make ends meet, it causes unemployment as businesses are compelled to lay off their workers or cut wages in order to remain profitable. It discourages savings. Where the rate of inflation is higher than the interest rate on savings, savers suffer a loss in the value of their savings. Lenders have to increase their lending rate otherwise they too will suffer loss of value on their funds, businesses may be compelled to pay higher wages to be able to retain its work force. Uncontrolled inflation could also lead to an unfavourable balance of payments situation, it could result to capital flight, fall in foreign direct investment and many other adverse economic effects. The harmful effects of inflation can be summarized under four headings: Higher Interest Rates, Lower Savings, Lower Exports and Mal-Investments.

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The chief cause of inflation in Nigeria was related to the inability of the government to restructure the economy and stop the over-dependence on oil exports. Some of the efforts already undertaken by government include: reducing gasoline subsidies, adjusting electricity tariffs, cutting nonessential spending and redirecting resources towards the COVID-19 response and improving public-sector transparency especially, around the operations of the oil and gas sector (Chaudhuri. 2021). The efforts of government to curb inflationary trends in the country seems not to have yielded enough results in the desired direction. This study aims to find out how investment in the stocks of fast moving consumer goods companies are affected by inflationary trends in Nigeria. The findings will aid government and other decision makers in decision making regarding inflation. The broad objective of the study was to evaluate the effect of inflationary trends on the Market Performance of Fast Moving Consumer Goods Companies in Nigeria and the basic hypothesis underlying this study are stated thus;

**HO1:** Consumer Price Index has no significant effects on market value/capitalization in fast-moving consumer goods companies in Nigeria.

**HO2:** Interest rates have no significant effects on market value/capitalization in fast-moving consumer goods companies in Nigeria.

### **LITERATURE REVIEW**

#### **Conceptual Framework**

The conceptual framework around which this study was carried out was the macro-economics theory. Macroeconomics theory tries to understand the complex relationships among various macroeconomic variables like economic growth, business cycles, unemployment, inflation, international trade and others from a theoretical perspective, developing relevant models to help economists understand and explain aggregate phenomena in the economy.

#### **Inflation**

Inflation can be seen as a general decline in the purchasing power of a given currency over a given time. Milton Freedman (2001) defined inflation as an economic collective, increases in the supply of money in money incomes, or prices. Inflation is generally thought of as an inordinate rise in the general level of prices. TeiyanPettinger (2021) sees inflation as a situation of rising prices in the economy. A more exact definition of inflation is a sustained increase in the general price level in an economy. Inflation means an increase in the cost of living as the price of goods and services rises. The rate of inflation measures the annual percentage change in the general price level. **a convenient** starting point for discussion is Milton Friedman's (1963) definition of inflation as a steady and sustained increase in the general price level". Friedman emphasizes the distinction between steady inflation and one that proceeds at a more or less constant rate, and intermittent inflation, one that proceeds by fits and starts.

Similarly, Laidler and Parkin (1985) define inflation as a process of continuously rising prices, or, equivalently, of a continuously falling value of money. They also emphasize the persistence or continuity of changes in prices as a defining characteristic of inflation. One conception of core inflation is based on the distinction between the steady or persistent component of measured inflation, and intermittent or transient inflation. The definition of core inflation as the persistent element is reflected in a common tendency to describe core inflation and trend inflation as essentially synonymous or to draw a distinction between price level shocks (having only a temporary impact on measured inflation) and more persistent inflation shocks. In keeping with the conception of core inflation as the persistent element of inflation, Quah and Vahey (1995) define core inflation "...as that component of measured inflation that has no medium- to long-term impact on real output". For this component of inflation to be output neutral over the medium to long term, it must be the component of inflation that feeds into or reflects inflation expectations.

#### **Interest Rate**

In simple words, interest means the reward for the use of capital. It is also called the income of the owner of capital for lending it. In other words, it is the price paid by the borrower of money to its lender. The

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concept of interest rate has also been explained by a lot of scholars in different ways; according to Marshall, Interest is the price paid for the use of capital in any market. J.M. Keynes sees Interest as a reward for parting with liquidity for a specified period. Cairncross defines Interest as the price paid for the hire of loan capital. To Carver, Interest is the income that goes to the lender of capital under its productivity as a reward for its abstinence. There are two concepts of interest: Gross Interest and Net Interest. Gross Interest: Gross interest refers to the entire payments made by the borrower to the lender on a certain amount of loan received for a while. It includes not only the payment for the use of money capital but also for risks, inconvenience, and management.  $\text{Gross Interest} = \text{Net Interest} + \text{Risk bearing} + \text{Reward for management} + \text{reward for inconvenience}$ . Net Interest: Net interest is the payment purely made for the use of money. Net interest rate is determined by the forces of demand and supply of funds or money. It generally relates to the public and is comparatively low to gross interest. The loan market is not characterized by the prevalence of one definite rate of interest. The rate of interest differs from place to place and from person to person. Some factors bring about such a situation.

### **Trend of Inflation in Nigeria**

The facts and figures obtained from the IMF World Economic Outlook Report (2011) revealed that Nigeria's GDP tends to be low when the inflation rates are high apart from a few years in the 80s. For example, in 1998 GDP growth rate was relatively high amidst the high inflationary levels at the time. This could be the positive effect of increased domestic productivity which was the major thrust of SAP in the sense that domestic output increased. In 1986, the rate of inflation in Nigeria was 6.25 with a GDP growth rate of 8.754; in 1987 the rate of inflation rose to 11.765 percent with the GDP growth rate decreasing to -10.752. The inflation rate rose sharply to 34.211 and 49.2 respectively in 1988 and 1989 with the GDP growth rate of 7.543 and 6.467 within these years. In 1990, the rate of inflation was stabilized at 7.895 with the GDP growth rate higher than the rates experienced since the introduction of SAP in 1986. The rate of inflation continued to Skyrocket above double-digit nearing triple digits in some of the years where it was above 50 percent in the period between 1993 and 1995. This was reflected in the abysmal level of Nigeria's GDP growth rate within the period. The rate of inflation rose from 12.195 percent in 1991 to 44.565 in 1992, 57.416 in 1993, 72.721 in 1994, and 72.81 in 1995 with the corresponding value of the GDP growth rate of -0.618, 0.434, 2.09, 0.91, and 0.307 within those years. In 1996, the rate of inflation reduced drastically to 29 percent though not healthy for meaningful investment and further reduced to 10.673 in 1997, 7.862 in 1998, and 6.618 in 1999 and remains relatively stable at 6.938 in the year 2000.

Within this period the value of GDP growth rate was 4.994 in 1996, 2.802 in 1997, 2.716 in 1998, and 0.474 in 1999 and gained slightly to 5.318 in the year 2000. The trend of inflation between 2001 and 2010 in Nigeria at the average level is in the double-digit rate but the GDP growth seems unimpressive which could be attributed to petroleum export proceeds. The inflation rate was 18.869 in 2001, 12.883 in 2002, 14.037 in 2003, 15.001 in 2004, 17.856 in 2005, 8.218 in 2006, 5.413 in 2007, 11.581 in 2008, 12.543 in 2009 and 13.72 in 2010 with the corresponding GDP growth rates within these years as 8.164, 21.172, 10.335, 10.585, 5.393, 6.211, 6.972, 5.984, 6.96, and 8.724, respectively. Despite the relatively good annual GDP growth rate, the poverty level and unemployment keep growing. The level of investment does not match the growth level because inflation constitutes risk. It, therefore shows that the level of inflation in Nigeria is disinvestment and not likely to translate to sustainable development in the long run.

### **Nexus between Inflation and Interest rate in Nigeria**

Inflation and interest rate are interlinked, two basic factors that can lead to inflation which are the supply-side and demand side. On the side of the supply, if the cost of production increased as a result of an increase in interest rate, the final price of the goods and services will be increased. On the demand side, if the aggregate demand is higher than the aggregate supply, the prices of goods and services will be increased (Davis, 2019). Inflation can be both beneficial to economic recovery and, in some cases, negative. If inflation becomes too high the economy can suffer; conversely, if inflation is controlled and



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at reasonable levels, the economy may prosper. With controlled, lower inflation, employment increases. Consumers have more money to buy goods and services, and the economic benefits grow. However, the impact of inflation on economic recovery cannot be assessed with complete accuracy. Some background details will explain why the economic results of inflation will differ as the inflation rate varies (Davis, 2019).

### **Capital Market Performance**

Donwa and Odia (2011) described the capital market as an institution that contributes to the socio-economic growth and development of both developing and developed economies by channeling funds from surplus units to projects with positive NPVs. Owolabi and Adegbite, (2013) posited that the capital market provides the industries and governments long-term funds to meet their long-term capital requirement such as financing of fixed investments like buildings, plants, machinery, bridges, e.t.c. A capital market that has been performing enormously in its operation is invariably affected by the level of inflation in Nigeria. Omodero, (2019) defined market capitalization as the total monetary value of all outstanding shares of a company. The Capital Market prices of listed securities are measures of the values of such securities. However, when comparing two or more shares, the market price will not be a good determinant of the comparative values of both companies. To determine the comparative value of two shares the measure to use is market capitalization. Market Capitalisation is derived from stock price by multiplying the most recent share price of a company by the total number of outstanding shares.

### **Empirical Review**

Babarinde and Abdulmajeed (2020) investigated the effect of inflation on the capital market in Nigeria, using annual time series data obtained from the Central Bank of Nigeria and World Development Indicators for the years 1981-2018. The Canonical Co-Integrating Regression (CCR) technique was applied to the data after descriptive analysis, augmented Dickey-Fuller (ADF) unit root, and Johansen co-integration tests were conducted. Co-integration analysis indicates that a long-run equilibrium relationship exists between inflation and the capital market in Nigeria. The CCR estimates showed evidence of a negative significant effect of inflation on the capital market in Nigeria. Owolabi and Adegbite, (2013), examined the effect of inflation on capital market performance in Nigeria. They made use of secondary data obtained from the central bank of Nigeria statistical bulletin and the Security exchange commission (SEC) covering the period of 1970 to 2010. Multiple regressions were employed to analyze data on variables such as inflation rate, market capitalization, All-Share index, market volume, market turnover, and Gross Domestic Product with the adjusted R<sup>2</sup> which is significant at 0.1821 (18.2%), it presages that inflation accounted for 18.2% of the variation in the influence of the capital market performance. The effect of inflation on the performance of the Nigerian capital market is weak. All the measures showed a negative relationship to inflation except MVOL which showed a deviation from a priori expectation as revealed by the positive correlation between inflation and the market volume. It is therefore concluded that there is a negative relationship between inflation and capital market performance.

Gerolamo (2001) identifies the impact of inflation on the interest rate as a channel through which it affects the stock market and ultimately economic growth. In studying the impact of Real Gross Domestic Product (RGDP), inflation, and interest rates on stock prices of quoted companies in Nigeria, Musa (2021) examined the interrelationship between interest rate and inflation rate in Nigeria. Findings established that interest rates were weak instruments to curb inflation in the short run but inclined to be significant and relevant instruments in the long run. Daferighe and Aje (2009) conclude that inflation and interest rates are negatively correlated with stock prices. The inflation illusion hypothesis of Modigliani and Cohn (1970) points out, that the real effect of inflation is caused by money illusion. Feldstein's (1980) variant of the inflation and stock market returns theoretical nexus, suggests that inflation erodes real stock returns due to an imbalance in the tax treatment of inventory and depreciation resulting in a fall in real after-tax profit. Feldstein further observed that the failure of share prices to rise during substantial

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inflation was because of the nominal capital gains from tax laws particularly, historic depreciation cost (Friend and Hasbrouck, 1981). Aperigis and Eleftheriou (2002) agreed that there is a negative link between inflation and stock returns in Greece than the interest rate and stock returns. Ugur (2005) brought out that expected inflation and real returns are not correlated. The results suggest there is a negative relationship between inflation and stock returns which may be caused by the negative impact of unexpected inflation on stock returns. Tamtom (2002) indicated that a negative long-run relationship exists between stock prices and inflation; in turn implying that higher stock prices are associated with lower inflation contrary to recent proposals. It is a common belief that inflation is advantageous to common stock. This is major because it is argued that inflation increases the returns to shareholders since the price of products rises faster than wage rates. The expected relationship between inflation and returns to owners of equity would be valid if business firms were debtors and if the current interest rates on debt finance failed to reflect the future changes in the price level.

Omoke and Ugwuanyi (2010) tested the relationship between money, inflation, and output by employing co-integration and Granger-causality test analysis. The findings revealed no existence of a co-integrating vector in the series used. The money supply was seen to Granger cause of both output and inflation. The result suggests that monetary stability can contribute toward price stability in the Nigerian economy since the variation in price level is mainly caused by money supply and also conclude that *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)* 5(1):93-99 (ISSN: 2141-7016) 95 inflation in Nigeria is to a large extent a monetary phenomenon. Kolari (2001) using stock price and goods price data from six industrial countries showed that the long-run Fisher elasticity of stock prices concerning goods prices exceeds unity and range from 1.04 to 1.65 which supported the Fisher effect that inflation has a negative short-run effect on stock returns but turns positive over longer horizons. According to Bekaert and Engstrom (2007), the inflation illusion suggests that when expected inflation rises, bond yields duly increase, but because equity investors incorrectly discount real cash flows using nominal rates, the increase in nominal yields leads to equity underpricing and vice versa. Feldstein's (1980) variant of the inflation and stock market returns theoretical nexus, suggests that inflation erodes real stock returns due to an imbalance in tax treatment of inventory and depreciation resulting in a fall in real after-tax profit. Patra and poshakwale (2006) used the error correction model (ECM) to conduct a study on the impact of economic variables on market returns in Greece from 1990 to 1999. Empirical results show that some macroeconomic variables like money supply, inflation, the volume of trade, and exchange have both short-run and long-run relationships with a stock price in equilibrium in Greece while there was no short-run or long-run relationship noticed between exchange rate and stock prices.

Onuora, Ezejiofor and Erhinyoja (2016) set out to examine the effects of inflation on the performance of the Nigerian capital market since the democratic dispensation. Specifically, the study determined the extent to which inflation has affected all share indexes, stock market capitalization, and the value of domestic shares traded. Ex Post facto research design was adopted. Data obtained were analyzed and the coefficient correlation coefficient statistical technique was used to test the three formulated hypotheses with aid of SPSS version 20.0. The study found that there is a negative correlation between inflation rate and all share index in Nigeria and there is a negative significant correlation between inflation rate and Nigerian market capitalization. Another level of inflation rate has a negative correlation with the value of domestic shares trading in Nigeria. The implication of this study is that inflation increases and when there is a decline in monetary growth rate, there is a strong relationship between an increase in money supply and inflation. This means that inflation is responsible for inefficiencies and non-performance of the capital market.

Orajaka and Okeke (2017) explored the inflationary trends to determine their impact on Nigeria Stock Exchange Market. Four variables were used to validate the reliability of the research work, namely: inflationary rate, total value of the Nigerian Stock Exchange market, government expenditure, and currency exchange rate ranging from 1980 to 2014. General regression statistical tool was used to analyze the data to determine the relationship between the dependent and independent variables. The study

revealed that inflation, government expenditure, and exchange rate are significant to the total value of Nigeria Stock Exchange transactions. To that extent, the researchers concluded that the Inflationary trend to a large extent has a tremendous effect on the Nigerian Stock exchange market. Gbenga and Tajudeen (2020), in their work discovered that most studies reported evidences of a negative relationship between inflation and the capital market while some reported evidences of a positive relationship and yet some showed evidences of no relationship. Some of those studies mentioned by them that show evidence of negative relationships are Al-Abbadi and Abdul-Khaliq (2017), Jepkemei (2017), Akani and Uzobor (2015), Khumalo (2013)). Those who reported showing evidence of the positive connection between the two variables are Ibrahim and Agbaje (2013), Kaur (2017), Lawal (2016), Mbulawa (2015), Omotor (2010)). The third category which shows inflation to be of no significance in predicting the movement in capital market performance include authors such as Ahmadi (2016), Floros (2004), Qamri et al (2015), and Sokpo et al (2017). The gap in the literature is that no one has studied the effect of inflation on the capital market performance of fast moving consumer goods firms in Nigeria.

### **Theoretical Framework**

Several theories have been propounded which can be used to explain how inflation affects the performance of the stocks of listed companies in the capital market. Some of them that are relevant to this study include Irvin Fisher's Effect theory, Fama's Proxy Hypothesis, Arbitrage pricing theory.

#### **Fisher Effect**

The Fisher Effect is an economic theory created by economist Irving Fisher that describes the relationship between inflation and both real and nominal interest rates. The Fisher Effect states that the real interest rate equals the nominal interest rate minus the expected inflation rate. Therefore, real interest rates fall as inflation increases, unless nominal rates increase at the same rate as inflation. Fisher's equation reflects that the real interest rate can be taken by subtracting the expected inflation rate from the nominal interest rate. In this equation, all the provided rates are compounded. (Adam Hayes, 2022). Fisher Effect Theory or Fisher Hypothesis postulates a positive relationship between stock returns and inflation based on the understanding that assets ought to maintain their values against inflation (Fisher, 1930). According to the scholar, the expected rate of return is an embodiment of both real return and the expected rate of inflation. He assumes no relationship exists between the real rate and the monetary sector. Thus, based on this theory, stock investment can serve as a hedge against the risk of inflation. This is because financial assets like stocks, which represent claims to real assets, should be positively related to expected inflation. (Babarinde and Abduljameed, 2020)

#### **Fama's Proxy Effect Hypothesis**

Fama (1981) in his Proxy Hypothesis explained that stock returns are negatively related to inflation because stock returns are positively related to real activity and real activity is negatively related to changes in the level of prices; a correlation between inflation and stock market returns is not a causal one; rather, it is a spurious relationship of dual effect. (Babarinde & Abduljameed, 2020). According to Takato Hiraki (1985), Fama's Proxy Effect Hypothesis states that the negative relationship between inflation and real activity induces the spurious negative correlation between equity returns and inflation. The hypothesis implies that measures of real activity included as explanatory variable in stock return regressions should eliminate the spurious correlation.

#### **Arbitrage Pricing Theory**

The arbitrage pricing theory was developed by the economist Stephen Ross in 1976, as an alternative to the capital asset pricing model (CAPM). Unlike the CAPM, which assume markets are perfectly efficient, APT assumes markets sometimes misprice securities, before the market eventually corrects and securities move back to fair value. Using APT, arbitrageurs hope to take advantage of any deviations from fair market value. 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

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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. (Hayes, 2021)

## METHODOLOGY

This study adopts a post-factor and descriptive research design using the regression – analysis method. The ex-post factor design involves the experimental study of examining the effect of inflationary trends on the Capital Market Performance of fast-moving consumer goods companies in Nigeria. The study shows the empirical analysis of annual financial statements often listed consumer goods companies in the Nigerian Exchange Group. The choice of ex-post factor and regression analysis is because the study is aimed at examining the effect of inflationary trends on the capital market performance of fast-moving consumer goods in Nigeria. The population of the study covers all the consumer goods companies in Nigeria of the period 2010 to 2020. A sample size of ten companies was selected using a simple random sampling technique as the basis of selection. The data of the ten listed fast-moving consumer goods companies from 2010 to 2021 used in the study was collected from secondary sources, basically from the statistical bulletin of the Central Bank of Nigeria 2020 edition.

### Technique for Data Analysis and Model Specification

The Panel regression analysis was used in this study and the analysis incorporated descriptive statistics, which was conducted to examine the linear association between Inflationary Trend on Capital Market Performance of listed fast-moving consumer goods companies in Nigeria.

$$MKTS = \beta_0 + \beta_1 CPI + \beta_2 INTR + \epsilon_t \dots 3.i$$

Where:

$\beta_0$  = The autonomous parameter alternate

$\beta_1 - \beta_2$  = Parameter coefficient of inflation and Capital Market

MKTS = Market Share

CPI = Consumer price index (Proxy of inflation rate)

INTR = Interest Rate

$\epsilon_t$  = Stochastic error t

## RESULT AND DISCUSSION

### Data Presentation

The data for market share is the dependent variable (Y) whereas CPI, and INTR as the independent variables. Data on these variables are presented in the table below.

**Table 1:** Time series data on MKTS, CPI, and INTR (Data ranging from 2010-to 2021)

YEAR	MKTS	CPI	INTR
2010	12.42	8.61	3.55
2011	20.81	19.37	10
2012	7.7	3.34	11.75
2013	23.21	0.37	11.5
2014	17.82	11.61	13
2015	7.44	4.19	11.75
2016	5.72	23.71	12
2017	11.29	42.31	19.2
2018	54.51	5.94	17.6
2019	50.47	6.88	24.6
2020	7.36	10.25	27.7

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<b>2021</b>	13.01	11.36	20.8
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**Source: Annual report**

**Empirical Results**

As the performance of theoretical postulation is no guarantee, but only an indicator of what we may expect in practice, empirical testing of the time series data of the variables is necessary.

**Unit Root Test**

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

H<sub>0</sub>: variable is non-stationary, that is, the variable has no unit root.

H<sub>1</sub>: variable is stationary, that is, the variable has a unit root.

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

**Table 4.1: Result of the ADF Test for Unit Root**

<b>Variables</b>	<b>ADF test statistics</b>	<b>5% critical value</b>	<b>Order of Integration</b>
<b>MKTS</b>	-2.158002	-1.950117	I(1)
<b>CPI</b>	-4.748925	-3.536601	I(1)
<b>INTR</b>	-6.725161	-3.536601	I(1)

From the tabular illustration (table 4.1) above, the market share (MKTS), consumer price index (CPI), and interest rate (INTR) are not stationary at level form. However, they are all stationary at first difference. That is, they are integrated at order one; I(1). Not having a stationarity time-series data at level form, indicates not having a short-run relationship among the individual time-series data, this result is expected since most macro-economic time series data are known to exhibit such behavior. Since the variables are non-stationary at level form, there is a need to conduct a co-integration test. The essence is to show that although all the variables are non-stationary, the variables may have a long-term relationship that is the variables may be co-integrated and will not produce a spurious result.

**Co-integration Test Result**

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

**Co-integration Test Result**

Null Hypothesis: ECT has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
<b>Augmented Dickey-Fuller test statistic</b>	-3.801775	0.0277
<b>Test critical values:</b> 1% level	-4.226815	
5% level	-3.536601	

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10% level -3.200320

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(ECT)

Method: Least Squares

Date: 03/23/22 Time: 12:03

Sample (adjusted): 2010 2021

Included observations: 11 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ECT(-1)	-0.602334	0.158435	-3.801775	0.0006
C	-0.005532	0.012976	-0.426346	0.6725
@TREND("1981")	0.000341	0.000581	0.587097	0.5610
R-squared	0.305509	Mean dependent var		0.000839
Adjusted R-squared	0.264657	S.D. dependent var		0.041525
S.E. of regression	0.035609	Akaike info criterion		-3.754853
Sum squared resid	0.043111	Schwarz criterion		-3.624238
Log-likelihood	72.46478	Hannan-Quinn criteria		-3.708805
F-statistic	7.478367	Durbin-Watson stat		1.904989
Prob(F-statistic)	0.002034			

From the result above, the ADF test statistics (-3.801775) is greater than the 5% critical value (-3.536601) in absolute terms. This implies that the residuals are stationary (that is, the variables are co-integrated or that the linear influence of the independent variables cancels out).

**Error Correction Mechanism Result and Interpretation**

**ECM Test Result**

Dependent Variable: D(MKTS)

Method: Least Squares

Date: 03/23/22 Time: 12:04

Sample (adjusted): 2010 2021

Included observations: 11 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.044833	0.007079	6.333043	0.0000
D(CPI)	4.510306	5.10E-06	3.884460	0.0330
D(INTR)	-0.142509	0.212418	-2.670888	0.0071
ECT(-1)	-0.476928	0.159954	2.981667	0.0054
R-squared	0.312543	Mean dependent var		0.042191
Adjusted R-squared	0.226611	S.D. dependent var		0.041292
S.E. of regression	0.036313	Akaike info criterion		-3.668185
Sum squared resid	0.042197	Schwarz criterion		-3.450493

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Log-likelihood	72.86142	Hannan-Quinn criteria.	-3.591438
F-statistic	3.637090	Durbin-Watson stat	1.901125
Prob(F-statistic)	0.014932		

From table 4.3 above, the magnitude of the short-run disparity is -0.4769, that is to say, the degree of the short-run dynamics is 47%. This shows a relatively high speed of adjustment to equilibrium after a shock.

### **Regression Result**

In the regression result, the variables under consideration are market share (dependent variable), consumer price index, and interest rate (independent variables). From the result, the estimated coefficient values of  $b_0$ ,  $b_1$ , and  $b_2$  are 0.044833, 4.510306, and -0.142509 respectively.

The regression results A priori test is presented as follows

Dependent Variable: D(MKTS)

Method: Least Squares

Date: 03/23/22 Time: 12:04

Sample (adjusted): 2010 2021

Included observations: 11 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.044833	0.007079	6.333043	0.0000
D(CPI)	4.510306	5.10E-06	3.884460	0.0330
D(INTR)	-0.142509	0.212418	-2.670888	0.0071
ECT(-1)	-0.476928	0.159954	2.981667	0.0054
R-squared	0.312543	Mean dependent var		0.042191
Adjusted R-squared	0.226611	S.D. dependent var		0.041292
S.E. of regression	0.036313	Akaike info criterion		-3.668185
Sum squared resid	0.042197	Schwarz criterion		-3.450493
Log-likelihood	72.86142	Hannan-Quinn criteria.		-3.591438
F-statistic	3.637090	Durbin-Watson stat		1.901125
Prob(F-statistic)	0.014932			

### **Evaluation of Regression Results**

#### **Evaluation Based on Economic Criterion**

This subsection is concerned with evaluating the error correction mechanism result based on a priori expectations. The signs and magnitude of each variable coefficient are evaluated against theoretical expectations. The signs of some of the coefficient of the variable from the estimated model are in line with a priori expectations. The consumer price index has positive relationships with market share while the interest rate has a negative relationship with market share (MKTS). The constant term is 0.044833, which means that the model passes through the point 0.044833 mechanically, if the independent variables are zero, Gross Domestic Product would be 0.044833, (Gujarati, 2007). The estimated coefficient for the consumer price index is 4.510306, this implies that if other variables affecting Gross Domestic Product are held constant, a unit increase in the consumer price index, will lead to a 4.510306 unit decrease in market share on average. Similarly, the estimated coefficient of interest rate is -0.142509, this means that holding every other variable that affect market share constant, a unit increase in interest rate will bring about a 0.142509 unit decrease market share.

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## Evaluation Based On Statistical Criterion

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

### $R^2$ –Result and Interpretation

The coefficient of determination,  $R^2$ , is given as 0.312543; this implies that 31.2543 percent of the variation in Gross Domestic Product is being explained by the variations in the consumer price index and interest rate. Thus, the  $R^2$  which yielded 31.2543 percent means that the explanatory powers of the independent variables: the consumer price index and the interest rate, over the dependent variable (MKTS), are low. Hence, the variables have no better or even worse goodness of fit.

### t-Test Result and Interpretation

We also employ the 95% confidence interval or 5% level of significance (that is,  $5/100=0.05$ ,  $0.05/2=0.025$ ) and 39 as our degree of freedom.

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

The result of the t-test of significance is shown in table 4.5 below:

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

**Table 5: Result of t-Test of Significance**

Variables	t-computed ( $t^*$ )	t-tabulated ( $t_{a/2}$ )	Conclusion
CPI	3.884460	2.042	Significant
INTR	-2.670888	2.042	Significant

Significant (Reject  $H_0$ ; accept  $H_1$ ),

Insignificant (Accept  $H_0$ ).

From the t-test result above, for CPI,  $t^* > t_{a/2}$ , that is,  $3.884460 > 2.042$ , therefore the null hypothesis is rejected. Hence consumer price index is statistically significant, thus consumer price index has a significant impact on market share.

For INTR,  $t^* > t_{a/2}$ , that is,  $-2.670888 > 2.042$ , therefore the null hypothesis was rejected. Hence interest rate is statistically significant, thus interest rate has a significant impact on market share.

### Result and Interpretation of f-Test of Significance

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

Where:

$N$ = sample size= 11

$K$ = number of parameters including the constant term= 4

$V_1=3-1=2$ ,  $V_2=11-3=8$ ,  $df=(2,8)$  at 5% level of significance and  $df=(2,8)$ ,  $f_{0.05}= 2.92$  and  $F^*= 3.637090$ . Since  $f^* > f_{0.05}$ , therefore, the alternative hypothesis is accepted.

This implies that the independent variables (CPI and INTR), have a joint influence on market share. Thus, the entire regression plane is significant.

### Evaluation Based on Econometric Criterion

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

### Result and Interpretation of Autocorrelation Test

Using the Durbin-Watson (D-W) statistic, the region of no autocorrelation (positive or negative) is given as follows:

$du < d^* < (4-du)$

$du= 1.722$



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$d^* = 1.901125$

$(4 - du) = 4 - 1.722 = 2.278$

By substitution, the region becomes:

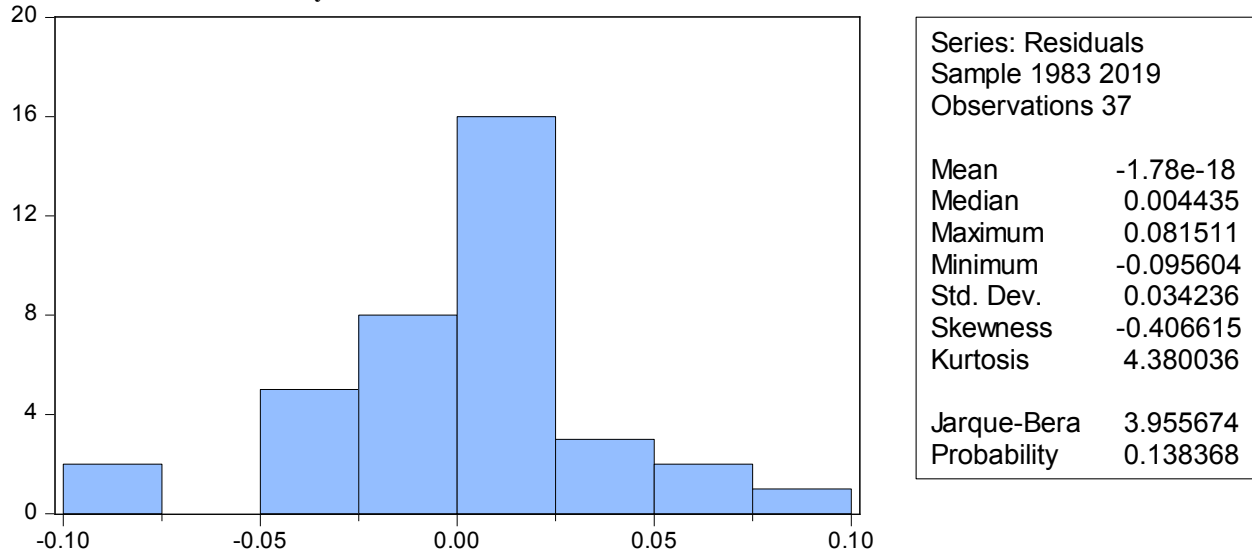
$1.722 < 1.901125 < 2.278$

The result shows that autocorrelation problem is absent in the model as the computed Durbin-Watson (D-W) statistic falls within the zero autocorrelation regions.

## Normality Test Result and Interpretation

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

**Table 6 Result of Normality Test**



From the normality table, the probability of Jarque-Bera is given as 0.138368. This is greater than 0.05, hence the residuals are normally distributed (ND).

## Evaluation of Research Hypotheses

**Hypothesis one:** The null hypothesis is rejected, which states that the consumer price index has no significant impact on the market share judging from the t-Test result because the computed t-values( $t^*$ ) are greater than the tabulated t-values( $t_{0.025}$ ).

**Hypothesis Two:** The null hypothesis is rejected, which states that interest rate has no significant impact on the market share judging from the t-Test result because the computed t-values( $t^*$ ) are greater than the tabulated t-values( $t_{0.025}$ ).

## RESULT AND DISCUSSION

Having estimated the parameters of the model numerically, with the use of multiple linear regression on the application of the ordinary least squares (OLS), this study reveals that the consumer price index has a positive and significant relationship with the market share, this implies that an increase in the units of consumer price index will lead to a significant increase in the market share in the period analyzed. More so, the study reveals that interest rates have negative and significant relationships with market share, which implies that an increase in the units of interest rate will lead to a decrease in the market share in the period analyzed.

## CONCLUSION AND RECOMMENDATIONS

Based on the findings of this study, the researcher concludes that the consumer price index has a positive relationship and insignificant impact on market share over the periods covered. In a similar vein, the study concludes

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that interest rate has a negative relationship with the market share in Nigeria. Based on the findings of this study, the following policy recommendations are necessary, to encourage and boost foreign direct investment in Nigeria.

- i. The results of the study indicate that the consumer price index has positive relationship with market share in Nigeria. Hence, the government should make necessary and informed trade policies capable of attracting more investors into the country that will bring down the level of a consumer price index. This would go a long way in enhancing the Nigerian economy.
- ii. Judging from the significant impact of all the variables on market share in Nigeria, the government should meticulously ensure in its entirety, that commercial banks reduce the rate of interest rate to promote an increase in domestic investment.

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## **Implementation Effect of Lean Accounting Practices on Financial Performance of Listed Industrial Goods Firms in Nigeria: A Literature Review**

**ANDINYANGA, Utibe Sunday**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: usandinyanga13562@gmail.com, Phone No: +234 8031973040

### **Abstract**

*One of the drastic changes that has taken place in the manufacturing sector is the emergence of lean production systems and its associate: the lean accounting. The study is a literature review meant to examine the implementation effect of lean accounting practices on the financial performance of listed industrial goods firms in Nigeria. The focus of this modern approach is to help reduce unit cost while increasing production efficiency. The literature review findings revealed that many manufacturing firms, in an attempt to reduce costs, have unwittingly adopted certain aspect(s) of lean manufacturing system, along with the existing traditional accounting system. Also, the level of lean accounting consciousness in Nigeria is very low, even among academics and professionals. The study, thus conclude implementation lean accounting practices is laudable but lack of or low level of awareness impede the derivation of the perceived benefits by many Nigerian industrial goods firms. The study therefore suggests, amongst others; the necessity of lean accounting with among the listed industrial goods firms in Nigeria as it leads to the optimal provision of appropriate information and better use of the establishment's resources at reduced costs.*

**Keywords:** Lean accounting, Waste, Traditional Accounting System, Financial performance, Value Stream Costing

### **INTRODUCTION**

In the contemporary time, manufacturing environment is increasingly becoming impulsive day by day through advancement in technology, information and communication technology as well as globalization. This requires manufacturing sector to be flexible and adaptive to changes, and remained proactive. The ability to sense the frequent changes and act accordingly distinguishes on firm from the other. The industrial goods firms are not immuned to the production environment volatility, in so much as the sector's performance is driven by the forces of demand and supply for its goods and services based on the prevailing economic conditions, which may cause significant variations in the economic activity level in the sector. Howbeit, not all business activities in the sector slow down simultaneously. While some sub-sector may lag, others may lead the economic cycle. In consequence, the industrial goods sector should be sensitive to trend of events taking place in the sector in order to align globally, as the importance of the sector to the socio-economic development of the nation cannot be ignored or overlooked.

Consequently, one of the drastic changes that has taken place in the manufacturing environment is the emergence of lean production birthed in Japan by Toyota Motors Company through the efforts and experience of Taiichi Ohno, one of the pioneers (Sakichi Toyoda, Kiichiro Toyoda and Taiichi Ohno) of Toyota Motors Company, Japan. Being faced with shortages in both capital and resources after the world war II and with accumulation of high volume of inventory as a result of mass production caused much waiting by customers and waste. He re-engineered the traditional manufacturing processes and created a more efficient and reliable approach that eliminated waste, and continuously improving quality for value addition (Womack & Jones, 2003; Rosa & Machado, 2012). The innovation brought a paradigm shift in manufacturing processes, which was tagged "Toyota Production System (TPS)". The success of TPS motivated United States and European companies, such as Ford Motors; to adopt it under the title "Just-in-Time (JIT)" to remain competitive with Japanese industry. Later on, due to global implementation of

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TPS, it was renamed: “Lean Management” in the United States in the early 1980s (Pepper & Speeding, 2009; Chen & Taylor, 2009; Habadullah, 2013).

Empirical evidences available in advanced countries showed that manufacturing companies have implemented lean production processes in their manufacturing systems (Naseem et al., 2021; Mohsin et al., 2020a; Salamat et al., 2020; Majeed et al., 2020a; Naseem et al., 2020b; Soliman, 2020; Amusawi, Almagtome & Shaker, 2019; Teixeira, dos Santos, Akkari, & Munhoz, 2019; Daferighe, James & Offiong, 2018; Farhana & Amir, 2009; Okpala, 2013; Keitany & Riwo-Abudho, 2014; Maleka, Hove & Karodia, 2014; Mustapha, et al, 2014; Uzochukwu & Ossai, 2016). However, companies that implemented lean manufacturing later discovered that the traditional accounting system was incompatible with lean philosophy. In other words, the traditional accounting system could not handle lean principles. The traditional accounting systems promote mass production, and consider high inventory a value that increases profit, which are contrary to lean thinking (McVay, Kennedy & Fullerton, 2013). Again, the traditional accounting systems emphasize exploitation of full production capacity as against lean philosophy that emphasizes optimization of flow and creation of value for customers (Maskell & Kennedy, 2007). In response modern management accounting approach: Lean accounting; emerged that helped resolve the deficiencies of the traditional accounting methods in Lean manufacturing firms. Further studies revealed that companies across Europe, United Kingdom and the United States that implemented lean production and its associate, lean accounting; recorded impressive financial performance than their counterparts that have not (Fullerton & Wempe, 2009; Hong & Modi, 2011; Hofer, Eroglu & Hofer, 2012; Marodin & Saurin, 2013; Thanki & Thankkar, 2014; Onyeizugbe & Ossai, 2016).

For the Nigerian manufacturing sector to be globally aligned; there is need to restructure its operations and exert a desire for problem solving on quality to compete internationally and expand the capacity of its share and profit. Also, the need to replace outdated methodologies with new and flexible approaches such as lean production is inevitable (Okocha & Daud, 2020). From extant literature reviewed, many firms that unwittingly implemented aspect(s) of lean manufacturing processes to reduce costs, are implementing the new manufacturing system along with the traditional accounting system. That is without corresponding implementation of lean accounting practices (Okpala, 2013a; Okpala, 2013b; Daferighe, James & Offiong, 2018; Okocha & Wan Norhayate, 2021; Okocha & Daud, 2020; Gupta & Sharma, 2016; Helleno et al, 2017; Henao et al., 2019). The two questions raised are: “What is the current level of lean accounting consciousness of industrial goods firms in Nigeria?” Secondly “What is the effect of lean accounting on the financial performance of firms in this sector?” This study is, therefore; motivated by the desire of the researcher to contribute to the level of responsiveness and understanding of the importance of lean accounting and its advancement in the industrial goods sector of the Nigerian economy.

### **LITERATURE REVIEW**

#### **Lean Accounting**

Lean accounting is an accounting support to lean operations and the use of lean tools within the accounting area (Debusk & Debusk, 2012). It is a collection of principles, practices and tools that are used by lean companies to measure the business, control operations, and make sound financial decisions, ultimately improving all financial results (Karko, 2015). Okpala (2013) defines lean accounting as the application of lean methods to company’s accounting control and measurement processes to support lean management to achieve lean philosophy. Lean accounting is a wide spectrum of changes in managing, evaluating and controlling accounting processes of firms that implement lean strategies (Ahakchi, et al. 2012; Cesaroni & Sentuti, 2014). The basic goals of lean accounting are to eliminate waste, errors and clarify information; and to bring about a radical change in accounting and control. It is to conduct measurement processes to stimulate change and provide the required value to the customers (Soleimani, et al., 2019). Lean accounting draws knowledge from such lean tools like kaizen (concerned with continuous improvement), target costing (concerned with time and cost reduction as well as quality improvement), value stream (concerned with value added activities aimed to deliver



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quality goods/services to customer), Just-in-time (discourse mass production and accumulation of inventory), sales operations and financial planning – SOFP- (concerned with eliminating wasteful annual budgeting choreography most firms engaged in), back flush accounting (concerned with loss reduction at all levels), as it's tools build up lean accounting systems. To this end, we describe lean accounting as the assemblage of principles, practices, tools and techniques of lean thinking to provide accurate, timely and easy to understand accounting information for planning, control and decision making, and to promote lean transformation. Lean accounting was initially developed to support lean manufacturing companies, however today; it is fast moving into the other sectors of economic endeavours.

Consequently, in *accounting*, lean accounting is applied to all departments of an organization to have overall meaningful changes and excellent results. The reasons for the application of lean improvement methods to the accounting processes lays in its ability to refine company's operations, encourage finance department staff to learn about lean methods through actual hands-on experience and freeing up finance department time by removing waste in the process (Okpala, 2013; Maskell & BMA Inc Team, 2007). In *performance measurement*, the control of production and other processes is achieved by visual performance measurements at the shop-floor and value stream level. This measurement eliminates the need for the differencetracking and variance reporting favoured by traditional accounting systems. The continuous improvement is motivated and tracked using value stream performance boards which is updated weekly and used by the value stream continuous improvement team to identify areas and level of improvement, initiate PDCA (Plan-Do-Check-Adjust) projects, and monitor their progress (Chen & Cox, 2012). In financial reports for lean, the lean operations report is classified into value stream costing, financial statements and transaction costs elimination. The value stream costing reports consists of a simple summary of direct costs of the value streams overheads allocation to provide financial information that can be clearly understood by every worker in the value stream. This in turn leads to excellent decisions, motivate lean improvement across the entire value stream and show clearly accountability for cost and profitability.

### **Objectives of Lean Accounting**

Lean philosophy is not about reduction in the size of an economic unit but rather to exploit idle energy, improve quality of products and services, eliminate waste and wasting in order to add value to customers (Debusk, 2012). Lean mission is to help firms move towards the overall goal of continuously and consistently delivering value to customers. It tries to precisely specify value from customers' perspective; identify the value stream; create continuous flow; implement demand-driven systems - "pull" and not "push" - and strive for perfection (Andersch, 2014). The five key objectives of lean accounting are: (1) To eliminate waste (2) To eliminate error and defects (3) To free up capacity (4) To simplify processes to help gain better understanding, and (5) To speed up process. The above-highlighted five significant goals can be achieved by replacing traditional accounting practices with lean accounting practices (Enoch, 2013; Muhammad, et al, 2021).

### **Transition to Lean Accounting**

In addition to tracking the success of lean practices on the manufacturing floor, lean accounting should itself be lean. Its processes should be streamlined and should not require more effort and resources than necessary. To transit to a lean accounting system, the approach mirrors the 5Ss approaches of Kaizen. First, *sort* your accounting operations, evaluating them with an eye toward determining which steps provide the most value relative to the time they take. Discard processes that are not necessary for legal accounting requirements. Also eliminate steps and reports that do not give quality information about how well your lean systems are working. After sorting your processes, *set* them in order by developing a sequence of tasks that makes the most of your accounting time and also yields the best possible information. For example, when evaluating workflow it makes sense to track inventory purchases before recording sales figures because the inventory is necessary to generate the sales rather than vice

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versa. Next, **shine** your processes by eliminating unnecessary steps and upgrading your spreadsheets and platforms so that they will provide the best-quality information with the least amount of input and backtracking. Once your systems have been tightened and cleaned, **standardize** your lean accounting processes by creating written protocols and training personnel to follow these clear procedures accurately and consistently. Create standards and schedules for recording information and relaying it to employees who rely on these figures to understand and evaluate their production and purchasing activities. Finally, **sustain** your lean accounting practices by following through and doing the scheduled tasks on schedule and making sure your employees do the same. Evaluate these processes regularly and update them as often as necessary, especially as systems and circumstances evolve. Keep accounting and production staff informed about changes you have implemented, especially when these changes affect their work and their responsibilities.

### **Value Stream Costing**

This costing method does not use detailed data and procedures to calculate costs, but does it at the value stream level. Ease, simplicity and understandability to most company employees, not just accountants, are the characteristics of the value stream costing (Baggaley & Maskell, 2003). Traditional costing methods pay attention to the selection of adequate bases for the allocation of overhead costs to cost objects. The choice of inappropriate keys to allocate the increased mass overhead costs to cost objects lead to the presentation of distorted information on product costs. Some products are burdened with higher or lower overheads than they actually caused. In value stream costing, all costs in the value stream are considered direct. The information necessary to calculate the value stream profit is collected at the production floor, linking all overheads to the value stream as a whole, without the need to use labor hours as the basis for allocation.

### **Waste Management**

Extant literature reviewed provide various definitions of waste because it disguises itself in different ways, according to the context in which it appears (Mascitelli, 2007; Poppendieck, 2017; Thurer, Tomasevic, & Stevenson, 2017; Okpala, 2013; Ofileanu & Topor, 2014; Daferighe, James & Offiong, 2018; Okocha & Wan Norhayate, 2021). Waste refers to any activity that is not necessary from the view point of product or service and the customer is not willing to pay for it. Such activity should be eliminated. Also, an activity that is necessary from the product or service point of view and the customer is not willing to pay for it is considered non-value added activity, and should be reduced or eliminated subject to evaluation of other factors. However, an activity is considered value added if it is necessary from the point of view of product or service and the customer is willing to pay for it. Waste in production could be caused by people (employees, suppliers, and etcetera), processes, information, and assets. Lareau (2002) maintained that “people waste” occurs when work environment is not properly structured resulting in the underutilization or misuse of work powers; “process waste” occurs when the organization’s processes are not adequately designed or properly executed; “information waste, occurs when there is information asymmetry (information are not available at a time when it is mostly needed); and “assets waste” occurs when the resources of the company are underutilized or mismanaged. Rossi, Morgan & Shook, (2017) in their study sub-divided waste into;

- 1) Overproduction – Producing more, faster, or at an earlier stage than is required by the next process (or customer);
- 2) Over-processing – Performing unnecessary processing on a task.
- 3) Waiting – Waiting for work to be completed by a previous process or person;
- 4) Defects – Any kind of correction, such as late engineering changes;
- 5) Movement – Excess movement or activity during task execution;
- 6) Inventory – Build-up of more material or information than required; and
- 7) Transportation – The movement of documents/information/project tasks from person to person

Womack & Jones (2003) and Rosa & Machado (2012) maintained that lean management philosophy is an antidote for waste and they define five fundamental principles to eliminate such waste, which include

value creation; value stream analysis; optimizing flows; pull system application; and striving for perfection.

### **Cost Reduction and Lean Accounting**

Cost reduction, simply put; is the process of reducing further from the current level of costs to a lower level through changing working conditions that facilitate producing the same product but at a lower cost (Okutmus, 2015). In other words, cost reduction is the optimal use of resources in a way that reduces the areas of misuse. Costs reduction contributes to increasing the competitiveness of firms, and helps the organization to achieve consumer satisfaction with regard to the quality of goods or services provided and within the appropriate price. Draziclutilsky et al. (2016) stressed that reducing cost does not mean reducing the level of quality; rather, cost reduction converges with maintaining product quality and within specified goals.

On influence of lean accounting on cost reduction; several studies have confirmed that by eliminating waste through application of tools of lean accounting, costs are directly reduced (Almashkor, 2021; Daferighe, James & Offiong, 2018; Awadallah & Al-Siddiq, 2018; Kocamiş, 2015; Okpala, 2013). Further, Lean accounting reduces the need for reporting and analysis metrics, thereby reducing waste in resources and activities that do not addvalue to products and production processes. Since the primary goal of lean accounting is to eliminate waste and reduce costs, the best way, therefore; to reduce costs is the application of lean accounting system, which contributes to the accurate allocation of costs along the flow thereby leads to lowering the unit cost. Impliedly, in lean accounting system, costs reduction is directly proportional to waste elimination, meaning, the more waste is eliminated the more cost is reduced. In the production process, the wastes to be eliminated are waste from: *Over production* - when products are produce more than theconsumers' require, the remaining is non-value added to the organization, and amounts to waste. *Defective products*: when products are bad, or below standard due to mistakes they are considered defective. This increases production cost and constitute waste. *Waiting time*: this is idle time. Time as an organizational resource should not be wasted. *Over Processing*: when processing jobs are done excessively beyond requirement it constitutes waste and incurs additional cost. *Stocks*: Inventory/warehouse costs. *Transportation*: cost of moving products and human-ware. Unnecessary motion: Unnecessary motion that is non-value adding during the production process can result to waste.

### **Traditional Accounting and Lean Accounting**

Traditional accounting systems uses costing methods designed to support mass production and cannot identify the financial impact of the lean improvements taking place throughout the lean thinking implemented company, thus; provides misleading information prompted by variance analysis, make or buy, out-sourcing, product rationalization and profitability, which are considered extremely inimical to companies with lean aspirations (Okpala, 2013; Maskell & BMA, 2007; Fiume & Cunningham, 2003). As a company progresses with lean thinking, many fundamentals of its management system changes and traditional accounting control and measurement methods become inadequate and unsuitable (Mascitelli, 2011). In consequence, lean thinking organizations sought after clearer understanding of the true costs associated with processes and value streams and this need is supported by lean accounting. It focuses on true performance measurements; prepares a simple summary of direct costing of the value streams; it enables decision making and reporting based on a box score; it encourages preparation of financial reports on timely basis; the income statements are presented in plain language for easy understanding; it embraces radical simplification and eliminates transactions and control bottle-neck; it activates changes from a deep understanding of the value created for the customers; lean accounting eliminates traditional budgeting through monthly sales, operations and financial planning processes - SOFP; it encourages value-based pricing; and has ability to track the financial impact of lean changes throughout the organization. The above reasons for implementing lean accounting methods motivate people/management in the organization to move lean improvement forward and assist the role of accounting function from mere bookkeeping and routine financial reporting to strategic partnering with the company leaders to

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achieve quick success (Ed. Stenzel, 2007), It empowers continuous improvement at every level of the organization leading to increased customer value, growth, profitability and cash flow. Lean accounting presents income statements in a simple easy to understand and use method. The statements do not include misleading data relating to standard costs and ambiguous variance figures favoured by traditional accounting methods. This makes it action oriented. It changes stakeholders question from “What does this mean?” to “What should we do?”

### **Financial Performance**

Financial performance are those measures that reflect the performance of the whole company in terms of profitability and portray the ability of firms to create value (Galeazzo & Furlan, 2018). Financial performance measures could be more consequential than operational performance measures given the levels of lean maturity in current production environments.

### **Lean Accounting and Accounting Education**

Accounting is the language of business, and as a language should be updated in line with business trends. The goal of an accounting education is not to prepare for a life time recording of debits and credits, but to learn a language and tools to assist a business toward better performance. As business environment continuously improve the process and make serious progress in the transition to lean manufacturing, the firms have to continuously improve the accounting method, keep accountant folks updated, educate them and get them involved in every step taken. This is to avoid the serious disconnect that will occur between the operations and accounting (Byrne & Womack, 2012). Lean accounting methods can be readily adjusted to meet a firm’s specific needs and it rigorously maintain adherence to GAAP and external reporting requirements and regulations.

### **Empirical Review**

Almaskhor (2021) studied the impact of integration between throughput accounting and lean accounting on cost reduction in industrial companies obtained data from a sample of Saudi companies. A quantitative methodology was adopted for the purpose of achieving the research objectives, questionnaire were administered online among a sample of one hundred (100) managers and accountants in Saudi industrial goods companies. The collected responses were analyzed by SPSS 23 and the results showed the importance of using throughput accounting and lean accounting in Saudi industrial companies, Moreover, the study concluded that there is a statistically significant, positive and strong correlation between the integration of lean accounting and throughput accounting on cost reduction in Saudi industrial goods companies, and that these two systems are complementary in their ability to reduce costs. The researcher recommended the necessity of using throughput accounting in conjunction with lean accounting in Saudi industrial companies for optimal use of the firms’resources. Udeze, Ugbam & Ugwu (2020) in their study: Effect of Lean Manufacturing on performance in the Nigerian manufacturing sector, specifically sought to establish the nature of the relationship between leanness and organizational performance and to ascertain the extent lean supply chain integration can affect competitiveness in the Nigerian manufacturing organizations. To achieve these objectives, two research questions along with two hypotheses were raised. The population of the study was 2703 employees of the selected manufacturing organizations, whereby a sample size of 336 was obtained using Godden (2004) statistical formula for determining sample size for finite population. Out of the 336 copies of the questionnaire distributed, 326 copies were returned and used for analysis. Hypothesis one was tested using Pearson Product-Moment Correlation Coefficient while hypothesis two was tested with linear regression analysis. The study revealed a positive correlation between leanness and organizational efficiency ( $r = .663$ ,  $p < .05$ ) and that lean supply chain integration significantly affected competitiveness in the manufacturing organizations ( $t = 25.146$ ,  $F = 0.000 < 0.05$ ). Thus, this implies that leanness in the organization resulted in efficiency. The study concluded that the leaner the entire production processes of an organization, the better its

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chances to sustain competitiveness. Based on the findings, the study recommends that as a matter of policy, leanness should be practiced in every facet of the organization to enhance efficiency.

Abdalla and Job (2018) examine the effect of selected lean management practices on financial performance of private hospitals in Kenya. The study adapted a descriptive design with the use of cross-sectional data. The target population was 40 private hospitals in Mombasa County. A census survey was carried out on all the private hospitals in Mombasa County with questionnaire used to collect primary data. Out of the 40 research instruments distributed, 37 were received and analyzed using SPSS, which produced both descriptive and inferential statistics. The findings revealed that all the lean management practices had a significant and positive relationship with financial performance. Okpala (2013) in an exploratory research investigated the application of lean accounting as a strategy to achieving lean business philosophy in Nigeria manufacturing firms. He studied 53 manufacturing firms listed in the Nigeria Exchange, and the findings revealed that lean accounting correlated positively with lean business philosophy but due to ignorance, implementation is insignificant in Nigeria. Iranmanesh et al (2019) studied the effect of lean manufacturing practices on firms' environmental performance by considering lean culture as a moderator. Data were gathered through a survey of 187 manufacturing firms in Malaysia and were analyzed using the partial least squares technique. The results indicate that process and equipment, product design, supplier relationships, and customer relationships have a positive and significant effect on sustainable performance. It also observed that lean culture positively moderated the effects of process and equipment and supplier relationships on sustainable performance. These results have important implications for enhancing the sustainable performance of manufacturing firms through lean manufacturing practices. Timm (2015) examined the problem of lack of adoption of lean-accounting techniques like value-stream costing in lean-manufacturing enterprises. The purpose of this non-experimental explanatory study was to investigate factors that influence the adoption of lean accounting. Using the technology acceptance model (TAM), based on the theory of reasoned action and the theory of planned behavior, the study examined whether management accountants' perceptions of the ease of use (PEOU), or perceived usefulness (PU) of value-stream costing may influence their intention to implement (BI) value-stream costing. The 2,307 attendees of the Lean Accounting Summit from 2005–2013 were invited to participate in an online survey; 70 attendees agreed to participate. Descriptive statistics, Pearson correlation coefficient, and multiple regressions were calculated. Statistically significant positive relationships emerged between PEOU, PU, and the intention to implement value-stream costing. Also, PEOU and PU for the individual accounted for 51% of the variance of BI, and PEOU and PU for the organization accounted for 49% of the variance of BI. This study added to the understanding how management accountants' perceptions positively influence their intention to implement value-stream costing.

Kadhim, Kadhim & Azeez (2020) conducted a study to determine the level of integration between lean accounting and activity-based public budgeting for providing useful information to evaluate the public sector firms' performance. The research sample consisted of 55 individuals in the public sector. The research hypothesis was tested. Findings significantly showed that lean accounting integrated with activity-based public budgeting for public firms' performance. The study concluded that the integration between lean accounting and activity-based public budgeting leads to providing financial and non-financial information to improve the efficiency of performance evaluation in public firm. This integration supports managers to decrease the idle capacities and generate important recommendations which improve the public sector firm's performance in future. Muhammad, et al., (2021) carried out the first study ever on lean accounting in Pakistan to create better understanding of lean accounting and how industries of Pakistan perceive lean accounting implementation and, as well explored the barriers to the adoption of lean accounting approach and the mitigation strategies. The study adopted a qualitative approach. Semi-structured interviews were conducted to collect data from managers of Textile industries to investigate the barriers and mitigation strategies. The appropriate tests were applied via Vivo 12 to summarize the interviews. The findings indicated a strong and positive perception of industrialists

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regarding the impact of the lean accounting approach on operational and financial efficiency in an organization. The study concluded that organizations can gain a competitive advantage by adopting this whole new approach. Of course, there are some barriers in its Implementation, but these barriers can be mitigated efficiently and conveniently. Ofileanu & Topor (2014) carried out a study on lean accounting: An ingenious for cost optimization. They uphold the views of earlier studies on lean accounting (Maskell & Baggaley, 2012; McVay, Kennedy & Fullerton, 2013), and maintained that lean accounting is a necessity for companies that have implemented lean manufacturing system.

Samad, Shu & Ogar (2017) conduct a study to examine the role of leanaccounting for value creation. The study employed qualitative approach to examine theaccounting methods applied by account preparers of industrial companies in Sweden.The findings of the study revealed that the financial statements preparers employmodern accounting methods because traditional accounting methods do not fit the process of leanaccounting. Lawal and Abdullahi (2020) studiedon impact of lean accounting on the financial performance of private hospitals in KadunaState. The data of the study was collected using questionnaires that are structured in a five-point Likert scale. Forty questionnaires were distributed to the management of Private hospitals, out of which thirty-eight questionnaires were filled and returned. Th edata of the study were analyzed using regression techniques and the result of theanalysis revealed that lean accounting has a significant and positive impact on thefinancial performance of private hospitals in Kaduna State. Therefore, the study concluded that the model of the study has significant ability to predict the relationshipbetween lean accounting and financial performance of private hospitals in KadunaState. In line with the findings, the study recommended that manufacturing and service enterprises should undertake to train their staff on the lean principles andpractice of lean accounting and ensure its full incorporation into the productionprocess

### **METHODOLOGY**

This study is a literature review and so data are gathered from secondary sources, which include journals, textbooks, Internet/websites of relevant organizations, both within and outside Nigeria. In addition, the personal experience of the research as a follower of lean philosophy with keen interest, one-on-one discussion with colleagues in the college, as well as peer-to-peer discourse with course mates also brought in to bear

### **RESULT AND DISCUSSION**

Based on the literature review and the peer-to-peer discussionswith colleagues and course-mates,the following are the findings with respect to current levels of lean accounting consciousness of of leanaccountingas well as the implementation effect on the financial performance listed industrial goods firms in Nigeria.It was found that;

- i. Lean accounting emerged to resolve the inadequacies of traditional accounting systems in leaned industries. This finding supports the position of proponents of lean accounting (Maskell & Baggaley, 2006; Maskell & BMA Inc. Team, 2007; Fiume & Cunningham, 2003)
- ii. Lean accounting is gaining global recognition and acceptance as accounting system concerned with eliminating waste, reducing costs/loss, and creating values for customers. This is in line with the findings of Hong & Modi, (2011); Hofer, Eroglu & Hofer, (2012); Marodin & Saurin, (2013); Thanki & Thankkar, (2014).
- iii. All lean organizations should implement lean accounting as traditional accounting systems are incompatible with lean thinking. This is consistent with the position of McVay, Kennedy & Fullerton (2013)
- iv. Companies that implemented lean accounting in their lean enterprises recorded higher financial performance than their counterparts that do not. This finding supported the findings of Abdalla & Job (2018); Lawal & Abdullahi (2020)

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- v. That the implementation of lean accounting practices is gaining global recognition and acceptance. This is in support of Martinez (2014) findings.
- vi. That the current level of awareness of lean accounting practices in Nigeria is still low as evidence by the literature reviewed. This is in line with the study carried out by Okpala (2013) whose finding correlated positively with lean business implementation, but due to ignorance lean accounting implementation is insignificant. That few firms in Nigeria that unwittingly adopted and implemented lean production in part are still maintaining the traditional accounting systems, which are incompatible with lean philosophy.
- vii. That ignorance, lack of expertise, policy framework and resources deficiency are the limiting factors mitigating against the adoption and implementation of lean accounting practices in Nigerian listed industrial goods firms. The finding corroborates the view of Timm (2015).
- viii. That initial costs of adopting and implementing lean accounting is high, but pays off in the long run, that is it has long term benefits.
- ix. That there is a gap between the academia and the industry with respect to promoting lean accounting practices, and it is consistent with the view of Bryne & Womack (2012), which posited that businesses should continuously improve the accounting method, keep accountants updated, educate them and get them involved in every step taken, to avoid serious disconnect that will occur between the operations and accounting.

### **CONCLUSION AND RECOMMENDATIONS**

The study concludes that lean accounting supports lean manufacturing and is capable of enhancing financial performance of listed industrial goods firms in Nigeria through waste elimination, cost reduction and continuous improvement in order to add value to customers. The study, therefore, recommends as follows:

- i. The professionals and the academia must canvass and create impactful awareness on the benefits of lean accounting and advocate for the need for manufacturing firms, particularly; industrial goods firms to be lean in order to be globally compliant.
- ii. Nigerian manufacturing companies that are lean should implement lean accounting system because maintaining the old traditional accounting system may result in giving misleading information to management, which would lead to taking wrong direction.
- iii. Lean industrial goods firms should train their accounting staff on lean accounting principles and practices and ensure its full implementation as the world is inching towards lean products and services.
- iv. In assessing and ranking the performed firms in manufacturing sector, leanness of the organization should be among the criteria. This will form a good source of pressure on regulatory authorities to provide a policy framework
- v. Lean accounting could be introduced as a topic in accounting courses for enhanced awareness and development of lean accounting experts

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# **Impact of Budget Implementation on Economic Performance in Nigeria**

**OMONIYI, Wahab Shina**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: [wahability2512@gmail.com](mailto:wahability2512@gmail.com), Phone No: +234 8181955930

## **Abstract**

*The issue of budget implementation has long been a source of concern to the public and also considering the important impetus of budget implementation on economic growth and development in Nigeria. Over the years, the impact of an increasing size of government operations without commensurate benefits or direct link to economic growth has become an emerging major public debate. Nigeria's public expenditure has been increasing year by year, mainly for the purpose of boosting her economic development. While Budget is considered the Chief policy of government in achieving other policy objectives, unfortunately, the achievement of this objective has continued to elude the country. The major aim of this study was to determine how budget implementation by Nigeria affected her economic performance during the period from 2010 to 2020. Specifically, the study sought to examine the impacts of public capital and recurrent expenditures on Nigeria's real gross domestic product. This study reveals that recurrent government expenditure has a positive relationship with the economic growth, this implies that an increase in the units of recurrent government expenditure will lead to an increase in the economic growth of Nigeria in the period analyzed, whereas capital government expenditure has a negative relationship with the economic growth, this implies that an increase in the units of capital government expenditure will lead to a decrease in economic growth of Nigeria. These results suggest that due process was compromised at the budget implementation stage. The study recommends that government should ensure the strict adherence to due process in the implementation of its annual budgets. Proper oversight functions should also be carried out by relevant supervisory agencies saddled with such responsibility to ensure maximum compliance by service public goods providers*

Keywords: Budgeting, Budget Implementation, Budget Process, Economic Performance, Nigeria

## **INTRODUCTION**

Budgeting in Nigeria has continued to be a subject of controversies ranging from shoddy preparation to incomplete implementation. There have also been this continuous change in government and the consequential change in policy and reforms. During the budget appropriation process in 2013, controversy came up on the oil benchmark, this caused the delay by the National Assembly from the passing the proposal due to dispute over the price that must be used for budgeting purposes. Also in 2016, the nation woke up with another slogan in budgeting called “budget padding” and “misplaced budget”. According to Ibrahim (2011), Nigeria has witnessed low level of budget implementation resulting in restrictions to the executive arm’s ability to efficiently and effectively execute projects that would improve the standard of living conditions of the citizenry since 1999. The main objective of budget is designed to stimulate the growth in the production sector, check inflationary pressure, correct balance of payment deficit and maintaining a reasonable foreign exchange reserve. However, any delay in preparation and execution of the budget would slow down any country’s journey to economic prosperity. The Nigerian economy is faced with series of imbalances in economic policy formulation and implementation, this menace which in itself is another bottleneck in making the budget achieve its objective. The importance of budget as a document that defines other document can not be overemphasized. The budget is itself a policy, its content remains a policy document and its implementation forms the basis of policy execution. According to Ogujiuba and Ehigiamusoe (2013), the budget ought to be the most important economic policy instrument; unfortunately, it is shrouded with a lot of myths and illusions and as such might not contribute to the economic growth and development of the country.

The budget, as an instrument of driving other government policies can be used to make or mar such policies depending on what government intends to achieve. If government desires to abolish an existing policy, there may be no need to make noise about it or officially abolish it. Through the instrumentality of budget, it can decide not to allocate or fund such policy. By so doing, the policy will die technically. An average citizen who doesn’t earn directly from the provision of government appropriation is always interested in the budget because indirectly the economic impact of the budget will have a multiplier effect on him/her. The citizen is also interested in the policy of government because it sets out the direction

every stakeholder will likely follow for that fiscal year. But more importantly, the citizen is interested in the figures allocated to drive a particular policy from the appropriation document. The budget process in Nigeria includes budget formulation and preparation by the executive, budget approval by the legislative arm of government and subsequent implementation by the executive through various ministry, department and agencies of the government. The power to execute the approved budget is always communicated to the various spending ministries and agencies of the government through Warrants issued by the Ministry of Finance authorizing the Accountant General of the Federation to release funds as contain in the warrant. This warrant will authorize officers controlling votes to incur expenditure in accordance with the approved estimates subject to any reserved items. In spite of the specific structural appropriation process and the necessary enabling laws guiding the budget process, commitment phase of the expenditure process is a fertile ground for corrupt activities. The law provides for a provisional general warrant permitting expenditure not exceeding those of previous year where the Appropriation Act has not come into operation at the beginning of the year. The aim of this provision is to ensure continuity of the services of government. The length of period of spending authorization is determined in functional cash flow forecast for the period when payments are anticipated. Over the years, there have always been concern and bottleneck in implementing the annual budget by governments in Nigeria. The legislative oversight functions by the legislative arm of government have always been more or mere desk oversight instead of field oversight. This has made physical monitoring of the budget to be ineffective. Budget means different thing to different groups. To an individual, budget may be overtly or covertly used. But to an organization or government, it must be expressly defined to guide other policies that are planned to be executed within that period. In public sector, the budget is the big mirror that financially defines the policy of governments through various programs, projects and activities for a particular fiscal period usually a year. It serves as an instrument to drive the policy of government. In other word, for a budget to be an effective instrument, it should be as comprehensive as possible detailing source of resources, commitment of resources as well as allocation of such resources for the period in question.

The Budget impacts the economy in so many ways. The fiscal deficit part of the budget affects the interest rate and the stock markets as well as power of the finance minister to spend and invest government funds. The extent of the deficit and the means of financing it influence the money supply and the interest rate in the economy. The cost of capital becomes higher when the interest rates are high, resulting to lower profits and ultimately lower stock prices. On the other hand, when the interest rates are low, it reduces the cost of capital for industry, relative higher profits and stock prices. All these fiscal measures undertaken by the government as policies affect public expenditure. For instance, if the direct taxes are increased, it would decrease disposable income, resulting to low purchase power of consumers. When this happens, the demand for goods also falls. When demand for goods reduces, production also decreases, thereby affecting economic growth. Similarly, an increase in indirect taxes would also decrease demand. This is so because the burden of indirect taxes is often partially or completely bore by the consumers in the form of higher prices. As higher prices affect demand, turnover reduces thereby affecting the marginal cost of production. When this happens, it reduces marginal profit, thereby slowing down production and growth. Thus, the general objectives of this study is to find out the impact of budget implementation on economic performance in Nigeria and the basic hypothesis underlying this study are stated thus;

**HO1:** There is no significant impact between capital expenditure and economic performance in Nigeria.

**HO2:** There is no significant impact between recurrent expenditure and economic performance in Nigeria.

## **LITERATURE REVIEW**

### **Conceptual Framework**

#### **Government Budget Implementation**

Budget is a financial plan for a defined period of time. It may also include planned sales volumes and revenues, resource quantities, costs and expenses, assets, liabilities and cash flows(Chartered Institute of Management Accounting, 2013). A Budget is defined as a plan which can be quantified financially demonstrating how resources to execute such plans are sourced for and allocated over a definite period of time. Budget is a document that defines

analyses and interprets the plans of an individual, family, organization or government in monetary terms stating various activities to be executed and resources being allocated to such activities for a specific period of time. According to (Olurankise 2012), it expresses strategic plans of business units, and an organization, activities or events in measurable terms. A budget is a framework for revenue and expenditure outlays over a specified period usually one year (Olurankise 2012). It is an instrument stipulating policies and programmed aimed at realizing the development objectives of a government. Meigs and Meigs (2004) defined budget as a comprehensive financial plan, setting forth the expected route for achieving the financial and operational goals of an organization. Omolehinwa (2003) is of the view that Budget is the plan of dominant individuals in an organization expressed in monetary terms and subject to the constraints imposed by other forces and the environment indicating how the available resources may be utilized for the purpose of achieving organization's objectives and proprieties. The concept of government budget from layman's perspective can be seen as an estimate of government income and expenditure for a set period of time. A much narrow view of government budget is that the budget is a regular estimate of expenditure put forward by a finance minister. Smith and Thomas (2004) also defined budget to be a plan for the accomplishment of program related to objectives and goals within a definite time period including an estimate of the resources required together with an estimate of resources available usually compared with one or more past periods showing future requirements. However, Samuel and Wilfred (2009) provided a broader concept. They opined that budget is a comprehensive document that outlines what economic and non-economic activities a government wants to undertake with special focus on policies, objectives and strategies for accomplishment that are substantiated with revenue and expenditure projections.

### **Capital Expenditure**

Capital expenditures (CapEx) according to investopedia are funds used by a company to acquire, upgrade, and maintain physical assets such as property, plants, buildings, technology, or equipment. CapEx is often used to undertake new projects or investments by a company. Capital expenditure is primarily expenditure to create or acquire fixed assets and on the acquisition of land, buildings and intangible assets. In any one year, the amount of funding for cultural activities can be affected by high levels of one-off capital expenditure (Australian bureau of Statistics 2010) Capital expenditure is payments for acquisition of fixed capital assets, stock, land or intangible assets. A good example would be building of schools, hospitals or roads. However, it is important to note that much donor-funded "capital" expenditure, though referring to projects, includes spending on non-capital payments (Government Spending Watch, 2017).

According to Olugbenga and Owoye (2007) and Ezirim and Ofurum (2003), capital expenditure is also composed of administration (for example, general administration, defense, internal security among others); economic services (includes, agriculture and natural resources, manufacturing, mining and quarrying, transport and communications and others); social and community services (such as, education, health, housing and others); transfers (includes, financial obligations, capital repayment for both internal and external loans, special projects, loans to parastatals and government-owned firms among others).

### **Recurrent Expenditure**

Recurrent expenditure on goods and services is expenditure, which does not result in the creation or acquisition of fixed assets (new or second-hand). It consists mainly of expenditure on wages, salaries and supplements, purchases of goods and services and consumption of fixed capital (depreciation). Recurrent Effect of Budget Implementation on Economic Growth in Nigeria expenditure refers mainly to expenditure on operations, wages and salaries, purchases of goods and services, and current grants and subsidies (Australian bureau of Statistics 2010). Recurrent expenditure is all payments other than for capital assets, including on goods and services, (wages and salaries, employer contributions), interest payments, subsidies and transfers. (Government Spending Watch 2017). According to (Olugbenga and Owoye, 2007) and (Ezirim and Ofurum, 2003), recurrent expenditure is composed of; administration (examples includes, general administration, defense, internal security); economic services (includes, agriculture, construction, transport, communication and among others); social and community services (includes, education, health, housing and among others); and transfers (includes, public debt charges or interests for both internal and external debts, pensions and gratuities, among others).

### **Gross Domestic Product (GDP)**

GDP is the total output of all goods and services produced in an economy. A country's economic growth is usually measured by an increase in that country's gross domestic product, or GDP. In other words, a

country's GDP is the total monetary value of the goods and services produced by that country over a specific period of time (Study.com, 2017). According to Kimberly (2017) Gross domestic product is the best way to measure economic growth. That's because it takes into account the country's entire economic output. It includes all goods and services that businesses in the country produce for sale. It doesn't matter whether they are sold domestically or overseas. GDP measures final production. It doesn't include the parts that are manufactured to make a product. It includes exports because they are produced in the country. Imports are subtracted from economic growth.

### **Empirical Review**

Nwala (2020) examined budget implementation and economic growth in Nigeria. Ex-post facto research design was adopted for this study. Secondary data relating to the study were obtained from Federal Ministry of Finance and Central Bank of Nigeria Statistical Bulletin for the period 1981 to 2018. Gross Domestic Product was used as the dependent proxy, while Capital expenditure, Recurrent expenditure and Debt as the independent proxies. Using E-Views 10, it was found that capital expenditure exerts positive and significant relationship with the Gross Domestic Product of Nigeria. Likewise, recurrent expenditure and gross domestic product show positive and significant relationship, and government debt and gross domestic product also show negative and significant relationship. Based on these it is recommended that government should try to put in place effective machineries that will ensure the strict adherence to due process and total implementation of annual budget provision and avoid diversion of public funds to personal uses. Abu and Abdullah (2010) investigates the relationship between government expenditure and economic growth in Nigeria from the period ranging from 1970 to 2008. They used disaggregated analysis in an attempt to unravel the impact of government expenditure on economic growth. Their results reveal that government total capital expenditure, total recurrent expenditure and Education have negative effect on economic growth. On the contrary, government expenditure on transport, communication and health result in an increase in economic growth. They recommend that government should increase both capital expenditure and recurrent expenditure including expenditure on education as well as ensure that funds meant for development on these sectors are properly utilized. They also recommend that government should encourage and increase the funding of anti-corruption agencies in order to tackle the high level of corruption found in public offices in Nigeria.

Nurudeen and Usman (2010) investigated the effect of government expenditure on economic growth with disaggregated expenditure data from 1979 to 2007. The results reveal that government total capital expenditure, total recurrent expenditures, and government expenditure on education have negative effect on economic growth. While the foregoing studies focused on the Keynesian model which stipulates that expansion of government expenditure accelerates economic growth. Ighodaro, Clement and Dickson (2010) in addition using total government expenditure they also used a disaggregated government expenditure data from 1961-2007, specifically; expenditure on general administration and that of community and social services to determine the specific government expenditure that economic growth may have significant impact on. Other variables reflecting fiscal policy changes and political freedom were also included in the model to augment the functional form of Wagner's law. All the variables used were found to be positive and long run relationship exists between the dependent and the independent variables except in the case where only GDP was used as the independent variable. Wagner's hypothesis did not hold in all the estimations rather Keynesian hypothesis was validated. Oke (2013) conducted a study to theoretically and empirically explore the effect of budget implementation on the Nigerian economic growth and provides a panacea to the problem of budget allocation and its implementation. The study adopted ordinary least square (OLS) regression test for analysis and time series data span from 1993 to 2010 was considered to capture the short run relationship between the proxies of budget implementation and economic growth. The study revealed that implementation has a positive effect impact on Nigeria economic growth. The study further showed a positive relationship between GDP and public total expenditure (PEX), public recurrent expenditure (PRE), public capital expenditure, external debt (EXD), while public capital expenditure (PCE) shows a negative relationship to GDP. Patricia and Izuchukwu (2013) investigated the effect of government expenditure in education on economic growth in Nigeria over a period from 1977 to 2012, the study adopted the Error Correction Model (ECM) to achieve its objectives. The study used Ex-post facto research design and applied time series econometrics technique to examine the long and short run effects of public expenditure and economic growth in Nigeria. The study revealed that Total Expenditure Education is highly and statistically significant and have positive relationship on economic growth in Nigeria in the long run.

Nwala and Ogboji (2020) conducted a study on the effect of budget implementation on economic growth of Nigeria. Secondary data relating to the study were obtained from Federal Ministry of Finance and Central Bank of Nigeria Statistical Bulletin for the period 1981 to 2018. Gross Domestic Product was used as the dependent proxy, while Capital expenditure, Recurrent expenditure and Debt as the independent proxies. Using E-Views 10, it was found that capital expenditure exerts positive and significant relationship with the Gross Domestic Product of Nigeria. Likewise, recurrent expenditure and gross domestic product show positive and significant relationship, and government debt and gross domestic product also show negative and significant relationship. Onaolapo and Olaoye (2013) conducted a study on the appraisal of the factors contributing disparity in budget proposal and implementation. The main thrust of this paper was to examine the behavioral aspect of budget implementation disparity. Two hypotheses were set forth and tested using two ministries namely: education and finance in the Ekiti State of Nigeria. The study was analyzed using the primary data of analysis. Thirty high ranking staff involved in budget preparation and implementation out of thirty-five administered with questionnaires responded to time. Their findings revealed that government ministries always meet their budget target and the ministries have adequate measures to curb budget variances

### **Theoretical Review**

#### **The Keynesian Theory**

According to Keynesian theory, government spending, particularly deficit financing, can offer short-term stimulus to assist prevent a recession or depression. On the other hand, the Keynesians encourage policymakers to be ready to cut government spending once the economy improves in order to avoid inflation. Increases in government spending (on infrastructure) contribute to better economic growth in this model. Other models claim that government fiscal policy has no influence on national output growth. Many economic theories exist, but the Keynesian notion of increased government action as a catalyst for economic growth was judged the most suitable. Consequently, this work was anchored on the Keynesian theory.

#### **Theory of Increasing State Activities**

According to Wagner's "law of rising public expenditures", a principle named after the German economist Adolph Wagner (1835-1917), the development of modern industrial society would give rise to increasing political pressure for social progress which will result to an increased allowance for social consideration in the conduct of industry. Wagner also postulated the second principle that the rise in public expenditure will be more than proportional increase in the national income (income elastic wants) and will thus result in a relative expansion of the public sector. This position was supported by Musgrave and Musgrave (1988). In their opinion, they stated that as progressive nations industrialize, the share of the public sector in the national economy grows continually. Ezirim (2006) accept that reduction in public sector growth would require a slowdown of economic growth and it is expected that a continuous expansion of the government sector and its expenditure would occur. Tsauni (2007), expresses the view that public expenditure can be treated as an outcome or an endogenous factor of the growth of economy and also state the opposite view of Keynes which regards public expenditure as an exogenous factor which can be utilized as a policy instrument to stimulate economic growth.

#### **Wagner's Hypothesis of Public Expenditure**

Wagner's law states that public expenditure rises faster than national output. In other word, as national income increases, the size of government expenditure also increases to meet the need of the state in providing social, administrative and protective functions to the people. This school of thought suggests that larger government expenditure is actually not synonymous with economic growth, but rather detrimental to it as most government operations are not performed efficiently.

#### **The Displacement Effect Theory**

According to Peacock and Wiseman (1961), government spending evolves in a step-like pattern as a result of changes in the pattern of government spending during periods of upheaval and periods of relative quiet. During times of turmoil, government revenue from taxes increases as people's tax resistance decreases. The income raised from higher taxes is used to fund government spending, which is projected to rise during this time of turmoil. A study was carried out on public expenditure in the United

Kingdom for the period, 1890-1955. It was observed that government spending does not generally return to pre-crisis levels after the situation has calmed down. In their study on public expenditure growth, they agree that public expenditure grows in step-wise fashion. This theory looked at increasing public expenditure from the social-political perspective Government expenditure will increase as income increases but because the leaders want re-election into political offices, so more infrastructures must be provided in order to convince the electorates that their interests are being catered for by the people they voted for. They argue that at some times, some social or other disturbances take place which at once shows the need for increase in public expenditure which the existing public revenue cannot meet, Ezirim (2006). According to Buhari (1993), Peacock and Wiseman are suggesting a displacement effect, a shifting of government expenditure and revenue to new higher level.

**METHODOLOGY**

The study adopt the ex- post factor research design by employing the Augmented Dickey-Fuller test (ADF) method of data analysis using regression analysis method. The ex-post factor design involves experimental study of examine the impact of budget implementation on the economic performance of Nigeria. The study covers a period of 10 (Ten) years of Nigerian capital and recurrent expenditure from year 2010-2019. The study requires the use of Augmented Dickey-Fuller test for data analysis, for the purpose of testing the formulated hypothesis. The choice of ex-post factor design is because the study aimed at determines the impact of budget implementation on the economic performance in Nigeria. The Ordinary Least Squares Method of Regression was used with the aid of E-view 10 to determine and analyze the impact of budget implementation on the economic performance of Nigeria. Thus, budget Implementation was measured by Capital expenditure and recurrent expenditure as independent variables, while GDP was used to measure economic performance as dependent variable.

**Model Specification**

The time series regression analysis was used for the study and the analysis incorporated the Augmented Dickey-Fuller test (ADF) method of data analysis was conducted to evaluate the Unit Root Test Results of the linear association between budget implementation on economic performance in Nigeria.

A regression model was built to suit the variables under study and it presented as below;

$$RGDP = \beta_0 + \beta_1RGEXP + \beta_2CGEXP + \epsilon_{it} \dots\dots\dots 3.1$$

Where:

- RGDP = Real Gross Domestic Product
- RGEXP = Recurrent Government Expenditure
- CGEXP = Capital Government Expenditure
- $\epsilon_{it}$  = Error Term.

**RESULT AND DISCUSSION**

**Unit Root Test**

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

H<sub>0</sub>: variable is non-stationary, that is, the variable has no unit root.

H<sub>1</sub>: variable is stationary, that is, the variable has a unit root.

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

**Table 1: Result of the ADF Test for Unit Root**

<b>Variables</b>	<b>ADF Test Statistic</b>	<b>5% Critical Value</b>	<b>Order of Integation</b>
<b>RGDP</b>	-2.158009	-1.950117	I(1)
<b>CGEXP</b>	-6.004537	-3.574244	I(1)

<b>RGEXP</b>	-8.456848	-3.536601	I(1)
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From the tabular illustration (table 4.1) above, all the variables under study: Real Gross Domestic Product (RGDP), Capital government expenditure (CGEXP) and Recurrent government expenditure (RGEXP) are not stationary at level form. However, they are stationary at first difference. That is, it is integrated at order one; I(1).

Not having a stationarity time series data at level form, indicates not having a short run relationship among the individual time series data, this result is expected since most macro-economic time series data are known to exhibit such behaviour. Since the variables are non-stationary at level form, there is need to conduct a co-integration test. The essence is to show that although all the variables are non-stationary at level form, the variables may have a long term relationship that is the variables may be co-integrated and will not produce a spurious result.

**Co-integration Test Result**

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

**Table 2: Co-integration Test Result**

Null Hypothesis: ECT has a unit root				
Exogenous: None				
Lag Length: 0 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-3.526613	0.0008
Test critical values:	1% level		-2.628961	
	5% level		-1.950117	
	10% level		-1.611339	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(ECT)				
Method: Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
ECT(-1)	-0.483812	0.137189	-3.526613	0.0012
R-squared	0.255629	Mean dependent var		0.001546



Adjusted R-squared	0.255629	S.D. dependent var	0.040065
S.E. of regression	0.034567	Akaike info criterion	-3.865197
Sum squared resid	0.043015	Schwarz criterion	-3.821659
Log likelihood	72.50614	Hannan-Quinn criter.	-3.849848
Durbin-Watson stat	1.977729		

From the result above, the ADF test statistics (-3.526613) is greater than the 5% critical value (-1.950117), in absolute terms. This implies that the residuals are stationary (that is, the variables are co-integrated or that the linear influence of the independent variables cancels out).

**Error Correction Mechanism Result and Interpretation**

**Table 3: ECM Test Result**

Dependent Variable: D(LRGDP)				
Method: Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.041012	0.007670	5.347361	0.0000
D(CGEXP)	-1.72E-05	3.10E-05	-0.554041	0.5833
D(LRGEXP)	0.011406	0.023489	0.485597	0.6305
ECT(-1)	-0.523221	0.144052	3.632180	0.0009
R-squared	0.303788	Mean dependent var		0.042191
Adjusted R-squared	0.240496	S.D. dependent var		0.041292
S.E. of regression	0.035986	Akaike info criterion		-3.709582
Sum squared resid	0.042734	Schwarz criterion		-3.535428
Log likelihood	72.62726	Hannan-Quinn criter.		-3.648184
F-statistic	4.799784	Durbin-Watson stat		1.992669
Prob(F-statistic)	0.006975			

From table 3 above, the magnitude of the short run disparity is -0.523221, that is to say the degree of the short run dynamics is 52.3221%. This shows a high speed of adjustment to equilibrium after a shock.

### **Regression Result**

In the regression result, the variables under consideration are Real Gross Domestic Product (RGDP) (dependent variable) and Capital government expenditure (CGEXP) and Recurrent government expenditure (RGEXP) (independent variables). From the result the estimated coefficient value of  $b_0$ ,  $b_1$ , and  $b_2$  are 0.041012, -0.0000172, and 0.011406 respectively.

The regression results are presented as follows:

$$RGDP = 0.041012 - 0.0000172CGEXP + 0.011406RGEXP$$

$$S.E = (0.007670) \quad (0.000031) \quad (0.023489)$$

$$T^* = 5.347361 \quad -0.554041 \quad 0.485597$$

$$R^2 = 0.303788$$

$$\text{Adjusted } R^2 = 0.240496$$

$$F^* = 4.799784$$

$$\text{Durbin-Watson statistics} = 1.992669$$

The A priori test results are presented as follows

**Table 4: Result of A priori Test:**

<b>Variable(s)</b>	<b>Expected Signs</b>	<b>Observed Signs</b>	<b>Results</b>
<b>CGEXP</b>	-Ve	-Ve	CWES
<b>RGEXP</b>	+Ve	+Ve	CWES

CWES – conform with expected sign

### **Evaluation of Regression Results**

#### **Evaluation Based on Economic Criterion**

This subsection is concerned with evaluating the error correction mechanism result based on a priori expectations. The signs and magnitude of each variable coefficient is evaluated against theoretical expectations. The sign of the variables coefficients from the estimated model are in line with a priori expectations. Thus, recurrent government expenditure has a positive relationship with real gross domestic product; hence this conforms to the a priori expectation. Similarly, capital government expenditure has a negative relationship with real gross domestic product; hence this conforms to the a priori expectations. The constant term is 0.041012, which means that the model passes through the point 0.041012 mechanically. If the independent variable is zero, Real Gross Domestic Product would be 0.041012, (Gujarati, 2007).

The estimated coefficient for Capital government expenditure is -0.0000172, this implies that if other variables affecting Real Gross Domestic Product are held constant, a unit increase in Capital government expenditure (CGEXP), will lead to a 0.0000172 units decrease in Real Gross Domestic Product on the average. On the other hand, the estimated coefficient of Recurrent government expenditure is 0.011406, this implies that if other variables affecting Real Gross Domestic Product are held constant, a unit increase in Recurrent government expenditure (RGEXP), will lead to a 0.011406 units increase in Real Gross Domestic Product on the average.

#### **Evaluation Based on Statistical Criterion**

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

#### **$R^2$ –Result and Interpretation**

The coefficient of determinations,  $R^2$ , is given as 0.303788; this implies that 30.3788 percent of the variation in Real Gross Domestic Product is being explained by the variation in capital government expenditure and recurrent government expenditure. Thus, the  $R^2$  which yielded 30.3788 percent means that the explanatory powers of the independent variables: capital government expenditure (CGEXP) and recurrent government expenditure (RGEXP) over the dependent variable (RGDP), is relatively high. Hence, the variable has relatively a better goodness of fit.

**t-Test Result and Interpretation**

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

**Table 5: Result of t-Test of Significance**

Variables	t-computed (t*)	t-tabulated (t <sub>a/2</sub> )	Conclusion
CGEXP	-0.554041	2.042	Insignificant
RGEXP	0.485597	2.042	Insignificant

Significant (Reject  $H_0$ ; accept  $H_1$ ),  
 Insignificant (Accept  $H_0$ ).

From the t- test result above, for CGEXP,  $t^* < t_{a/2}$ , that is,  $-0.554041 < 2.042$ , therefore the null hypothesis is accepted. Hence, capital government expenditure is statistically insignificant, thus capital government expenditure has no significant impact on economic growth. For RGEXP,  $t^* < t_{a/2}$ , that is,  $0.485597 < 2.042$ , therefore the null hypothesis is accepted. Hence recurrent government expenditure is statistically insignificant, thus recurrent government expenditure has no significant impact on economic growth.

**Result and Interpretation of f-Test of Significance**

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

N= sample size= 39

K= number of parameters including the constant term= 3

$V_1=3-1=2$ ,  $V_2=39-2=37$ ,  $df=(2,37)$  at 5% level of significance and  $df=(2,37)$ ,  $f_{0.05} = 3.26$  and  $F^*= 4.799784$ . Since  $f^* > f_{0.05}$ , therefore, the null hypothesis is rejected. This implies that the independent variables (CGEXP and RGEXP), have a joint influence on economic growth. Thus, the entire regression is significant.

**Evaluation Based on Econometric Criterion**

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

**Result and Interpretation of Autocorrelation Test**

Using the Durbin-Watson (D-W) statistic, the region of no autocorrelation (positive or negative) is given as follows:

$$du < d^* < (4-du)$$

$$du = 1.58$$

$$d^* = 1.987886$$

$$(4-du) = 4 - 1.58 = 2.42$$

By substitution, the region becomes:

$$1.58 < 1.992669 < 2.42$$

The result shows that there is presence of autocorrelation problem in the model as the computed Durbin-Watson (D-W) statistic does falls within the zero autocorrelation regions.

### **Granger Causality Test Result and Interpretation**

The essence of causality analysis, using the Granger causality test, is to actually ascertain whether a causal relationship exists between two variables of interest.

**Table 4.7: Result of Causality Test**

Pairwise Granger Causality Tests

Date: 05/12/21 Time: 18:38

Sample: 1981 2019

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
CGEXP does not Granger Cause LRGDP	37	0.71885	0.4950
LRGDP does not Granger Cause CGEXP		1.63903	0.2101
LRGEXP does not Granger Cause LRGDP	37	3.06781	0.0604
LRGDP does not Granger Cause LRGEXP		0.60277	0.5534

The Granger causality result in the table above indicates that no significant causality relationship exists between Capital government expenditure and Real Gross Domestic Product which means that Capital government expenditure does not Granger cause Real Gross Domestic Product because the probability value (0.4950) is greater than 0.05; similarly, a no significant causality relationship exists between Real Gross Domestic Product and Capital government expenditure, which means that Real Gross Domestic Product does not Granger cause Capital government expenditure because the probability value (0.2101) is greater than 0.05. This means as the past values of Capital government expenditure cannot be used to forecast the future values of real gross domestic product, also the past values of real gross domestic product cannot be used to forecast the future values of Capital government expenditure in Nigeria. On the other hand, the result also shows that no significant causality relationship exists between Recurrent government expenditure and Real Gross Domestic Product which means that Recurrent government expenditure does not Granger cause Real Gross Domestic Product because the probability value (0.0604) is greater than 0.05; similarly, Real Gross Domestic Product does not Granger cause Recurrent government expenditure because the probability value (0.5534) is greater than 0.05. This means as the past values of Recurrent government expenditure cannot be used to forecast the future values of real gross domestic product, so also the past values of real gross domestic product cannot be used to forecast the future values of Recurrent government expenditure in Nigeria.

### **Evaluation of Research Hypotheses**

**Hypothesis one:** The null hypothesis is accepted, which states that government expenditure has no significant impact on the economic growth of Nigeria judging from the t-Test result, because the computed t-value ( $t^*$ ) is greater than the tabulated t-value ( $t_{0.025}$ ).

**Hypothesis Two:** The null hypothesis is accepted for government expenditure, which states that government expenditure has no significant causality relationship with economic growth in Nigeria.

### **Discussion of Findings**

Having estimated the parameters of the model numerically, with the use of multiple linear regression on the application of the ordinary least squares (OLS), this study reveals that recurrent government

expenditure has a positive relationship with the economic growth, this implies that an increase in the units of recurrent government expenditure will lead to an increase in the economic growth of Nigeria in the period analyzed, whereas capital government expenditure has a negative relationship with the economic growth, this implies that an increase in the units of capital government expenditure will lead to a decrease in economic growth of Nigeria. However, the error correction mechanism result also shows that recurrent government expenditure has a positive but insignificant relationship with economic growth, which implies that an increase in the units of recurrent government expenditure will lead to an insignificant increase in economic growth of Nigeria in the period analyzed, whereas capital government expenditure has a negative and insignificant relationship with economic, this implies that an increase in capital government expenditure will lead to an insignificant decrease in economic growth of Nigeria in the period under study.

The result of the Granger causality of this study indicates that no significant causality relationship exists between real gross domestic product and capital government expenditure, which implies that past values of real gross domestic product can be used in forecasting the future values of capital government expenditure, also past values of capital government expenditure cannot be used in forecasting the future values of real gross domestic product. The result of the Granger causality of this study indicates that zero or no causality relationship exists between recurrent government expenditure and real gross domestic product, which implies that past values of recurrent government expenditure cannot be used in forecasting the future values of real gross domestic product, also past values of real gross domestic product cannot be used in forecasting the future values of recurrent government expenditure. The error correction mechanism result of this study indicates that capital government expenditure has a negative relationship with economic growth whereas recurrent government expenditure has a positive relationship with economic growth in Nigeria over the periods covered. On the other hand, the t-Test result shows that capital government expenditure has an insignificant impact on the economic growth, whereas recurrent government expenditure has an insignificant impact on the economic growth in Nigeria over the period covered in this study.

## **CONCLUSION AND RECOMMENDATIONS**

It is worthy, therefore, to conclude that capital government expenditure has a negative relationship with and an insignificant impact on economic growth, whereas recurrent government expenditure has a positive relationship with but an insignificant impact on economic growth of Nigeria over the periods covered. By the same token, it is conclusive that government expenditure has a no significant causality relationship with economic growth of Nigeria over the period covered. The positive but insignificant impact of government expenditure on the Nigerian economy is evident from the findings and calls for deliberate actions to make these areas more additive to economic growth. Sequel to the findings of this study, the following policy recommendations are necessary, to encourage and enhance government expenditure in Nigeria.

- i. The result of the study indicates that recurrent government expenditure has a positive relationship with economic growth. This may be due to increase in private investments by salary earners. Hence, government at all levels should ensure adequate and timely enumeration of workers in order to encourage private investments and its contributions to the economic growth of the country.
- ii. This study reveals that capital government expenditure has a negative impact on economic growth in Nigeria. This may be as a result of massive siphoning of government funds by gullible and selfish government officials. Hence, the government should ensure that funds mapped out for projects and investments should be adequately expended, as this would go a long way to impacting the economic growth of the country positively.
- iii. The insignificant impact of capital government expenditure shows low levels of capital projects and infrastructural development in the country. Hence, it is worthy recommending that more basic amenities

such as feeder roads, potable drinking water, adequate power, etc., and other capital projects be embarked upon by the government. However, these projects if carried out, will add immensely to the economic growth of Nigeria.

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# **Economic Impact of Treasury Single Account Management on the Growth of Nigerian Economy**

**AKINYELURE, Titilayo Fidelia**

Federal Polytechnic,  
Nasarawa, Nasarawa State

E – Mail: [aftitilayo@gmail.com](mailto:aftitilayo@gmail.com), Phone No: +234 8121171661

## **Abstract**

*Government intention to control financial mismanagement and to improve revenue and economic growth; Nigerians are interested in knowing whether the objectives are achieved. The study examined the extent to which TSA has improved Federally Collected Revenue (FCR), and economic development. The result fall short of expectation of the Federal government towards TSA's implementation but Gross Domestic Product improved with the implementation of TSA. Further findings revealed that the result was statistically significant. Moreso, the result correlates with the findings of Chijioke, e'tal. (2018), who confirmed that Treasury Single Account has a positive and significant impact on the country's economic growth. The study concludes that the implementation of Treasury Single Account has improved revenue generation in Nigeria, however the economy's growth measured using Gross Domestic Product was positively and significantly impacted by the new revenue management and accounting system. The study recommend appraisal of each revenue generating sectors periodically so that some sectors that are not performing as they ought to, will not feel covered by those that are doing better. The senate and the federal government should establish policies and various means to make sure that proper accounting and management of the funds coming into the Treasury Single Account follows due process and any subsequent unclean play by any agencies, or even the CBN is duly prosecuted. Secondary data from CBN statistical bulletin and economic reports were utilized for this study. OLS regression method through eviuew was use as statistical tool.*

**Keywords:** Economic Growth, TSA, Revenue, Federal Account, Accountability

## **INTRODUCTION**

Emme (2015) and Kano (2016) stated that as a result of numerous corrupt practices that exist in Nigeria, such as lack of transparency and accountability necessitated establishment of TSA policy. It was introduced to reduce the proliferation of bank accounts operated by ministries, Departments and Agencies (MDAs) and also to promote transparency and accountability among all organs of the governments to ascertain the amount that is accruing to its accounts on a daily basis. Treasury Single Account (TSA) is one of the financial policies implemented by the federal government of Nigeria to consolidate all the revenue from all MDA's in the country by way of deposit into commercial banks traceable into a single account at the Central Bank of Nigeria. In the face of the law, section 80 (1) of the 1999 Constitution as amended states that "all revenue or other money raised or received by the Federation (not being revenue or other money 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. Blomquist (2007), Nina N. M, Ohaegbu K. O., and Ndubuaku Victor Chijioke (2016) Succinctly explain that a great challenge facing most parts of the world and, particularly, the developing countries like Nigeria is how to achieve efficient allocation of resources as well as stabilization of the business cycles. 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 to 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. Many emerging markets and low-income countries have fragmented systems for handling government receipts and payments. In these countries, the ministry of finance/treasury lacks a unified view and centralised 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

Government staff and politicians have been known to employ all sorts of administrative devices and illegal liaisons to engage in business ventures for private gains using government money and thereby frustrating proper execution of projects as well as causing salary delays. Furthermore, agencies defraud government by siphoning government

funds through multiple bank accounts unknown to the authorities. The implementation of the TSA would make it difficult for this monumental fraud to continue undetected. It also affords the government an oversight of funds pooled into the TSA by generating agencies. However, since the implementation of Treasury Single Account, it is still unclear on how the system has affected federal government revenue and specifically, the growth and development of the country's economy at large (GDP). It is against this background that the researcher is motivated to examine the economic impact of the revenue generating tool known as treasury single account has on revenue generation and economic growth in Nigeria. Consequently, the Null hypothesis of the study is formulated in view of the above objective is stated thus;

**HO1:** There is no significant economic impact of Revenue through TSA on economic growth on Nigeria.

## **LITERATURE REVIEW**

### **Conceptual Framework**

#### **Treasury Single Account (TSA)**

Eme, Chukwurah and Iheanacho (2015), A Treasury Single Account (TSA) is a network of subsidiary accounts all 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. The primary objective of a TSA is to ensure effective aggregate control over government cash balances. The consolidation of cash resources through a TSA aggregate control of cash is also a key element in monetary and budget management. According to Ndubuaku et al (2016), its function in national area of: improving operational control during budget execution. When the Treasury has full information about cash resources, it can plan and implement budget in an efficient, transparent, and reliable manner. The existence of uncertainty regarding whether the Treasury will have sufficient funds to finance programme expenditures may lead to sub-optimal behaviour by budget entities, such as exaggerating their estimates for cash needs or channelling costs through off-budget arrangements.

It also enables efficient fund management - TSA facilitates regular monitoring of government cash balances. It also enables higher quality inflow and out flow analysis to be undertaken (e.g., identifying causal factors of variances and distinguishing causal factors from random variations in cash balances). Elimination of bank fees and transaction costs, Reducing the number of bank accounts results in a lower administrative cost for the government for maintaining these accounts, including the cost associated with bank reconciliation, and reduced banking fees, Facilitates efficient payment mechanisms. TSA ensures that there is no ambiguity regarding the volume or the location of the government funds, and makes it possible to monitor payment mechanisms precisely. It can result in substantially lower transaction costs because of economies of scale in processing settlements. In establishment of a TSA, it is combined with the elimination of the "float" in the banking and the payment systems, and the introduction of transparent fee and penalty structures for payment services. Many governments have achieved substantial reductions in their real cost of banking services by introducing a TSA system. It equally improves bank reconciliation and quality of fiscal accounting system. TSA allows for effective reconciliation between the government accounting systems and cash flow statements from the banking system. TSA also eliminates the risk of errors in reconciliation of financial statements and improves the timeliness and quality of the fiscal accounts. Consequently, it lowers liquidity reserve needs. TSA reduces the speedy depletion of cash flows through the treasury, thus allowing it to maintain a lower cash reserve/ buffer to meet unexpected fiscal volatility.

### **Economic Growth**

The International Monetary Fund (2002) defines economic growth as the increase in the inflation-adjusted market value of the goods and services produced by an economy over time. It is conventionally measured as the percent rate of increase in real gross domestic product, or real GDP. Therefore, for the purpose of this study, real GDP shall be used as the proxy for economic growth. The OECD (2017) refers to GDP as "an aggregate measure of production



equal to the sum of the gross values added to all resident and institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the value of their outputs). Gross domestic product (GDP) According to Akande (2016) is a monetary measure of the market value of all final goods and services produced in a period. The country's GDP since 2013 has been steadily increasing. For instance, in 2013 the country's GDP was N80,092.56 million, it increased to N89,043.62 million in 2014 and N94,144.96 in 2015, currently the figure stood at N101,489.49. The thrust of this study is to examine the extent to which Treasury single account implemented in 2010 has affected the country's economic growth.

### **Empirical Review**

Oguntodu (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. Bashir (2016) examine the extent to which Treasury Single Account can block financial leakages, promotes transparency and accountability in the public financial management in his study "Effects of Treasury Single Account on Public Finance Management in Nigeria". The study population covers Ministries, Department and Agencies within Bauchi metropolis using a sample of 72 respondents through judgment sampling. A Pearson correlation technique was employed as the data analysis method. The study result shows that Treasury Single Account (TSA) is capable of plugging financial loopholes, promoting transparency and accountability in the public Financial System. Thus, the researchers recommend and that for the success of this policy government should promulgate more legislation to make it mandatory for all the three tiers of government in Nigeria.

Chijioke N. Ofurum, Promise C. Oyibo, Queeneth E. Ahuche (2018) Since the implementation of Treasury Single Account (TSA) in 2015 by the present administration in government with the intention to control financial mismanagement which will consequently improve government revenue and economic growth; stakeholders, researchers and the general public are interested to know the extent to which these objectives have been met. This study empirically examined the extent to which TSA has improved Federally Collected Revenue (FCR) and Gross Domestic Product (GDP) of the economy. Secondary data sources from Central Bank of Nigeria statistical bulletin and economic reports were utilized for this study. The observations were recorded on quarterly basis from Q3-2013 to Q2-2017. The data were divided into two periods: Pre TSA period (Q3-2013 to Q2-2015) and Post TSA period (Q3-2015 to Q2-2017). A pre post analysis (difference in means test) was carried out using SPSS version 20. Analysis shows that the implementation of TSA has a negative and significant effect on FCR. However, further findings revealed that GDP of the country significantly increased after the implantation of TSA. It was 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. Ndubuaku Victor Chijioke, Ohaegbu Kingsley O And Nina Nsimoh M (2016) Treasury Single Account (TSA) was introduced to curb corruption in the country's public accounting system with its attendant impact on the banking sector. This research study aims to determine the impact of TSA on the performance of the banking system 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 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.

### **Theoretical Framework**

#### **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, R.E. in 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. The stakeholder's theory therefore explains the motivating factors that made the government to adopt and implement the TSA,

### **Public Finance Management Theory**

This theory assumes that the government should endeavour to prudently manage her expenditure to the benefit of the citizenry. The theory also stress that the government's revenue should be well mobilized to disallow the looting of such into private pockets Udo and Esara, (2016). These consist of resources prioritization, prioritization of programmes the budgetary process, efficient management of resources etc. Bashir, (2016), therefore, the essence of TSA is to avoid misapplication of public fund..

### **Modern Monetary Theory (MMT)**

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 Eric 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

### **Diffusion of Innovations Theory**

Diffusion of innovations is a theory that seeks to explain how, why, and at what rate new ideas and technology spread through cultures Richard, Florence, and Zenon, (2015). Rogers, (1995) explained diffusion as the process by which an innovation is communicated through certain channels over time among the participants in a social system. The origins of the diffusion of innovations theory are varied and span multiple disciplines. The four main elements of diffusion are the innovation, communication channels, time, and the social system. Diffusion is a special type of communication, in which the messages are concerned with a new idea. It is this newness of the idea in the message content of communication that gives diffusion its special character. This process consists of a series of actions and choices over time through which an individual or an organization evaluates a new idea and decides whether or not to incorporate the new idea into ongoing practice. This behaviour consists essentially of dealing with the uncertainty that is inherently involved in deciding about a new alternative to those previously in existence. It is the perceived newness of the innovation, and the uncertainty associated with this newness, that is a distinctive aspect of innovation decision making Freeman (1987). This theory is related to the study as it presents the process of newness, implementation and consequences of the innovation as regards the Treasury Single Account (TSA) policy.

Despite the fact that some studies has been conducted on TSA and how it affects revenue generation,most studies formed their conclusions based on people's opinion and not on the government revenue data made available by central bank of Nigeria. For instance, the study conducted by Eric (2013), Akande, Udo and Esara (2016) made use of 200 Professional Accountants in Akwa-Ibom State to evaluate the benefit of the adoption and full implementation of TSA by the state governments of Nigeria. Also, Bashir (2016) used a sample of 72 respondents through judgment sampling to examine the effects Treasury Single Account has on Public Finance Management in Nigeria. Other studies focused on the commercial banking sectors such as Kanu (2016), Ndubuaku, Ohaegbu, and Nina (2017) Chijioke N. Ofurum, Promise C. Oyibo, Queeneth E. Ahuche (2018) etc. As a result, this study will examine the economic impact of TSA on economic growth and development I n Nigeria.

### **METHODOLOGY**

This study employed descriptive and ex post facto research design. The population of the study is made up of 2010 2020 GDP, Total Federal Rimitance and Total Collected Revenue through TSA of Nigeria. The Time Series data used for the study was obtained from secondary sources such as the Central Bank of Nigeria Statistical Bulletin. The Regression and correlation analysis were used to analyze the data.

### **Models Specification**

This study adopts Keynesian liquidity preference theory as its theoretical framework and as such Specifies its model in line with the theory.

$$Y = WC \dots\dots\dots(1)$$

Y means Economic impact of TSA and National Economic Growth in line with the theories and literature reviewed, gross domestic product (GDP), Federal Account Collected (FAC) Total Federal Collected Revenue (TFCR). As such this study specifies its model below.

$$Y = f (GDP, FAC, TFCR) \dots\dots\dots (2)$$

$$CR: \beta_0 + \beta_1 FAC + \beta_2 TFCR + \epsilon_{it} \dots\dots\dots(3)$$

Where:

- $\beta_0$  = The autonomous parameter estimate (Intercept or constant term)
- $\beta_0 - \beta_4$  = Parameter Coefficient of Economic impact Management
- GDP = Gross Domestic Product
- FAC = Federal Account Collected
- TFCR = Total Federal Collected Revenue
- $\epsilon_{it}$  = Stochastic Error Term

**Table One: Descriptive Statistics**

Date: 03/24/22  
 Time: 08:41  
 Sample: 2010 2020

	GDP	FED_ACCT	TFR
Mean	100414.6	4892.498	8908.647
Median	95177.74	4784.474	9551.800
Maximum	154252.3	7540.321	11116.85
Minimum	55469.35	2119.900	5616.400
Std. Dev.	32604.69	1966.790	1787.147
Skewness	0.317365	-0.025544	-0.548123
Kurtosis	1.942006	1.582570	1.979226
Jarque-Bera	0.697690	0.922037	1.028378
Probability	0.705502	0.630641	0.597985
Sum	1104560.	53817.47	97995.11
Sum Sq. Dev.	1.06E+10	38682637	31938929
Observations	11	11	11

**Eview v.9 Computation**

Descriptive analysis is primarily used to describe the sample. To test the impact of working capital management on the profitability of listed manufacturing companies in the Nigerian Exchange Group, inferential statistic- correlation and panel regression analysis is used. The descriptive statistics table bellow displays the interpretation of the study statistical summary of analysis. This range from mean, median, maximum, minimum, deviations values of the study variables. The explanatory concern of this study focuses on the skewness, Kurtosis, Jarque-Bera and the probability statistical values of the study.

Knowing thickness, and flatness of the distribution of the series, is to have measures of normality using Kurtoises and Skewnes. Skewnes measures the asymmetry of the series and normal skewnes is said to be ‘0 skew’, that is, distribution is asymmetry around its mean value. But if the value is high, it is negatively

skew. The variables measurement is as such that Gross Domestic Product has a long –right tail (positive) skew and leptokurtic because of value 0.317365 less than 3, Federal Collected Accounts has a long-right tail ( positive) and leptokurtic with the value of -0.025544 less than 3, Total Federal Revenue mirrors normal but negatively skew and leptokurtic due to the value of -0.548123 less than 3. Again, Jaque-Bera; the test statistics that measures the difference of the skewnes and Kurtoises of the series with those from the normal distribution. While probability is the probability that Jaque-Bera statistics exceeds (absolute values), the observed value leading to the acceptance or rejection of the null hypothesis of a normal distribution.

**Table Two: Corellation Analysis**

Covariance Analysis: Ordinary  
 Date: 03/24/22 Time: 09:20  
 Sample: 2010 2020  
 Included observations: 11

Correlation Probability	GDP	FED_ACCT	TFR
GDP	1.000000 -----		
FED_ACCT	-0.732624 0.0103	1.000000 -----	
TFR	-0.004935 0.9885	0.286005 0.3939	1.000000 -----

The Pearson correlation coefficient (r) is employed to establish the measures of associations between the variables. Table two shows the Pearson correlation coefficient (r) and the respective probabilities of the relationship between Economic impact (FA, and TFCR) and Economic Development (GDP). The results show that the coefficient of the correlation between FA and GDP stood at -0.732624 which is negative and strong. This implies that an increase in FA would lead to a substantial decrease in GDP. This is supported by its p-value which is 0.0103 stating that the correlation is not significant at 5%. The coefficient of the correlation between GDP and TFCR stood at -0.004935, which is equally negative, and it is supported by the p-value of 0.9685. This implies that an increase in GDP would lead to a substantial decrease TFCR. Furthermore, the coefficient of the correlation between TFCR and FA stands at 0.286005, which is positive. This implies that an increase in TFCR would lead to a minimal increase in FA with a p-value of 0.3939.

**Decision Rule:** The decision rule for accepting or rejecting the null hypothesis for the test will be based on the R square Value and the Adjusted R square. If the value is less than 5% it implies that the regressor in question is statistically significant at 5% level; and if the value is more than 5% or 0.05 (that is, if Value > 0.05), it is categorized as not significant at that level. This implies that the level of significance for the study is at 5% (for the two-tailed test). Thus, the decision rule for accepting or rejecting the null hypothesis is based on both the Probability Values.

In panel regression analysis, the ultimate goal is estimation of the relationship between dependent and independent variables. This goal can be achieve through the estimation of the coefficients of each independent variable in the model.

**Table Three: Regression Matrix Analysis**

Dependent Variable: GDP  
 Method: Least Squares  
 Date: 03/24/22 Time: 09:26

Sample: 2010 2020  
Included observations: 11

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	128787.8	38700.85	3.327776	0.0104
FED_ACCT	-13.20163	3.952995	-3.339653	0.0102
TFR	4.065232	4.350349	0.934461	0.3774
R-squared	0.582327	Mean dependent var		100414.6
Adjusted R-squared	0.477909	S.D. dependent var		32604.69
S.E. of regression	23558.80	Akaike info criterion		23.19939
Sum squared resid	4.44E+09	Schwarz criterion		23.30790
Log likelihood	-124.5966	Hannan-Quinn criter.		23.13098
F-statistic	5.576874	Durbin-Watson stat		0.533271
Prob(F-statistic)	0.030433			

The regression run by e-view version 9 as displayed above, shows the probability value that determine the significance relationship between the independent variables and that of the dependent variable. The probability of FA is 0.0102 which is less than 0.05. It therefore, displayed significant independent variable relationship on the dependent variable which is GDP. The determinant of TFR to ascertain the significant relationship with the dependent variable display the Probability value of 0.3774, showing that it does not significantly determine the GDP in an essential manner. Hence the probability value fall above 0.05 level of significant.  $R^2$  and adjusted  $R^2$  are about the same interpretation of result. However, the fact is that adjusted  $R^2$  is more acceptable than  $R^2$ . In other words, the more the value of adjusted  $R^2$ , the more fit the model is. Otherwise looking at the value of adjusted  $R^2$ , one can determine the goodness of the model.  $R^2$  independent variables cumulatively are 0.582327, it means 052% determinant and adjusted  $R^2$  is 0.477909 that determine the mean of 047% level of fitness or not. A researcher can equally interprets the result using durbin-watson statistical measurement to determine the auto correlation whether it is less than 2, it is positive but greater than 2 refers to negative and if it is absolute 2, it means no autocorrelation in the statistics. Durbin-watson statistical measurement of this study explains that the autocorrelation value is 0.533271 shows that it is positive since the value is less than two.

### **Test of Hypotheses**

$H_0$ : There is no significant economic impact of Revenue through TSA on economic growth in Nigeria. Given the fact that f-statistic value of 5.576874 of the regression analysis as well as the Prob(F-statistic) value of 0.030433, which is less than 0.05, there is enough evidence to reject the null hypothesis of the study. This result implies that the overall regression is positive and statistically significant at 5% level of significance, given that Prob (F-statistic) value of 0.030433 is less than 0.05.

### **DISCUSSION OF FINDINGS,**

From the result above, it can be seen that the implementation of Treasury Single Account has in one way or the other improved revenue generation and boost economic growth in Nigeria. again, the analysis disclosed that Federally Collected Revenue significantly decreased during the period of its implementation. This result is contrary to the expectation of the Federal government towards TSA's implementation. In respect to the impact of TFCR on economic growth, it could be seen from the result that Gross Domestic Product improved with the implementation of TSA. Further findings revealed that this improvement was statistically significant. This result correlates with the findings of Chijioke, etal. (2018), who confirmed that Treasury Single Account has a positive and significant impact on a country's economic growth.

### **CONCLUSION AND RECOMMENDATIONS**

Based on the result of the analysis carried out on the economic impact TSA on the economic growth in Nigeria, the study concludes that the implementation of Treasury Single Account has improved revenue generation in Nigeria, however the economy's growth measured using Gross Domestic Product was positively and significantly impacted by the new revenue management and accounting system. Given the foregoing, the following recommendations are 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 senate and the federal government should establish policies and various means to make sure that proper accounting and management 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 Financial Control on Educational Sector Project Development: Evidence from Federal Polytechnic, Nasarawa**

**GOFWAN, Hassan**

Federal Polytechnic, Nasarawa  
Nasarawa State

E – Mail: hgofwan@gmail.com, Phone No: +234 7067248890

**YASHIM, Caleb Yahaya**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: karlfancy@gmail.com, Phone No: +234 7035303440

**YUSUF, Paul Yaki**

Bursary Department,  
Bingham University,  
Karu, Nasarawa State

E – Mail: paulyyusuf@gmail.com, Phone No: +234 8064670970

### **Abstract**

*Tertiary institutions are supposed to be corner of excellence, a place of building brains training of disciplined and highly skilled individuals. A condition was basic learning facilities are lacking in our tertiary institutions, spells doom for the state and country at large. The study sought to determine the effect of Financial Control on Educational Sector Project Development in Federal Polytechnic Nasarawa. The variables which were used to determine the specific objectives are:; the Financial Control (Independent variable) was proxied by Tertiary Education Trust Fund (TETF) and Internally Generated Revenue; and Educational Sector Project Development (dependent variable) was proxied by Expenditure on Capital Project Development. The study employed annual time series data spanning the years from 2011-2020. The study was based on the Ex-post facto research design. The target population of the study comprises of Federal Polytechnic Nasarawa financial control and developmental projects between the years 2011–2020. All population was censored, in which case the TETFund, Internally Generated Revenue, and educational sector project development as individual component of the aggregate were taken into consideration. Data were analyzed using the Auto-Regressive Distributed Lags and the Ordinary Least Square via the use of E-views 10. The study concludes that TETFund has no any significant influence on the developmental projects in Federal Polytechnic Nasarawa; that TETFund has only succeeded in few Nigerian Tertiary Institutions. This could be as a result of lack of effective internal control and this has given rise to numerous ills in the organization, and could stand the high risk of losing large portions of its resources through wastage, embezzlement, misappropriation and financial recklessness. The study also concludes that the systems adopted by the Federal Polytechnic, Nasarawa in the area of revenue generation have no any significant effect on the Polytechnic developmental projects. The study recommended that the Management in charge of the TETFund department in the public Tertiary Institutions to highly prioritize the formulation, implementation and monitoring of financial control mechanisms in the TETFund; as such, they ensure that appropriate infrastructure, resources and budgetary allocations to support good financial control mechanisms. Also, the study suggested that in order to enhance revenue generation and optimize the ability to minimize corruption, Federal Polytechnic, Nasarawa is urged to enforce Trearry Single Account (TSA), e-transaction systems (e-payment system and e-collection system) to its fullest.*

**Keywords:** Financial Control, Tertiary Education Trust Fund, Internally Generated Revenue, Expenditure on Capital Project Development

### **INTRODUCTION**

Higher institution helps the nation in developing low, middle and high level man power necessary for economic development. These higher institutions train a significant number of the country's labour force such as technicians, accountants, confidential secretaries, typists etc. Government globally, is saddled with the responsibility of promoting the general wellbeing of the citizens and is expected to operate according to the diction of effectiveness, efficiency, and economy. In the developing countries,



government's fulfilments of her obligations have been characterized by inefficiency, poor performance and inadequate delivery of basic educational services in higher institutions (Perotti, 2018; Van Horne & Wachowicz, 2019). This development has forced governments to find lasting solutions to the problems by evaluating the financial control management's frameworks guiding her operations. However, higher educational institution especially in Nigeria is known for insufficient allocation of resources from government/stakeholder that set them up and other resources centers. In most instances, management of these institution fall challenges of having to apply in adequate resources to meeting the multi-dimensional objectives in producing good output. This has always been a serious process. This therefore necessitates the need to draw policies that will help in the management of these facilities. Consequently there is a need to also evaluate these policies and its management in order to known its efficiency (Krause, 2018). The tertiary education trust fund (TETFund) supports a variety of programs and activities design to advance the appraisal profession and provide quality education and professional training for current and prospective read estate appraisals in Nigeria. To ensure that the programs funded by the tertiary education trust fund are consistent with the goals of the trust fund, the tertiary education trust committee has established the following deadlines and format for feeding request. The tertiary education trust fund will typical consider request for proposal at its fall meeting usually held in conjunction with the appraisal institutes fall board of directors meeting so the trust committee has adequate time to receive all proposal, request for funding must be submitted to tertiary institutes office, at least six weeks prior to the meeting date for the tertiary education trust fall meeting (Enofe, Afiangbe, & Agha, 2019).

According to Shakirat, Babatunde, and Isa (2014), financial control system deficiency has significant negative effects on capital project management. Ayodele and Michael (2011); Oyewobi, Ganiyu, Oke, Olaawo, and Shittu (2011) find that there exists a relationship between financial control and project activities. Amudo and Inanga (2009)'s study in Uganda on evaluation of internal control systems and finds that effective internal control systems are lacking in public sector financial management and capital project development. Orimoloye Mayokun John and Adegbe (2021), posit that Government capital expenditure is one of the instruments of fiscal policy in achieving macroeconomic objectives, as it improves the provision of capital projects and infrastructural facilities in the economy. Inadequate capital projects have contributed to poor infrastructural facilities in the Nigeria economy. Therefore, the populace desires of good infrastructural amenities from the government as well as the potential investors, as poor infrastructural facilities discourage potential investors from investing in the country. Availability and efficient use of revenue generated by the government would help in closing the gaps in the citizens' requirements of providing the infrastructures. This infrastructure is majorly what is required in the public schools like universities and polytechnics in Nigeria. This study is motivated by the fact that there are some problems associates with the delivery of TETFund education trust fund to the beneficiaries which arose the interest of the researchers; the researchers are also very optimistic that if these problems remain unsolved the end user of TETFund project would continue to be at the receiving end. One of the major problems observed by the researcher which informed the decision of carryout the research is that, when the tertiary education trust fund release money for educational project, the money is usually mismanagement which results to sub-standard project. In most of the institution where TETFund finance library projects, the library building are poorly constructed that some even collapse just one year after the project was completed. The researcher also observed that there is no effective supervision is usually characterized with Windom dressing and observes corruption (Ajayi,,2020). Besides, most Nigerian Polytechnics continue to experience capital insufficiencies, despite the existence of the TETFund and this has been linked largely to ineffective financial control mechanisms in the institutions (Ukah, 2020). Particularly, the study centred on the Federal Polytechnic, Nasarawa State; this sector in particular needed capital project development mostly to meet up with the contemporary trend. Government is aware and that is why bodies are established to take care of the development not only project development, but also human capital development. TETFund organization is one. Victoria, Onyeike, and Emmanuel (2014) posit that the overall development of the nation is anchored on the survival of educational system; all efforts need to be made to ensure that the sector is performing. The Tertiary Education Trust Fund (TETFund)

came into existence in 2011 after it metamorphosed from the Education Trust Fund (ETF) which was established in 1993 (Ogunde, 2011). As an intervention agency, the institution has been responsible for ensuring that the objectives of the public tertiary institutions in the country are met through the provision of necessary resources. Therefore, as one of the intervention agencies of the government, it has been established with the responsibility of seeing to the survival of the educational system. In the face of human, financial and material inadequacies in the nation's tertiary institutions, the standard of teaching, learning, research and community development has continually been threatened. As such, in order to redeem the image or lost glory of these institutions, monitoring agencies are employed to intervene and revamp the tertiary institutions vis-à-vis position the nation on the path of development and this includes capital project developments via the efficiency and effectiveness of these tertiary institutions As stated by the Federal Government of Nigeria in the National Policy on Education (2004).

Generally, the state of the nation's development has enough problems to share around due to poor management and corruption. The Nigerian government has engaged in reforms and campaigns like National Economic Empowerment Development Strategy (NEEDS). This is to improve the Nigerian economy, yet there is a high rate of unaccomplished capital project strategies, resulting into capital project mismanagement. Simon (2012) refers to the Presidential Project Assessment Committee (PPAC), there are 'Eleven thousand, eight hundred and eighty- six (11,886) abandoned projects that will cost an estimated ₦7.78 trillion to complete. If the government does not start any new projects, it will take more than five years budgeting about 1.5 trillion annually to complete them all (El-Rufai, 2012). Simon (2012) reiterates that control over project management in Nigeria should improve to reduce the problem of abandonment and wastages of public fund. Oyewobi (2011) argue that the regulatory oversight has not kept pace with internal control development in the Nigerian public sector despite the enactment of Public Procurement Act No.14, 2007, Law of the Federation of Nigeria. Mboti, (2012) assert that there is incessant policy discontinuities and politicians have unquestioned discretion in awarding contracts without following due process. Effect of Financial Control on Educational Sector Project Development in Nigerian Federal Polytechnics has been a focus of a substantial amount of empirical research for many years. For instance Eme, Emmanuel, and Chukwurah (2018), Anumihe (2018), Onyekpere (2019), and Ukah, (2020) amongst others carried out studies on a similar topic. None of the studies focused on the area of study for this research work. Moreover, most studies conducted on this topic have investigated the proxies for Financial Control, which are TETfund and Internally Generated Revenue separately without the determination of the relationship that exists. The available literature is thus not sufficient enough, presenting a research gap this study on Financial Control aimed to address. It is imperative to understand the Financial Control on Educational Sector Project Development in Nigerian Federal Polytechnics so as to elevate the performance of Income generating units of the Nigerian Institutions of higher learning. However, for the purpose of this research work, the following null hypotheses were formulated:

**HO<sub>1</sub>:** There is no significant effect of TETfund on Capital Project Development in the Federal Polytechnic, Nasarawa.

**HO<sub>2</sub>:** There is no significant effect of Internally Generated Revenue on Capital Projects Development in the Federal Polytechnic, Nasarawa.

## **LITERATURE REVIEW**

### **Conceptual Framework**

#### **Capital Project Development**

This is payment for acquisition of fixed capital assets, stock, land or intangible assets. A good example would be building of schools, hospitals or roads. However, it is important to note that much donor-funded "capital" expenditure, though referring to projects, includes spending on non capital payments. More so, Relevance Capital Budgeting to Public Sector in an Organization is the process of analyzing potential investment for the firm in the case of government business enterprises or private firms. Capital budgeting decisions are probably the most important ones financial managers must make (Ukah, 2020).

#### **Tertiary Education Trust Fund**

TETFund is an interventional measure of the Federal Government to tackle inadequate facilities in our tertiary institutions (Nairaland, 2013). This is the major role which the agency has been playing over the years since it came into establishment in 2011.

### **Revenue Generation**

Public revenue could be defined as the funds generated by the government to finance its activities. In other words revenue is the total fund generated by government (Federal, state, local government, other organizational bodies to meet their expenditure for a fiscal year. This refers also to the grand total of money of income received from the source of which expenses are incurred. Revenue could be internal or external revenue (Nairaland, 2013).

### **Empirical Review**

This Study reviews related researches on in the effect of financial control on educational sector project development in the Nigerian Federal Polytechnics. Orimoloye et al (2021) carried out a study is on Revenue Generation and Capital Project Development in Lagos State, Nigeria. It examined the effect of revenue generation on the capital projects development in Lagos state from 2000-2018. Secondary method of data collection was employed and analyzed using correlation and Ordinary Least Square regression. The findings revealed that government revenue has a significant effect on the total capital projects development in Lagos state as well as on RCAPEX and ECAPEX. Also, STR in isolation has a significant positive effect on the CAPEX, RCAPEX and ECAPEX. However, OIGR in isolation has an insignificant negative effect on CAPEX and ECAPEX and insignificant positive effect on RCAPEX. The study concluded that, Lagos state government is yet to economically, effectively and efficiently utilize the revenue generated for capital projects development. The study recommended that state governments should establish a revenue policy that will improve capital projects development rather than using other means of financing the capital projects. This current study aimed to ascertain whether financial control mechanism affects the educational sector project development in the Nigerian Federal Polytechnics. Besides, their study was however conducted on the capital project development in Lagos State and thus the findings cannot be generalized to the Nigerian Institutions of higher learning.

Ukah (2020) conducted a study on the role of education Trust Fund (Tetfund) on the development of Educational Infrastructure in Kogi State: A Case Study of Kogi State Polytechnic. Data for this research were collected through questionnaire using random sampling technique on one thousand five hundred respondents. The analysis was carried out using simple percentage and regression analysis. Findings that emerged clearly indicated that the education Trust Fund (Tetfund) has no any significant effect on the development of educational infrastructure in Kogi State Polytechnic. The study recommended among others that government and polytechnic board must strengthen monitoring and supervision unit of the Tetfund to ensure effective monitoring, supervision, enforcement; and effective implementation of developmental projects in the Nigerian Polytechnics. Consequently, the above study failed to carry out normality test of the primary data collected, thus, this could make the findings of the study to be spurious and unreliable. But however, this current study will fill the gap by using secondary data; and avoid spurious results by carrying out the stationarity test of series from 2011 to 2019. Besides, this study contributes to knowledge by providing more recent findings regarding the effect of financial control on educational sector project development in the Nigerian Federal Polytechnics.

Shakirat, Babatunde, and Isa (2014) conducted a study on financial control system deficiency and capital project mismanagement in the Nigerian public sector. Kendall's tau\_ b  $\tau$ , ANOVA and Chi-square X2 statistics were employed as the statistical tool. It finds that financial control system deficiency has significant negative effects on capital project management in the Nigerian Public Sector. So it recommends strict compliance with internal control system in the best interest of public sector and the citizenry. Kiabel (2012) considered the assessment of internal auditing practice on the financial performance of government owned companies (GOC) in Nigeria. The study finds that there is no strong association between internal auditing practices as measures of control and financial performance of

government owned companies in Nigeria. Nwachukwu and Emoh (2011) in their study on financial control in capital project management in Nigeria public institutions; using survey design and chi-square analysis. The study finds that high level of capital project abandonment has worsened the acceptance of financial control as an effective tool of assurance in the public sector financial management. The study concludes by recommending that capital project is a catalyst to public development in all the agenda of government that should not be neglected. It is used for supporting programmes such as health care delivery, roads and transportation, education, security, power, energy and shelter. It is about life. It provides a solid foundation upon which industrial structure is built.

### **Theoretical Review**

This section discussed theories related to effect of financial control on educational sector project development in the Nigerian Federal Polytechnics. These theories include the Management by Objectives (MBO) Theory, Institutional Theory, and Public Cost Management Theory. However, for the purpose of this study, the Public Cost Management Theory underpinned this study.

### **Management by Objectives (MBO) Theory**

This study is Management by Objectives (MBO) propounded by Peter F. Drucker (1954). It is one of the prominent theories used in the field of management. This theory is renowned for its ability to guide any organization towards setting and achieving defined goals or objectives.

### **Institutional Theory**

Meyer, John W. propound 'Institutionalized organizations in 1977', the theory indicates that, in order to survive, organizations must conform to the rules and belief systems prevailing in the environment (DiMaggio & Powell, 1983; Scott 1995) supported institutional isomorphism, both structural and procedural, will earn the organization legitimacy and made emphasis on rules of guidance are established and enforced for smooth conduct of hierarchical duties of an organization in respect of deeper and more responsive, transparent and resilient aspects of social structure.

### **Public Cost Management Theory**

Erik Lindahl a Swedish Economist "Propounded this theory in 1919". According to his theory, determination of public expenditure and taxation will happen on the basis of public preferences which they will reveal themselves. The tax that they will pay is revealed by them according to their capacities and budget planning and execution. Walle (2007) Development Budget and planning, which is now practiced in one form or another in more than a hundred countries, has been viewed primarily as a feature of the developing countries.

## **METHODOLOGY**

Ex-post facto research design was adopted for this study, this means cause-effect research design and this is chosen because of the research-specific objectives. The target population of the study comprises of Federal Polytechnic Nasarawa financial control and developmental projects between the years 2011–2020. All population was censored, in which case the TETFund, Internally Generated Revenue, and educational sector project development as individual component of the aggregate were taken into consideration. The study adopts the secondary method of data collection. Secondary data is research data that has been previously gathered for other uses by researchers or institutions other than the present user; and data were analyzed using Auto-Regressive Distributed Lag (ARDL) and Ordinary Least Square (OLS). Time series data was used in this study. The method that was employed to analyze the behaviour of the data is the use of both descriptive and inferential statistics. However, the variables which used to determine the formulated are presented as follows:

Independent variable is the Financial Control, and it was proxied by the TETFund allocated to Federal Polytechnic, Nasarawa and Internally Generated Revenue by Federal Polytechnic, Nasarawa; and dependent variable is the Educational Sector Project Development, and it was proxied by the Federal

Polytechnic, Nasarawa Expenditure on Capital Project Development. The study modeled according to the studies of Onyekpere (2019) but used different variables. The relationship between the two variables will be:

**TETFund, Internally Generated Revenue, and Capital Project Development**

$$ECPD = \beta_0 + \beta_1 TETF + \beta_2 IGR + \varepsilon \text{-----} (1.1)$$

Where:

ECPD = Expenditure on Capital Project Development

TETF = Tertiary Educational Trust Fund

IGR = Internally Generated Revenue

$\beta_0$  is the intercept of the regression model of Expenditure on Capital Project Development.

$\beta_1$ , and  $\beta_2$  are rates of change of the Tertiary Educational Trust Fund and Internally Generated Revenue

$\varepsilon$  = is the error term associated with the model of the Tertiary Educational Trust Fund and Internally Generated Revenue.

Re-writing equation (1.1) in general Error Correction Model (ECM) form to capture the dynamic relationship among the variables in the short and long-run, the model becomes:

$$\Delta ECPD = \alpha_0 + \sum_{g=1}^l \alpha_{1i} \Delta ECPD_{t-i} + \sum_{h=1}^m \alpha_{2i} \Delta TETF_{t-i} + \sum_{i=1}^n \alpha_{3i} \Delta IGR_{t-i} + ECM_{t-1} + \varepsilon_t \text{---} (1.2)$$

Therefore, equation (1.2) was used to estimate and analyze the short-run and long-run of the effect of financial control on educational sector project development in Federal Polytechnic, Nasarawa.

**RESULT AND DISCUSSION**

**Descriptive Analysis of Variables**

**Table 1: Descriptive Analysis of Variables**

	ECPD	TETF	IGR
Mean	0.101247	0.192673	2.177636
Median	0.062124	0.198017	2.242000
Maximum	0.494026	0.457664	3.052000
Minimum	0.044799	0.013897	1.042000
Std. Dev.	0.131133	0.131338	0.545107
Skewness	2.780794	0.494500	-0.721379
Kurtosis	8.868123	2.515534	3.282880
Jarque-Bera	29.95948	0.555879	0.990721
Probability	0.000000	0.757343	0.609351
Sum	1.113714	2.119398	23.95400
Sum Sq. Dev.	0.171958	0.172498	2.971421
Observations	11	11	11

*Source: Output from E-views 10 (2021)*

The summary of descriptive statistics of relevant variables of study is as reported in Table 1 above. As it is observed from the table, the mean, median, standard deviation, as well as the skewness and kurtosis measures of our variables of interest, are given. The mean values of Expenditure on Capital Project Development (ECPD), Tertiary Educational Trust Fund (TETF), and Internally Generated Revenue (IGR) are 0.101247, 0.192673, and 2.177636 respectively. IGR has the highest value of Mean while ECPD has the lowest value of Mean. Also, their respective standard deviations are 0.131133, 0.131338, and 0.545107. However, TETF has the highest value of Standard Deviation while IGR has the lowest value of Standard Deviation. Besides, the minimum values for ECPD, TETF, and IGR are 0.044799 Billion Naira, 0.013897 Billion Naira, and 1.042000 Billion Naira respectively, while their maximum values are 0.494026 Billion Naira, 0.457664 Billion Naira, and 3.052000 Billion Naira respectively. The Jarque-

Bera test of normality shows that the error term in our specified equation is normally distributed. This is evidenced by the respective insignificant Jarque-Bera statistics of the relevant variables. Finally, TETF and IGR series have normal distributed curves, but ECPD has an abnormal distribution curve.

### Stationarity Test of Variables

**Table 2: Augmented Dickey-Fuller Test**

Variables	ADF P-value @ 5% Level	ADF P-value @ 1 <sup>st</sup> Difference	Order of Integration
ECPD	0.0866	0.0035	I(1)
TETF	0.2074	0.0151	I(1)
IGR	0.0019	-	I(0)

*Source: Output from E-views 10 (2021)*

Table 2 shows the Augmented Dickey-Fuller stationarity test results of the three economic variables used in this study. However, from the results, Expenditure on Capital Project Development (ECPD) and Tertiary Educational Trust Fund (TETF) were stationary after first difference, while Internally Generated Revenue (IGR) was stationary at first level. This implies that the economic variables are fit and suitable to be used for the analysis.

**Table 3: Co-integration Results of ECPD, TETF, and IGR**

ARDL Long Run Form and Bounds Test

Dependent Variable: D(ECPD)

Selected Model: ARDL(1, 0, 0)

Case 3: Unrestricted Constant and No Trend

Date: 09/09/21 Time: 13:55

Sample: 2010 2020

Included observations: 10

Conditional Error Correction Regression				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.401224	0.259542	-1.545892	0.1731
ECPD(-1)*	-0.412892	0.427877	-0.964977	0.3718
TETF**	-0.109402	0.328732	-0.332801	0.7506
IGR**	0.216755	0.101647	2.132420	0.0770

\* p-value incompatible with t-Bounds distribution.

\*\* Variable interpreted as  $Z = Z(-1) + D(Z)$ .

Levels Equation Case 3: Unrestricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
TETF	-0.264966	0.791966	-0.334567	0.7493
IGR	0.524968	0.729617	0.719511	0.4989

$$EC = ECPD - (-0.2650 * TETF + 0.5250 * IGR)$$

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
		Asymptotic: n=1000		
F-statistic	5.082974	10%	3.17	4.14
K	2	5%	3.79	4.85
		2.5%	4.41	5.52
		1%	5.15	6.36
		Finite Sample: n=30		
Actual Sample Size	10	10%	3.437	4.47
		5%	4.267	5.473
		1%	6.183	7.873

t-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
t-statistic	-3.964977	10%	-2.57	-3.21
		5%	-2.86	-3.53
		2.5%	-3.13	-3.8
		1%	-3.43	-4.1

**Source:** *Researcher Computations (2021) employing E-Views*

The above results revealed that F-Value of 5.082974 is greater than the I(1) bound (Critical Value for the upper bound) of 4.85 at 5% level of significance. Similarly, the absolute T- statistics value of 3.964977 is greater than the I (1) bound (absolute Critical Value for the upper bound) of 3.53 at 5% level of significance. Therefore, it indicates that the null hypothesis of no level of relationship is rejected and accepts the alternate hypothesis of there is a long run relationship among the three series. Thus, we estimate the long-run model and extract the residual via the use Ordinary Least Square and Error Correction Model.

### **Test of Hypotheses**

**Table 4: Effects of TETF and IGR on ECPD**

Dependent Variable: D(ECPD)

Method: Least Squares

Date: 09/09/21 Time: 15:46

Sample (adjusted): 2012 2020

Included observations: 9 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.012212	0.123340	-0.099011	0.9259
D(ECPD(-1))	0.277030	2.103811	0.131680	0.9016

*Effect of Financial Control on Educational Sector Project Development: Evidence from Federal Polytechnic, Nasarawa*

D(TETF(-1))	0.026134	0.558434	0.046798	0.9649
D(IGR(-1))	-0.062440	0.197224	-0.316596	0.7674
ECM(-1)	-1.557690	2.460969	-0.632958	0.0361
R-squared	0.564249	Mean dependent var		0.004214
Adjusted R-squared	0.228498	S.D. dependent var		0.206051
S.E. of regression	0.192358	Akaike info criterion		-0.158739
Sum squared resid	0.148006	Schwarz criterion		-0.049170
Log likelihood	5.714327	Hannan-Quinn criter.		-0.395189
F-statistic	1.294888	Durbin-Watson stat		2.186767
Prob(F-statistic)	0.404157			

**Source:** *Researcher Computations (2021) employing E-Views*

From the long-run regression results shown in Table 4, the following interpretation can be inferred; a unit increase in Tertiary Educational Trust Fund (TETF) on the average holding other independent variables constant will lead to a 0.14 unit increase in Expenditure on Capital Project Development (ECPD). While a unit increase in Internally Generated Revenue (IGR), holding other independent variables constant will lead to 0.06 unit decreases in Capital Project Development (ECPD). However, based on the probability value, the Tertiary Educational Trust Fund (TETF) and the Internally Generated Revenue (IGR) were statistically insignificant in explaining the variation in the Capital Project Development (ECPD). Besides, the Error Correction Model (ECM) parameter is negative (-) and significant which is -1.557690 and the p-value is 0.0361; this shows that 3.61 percent disequilibrium in the previous period is being corrected to restore equilibrium in the current period. Moreover, the table above shows the relationship between Financial Control and the Educational Sector Project Development in Federal Polytechnic Nasarawa. The  $R^2$  value is 0.56; it indicates the prediction capability of the independent variables. This indicates that 56% changes in the Educational Sector Project Development in Federal Polytechnic Nasarawa are explained by the changes in the Contributory Pension Scheme. Also, that only about 44% other factors that could bring about changes in the model were not included. Besides, the value of 23% of the Adjusted  $R^2$  shows a weak relationship between the Financial Control and the Educational Sector Project Development in Federal Polytechnic Nasarawa.

Furthermore, it has been established that the  $H_{O1}$  which stated that there is no significant effect of TETFund on Expenditure on Capital Project Development in the Federal Polytechnic, Nasarawa is accepted; this is because the p-value of 0.9649 is greater than 0.05. This implies that after the coming on stage of the TETFund that the developmental projects in Federal Polytechnic Nasarawa has not been better off; TETFund has only succeeded in few Nigerian Institutions of higher learning. This could be as a result of lack of effective internal control and this has given rise to numerous ills in the organization, and could stand the high risk of losing large portions of its resources through wastage, embezzlement, misappropriation and financial recklessness. Also, the  $H_{O2}$  which stated that there is no significant effect of Internally Generated Revenue on Expenditure on Capital Project Development in the Federal Polytechnic, Nasarawa is also accepted; this is because the p-value of 0.7674 is greater than 0.05. This implies that the systems adopted by the Federal Polytechnic, Nasarawa in the area of revenue generation have no any significant effect on the Polytechnic developmental projects. Finally, when TETFund and Internally Generated Revenue are joined together, they cannot influence Expenditure on Capital Project Development in the Federal Polytechnic, Nasarawa. This is because; the Prob. (F-statistic) is 0.404157, greater than 0.05. Therefore, it can be concluded that Financial Control has no any significant effect on the Educational Sector Project Development in Federal Polytechnic Nasarawa. This implies that the financial control mechanisms such as internal audit, internal control measures, risk management strategies and credit policies have no any significant effect on the developmental projects in Federal Polytechnic Nasarawa



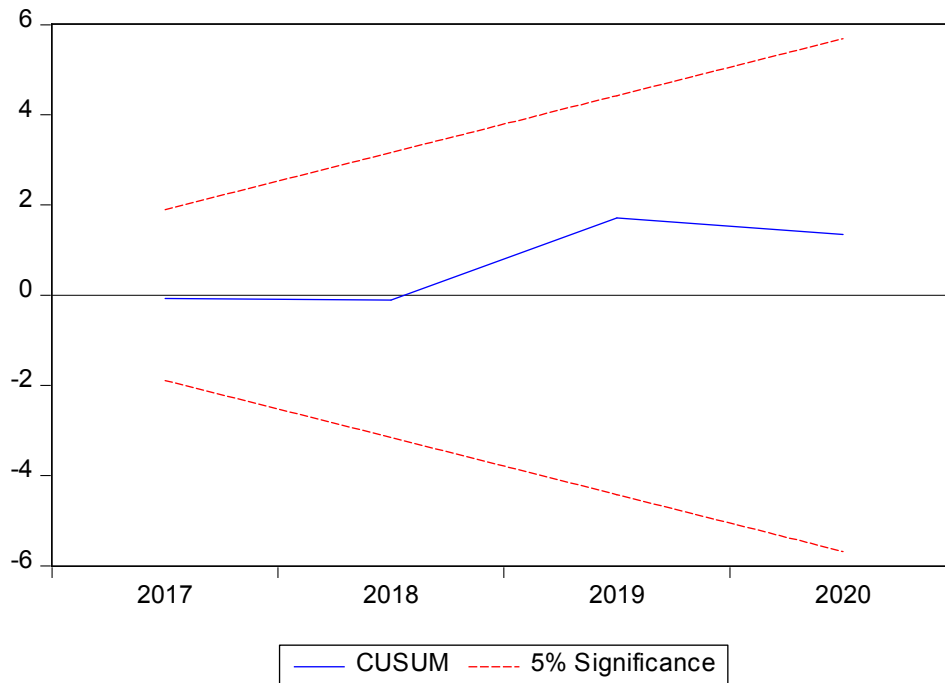
**Post Estimation Test**

**Table 6: Breusch-Godfrey Serial Correlation LM Test:**

F-statistic	5.006041	Prob. F(1,3)	0.1112
Obs*R-squared	5.627547	Prob. Chi-Square(1)	0.1177

The above table shows that all observed R-square and the corresponding P-Values is 0.6112, greater than 0.05; we therefore, accept the Ho and conclude that the model is free from the problem of serial autocorrelation.

**Stability Test**



**Figure 1: Cusum stability Test**

The Cusum series in Figure 1 lies between the lower and upper critical limit value of 2% indicating that the model is stable.

**Discussion of Findings**

This study was carried out to examine Effect of Financial Control on Educational Sector Project Development in Federal Polytechnic Nasarawa. The study used secondary data for the analysis, and the following findings were observed from the study: The study established that TETfund has no any significant effect on Expenditure on Capital Project Development in the Federal Polytechnic, Nasarawa. This finding is consistent with the finding of Ukah (2020) who conducted a study on the role of education Trust Fund (Tetfund) on the development of Educational Infrastructure in Kogi State: A Case Study of Kogi State Polytechnic. Findings that emerged clearly indicated that the education Trust Fund (Tetfund) has no any significant effect on the development of educational infrastructure in Kogi State Polytechnic. Besides, the study revealed that Internally Generated Revenue has no any significant effect on Expenditure on Capital Project Development in the Federal Polytechnic, Nasarawa. This result disagrees with the result of Orimoloye etal (2021) who carried out a study on Revenue Generation and Capital Project Development in Lagos State, Nigeria. The findings revealed that government revenue has a

significant effect on the total capital projects development in Lagos state as well as on RCAPEX and ECAPEX.

## **CONCLUSION AND RECOMMENDATION**

This paper examines the dynamic and causal relationship between Financial Control and Educational Sector Project Development in Federal Polytechnic Nasarawa. Based on the findings, the study therefore concludes as follows; TETFund has no any significant influence on the developmental projects in Federal Polytechnic Nasarawa ; that TETFund has only succeeded in few Nigerian Tertiary Institutions. This could be as a result of lack of effective internal control and this has given rise to numerous ills in the organization, and could stand the high risk of losing large portions of its resources through wastage, embezzlement, misappropriation and financial recklessness. This could also be as a result of fraud; lack of proper accounting record, lopsidedness in the management of TETFund, lack of proper sharing formula of the fund among the tertiary institutions. Besides, the study concludes that the systems adopted by the Federal Polytechnic, Nasarawa in the area of revenue generation have no any significant effect on the Polytechnic developmental projects. This implies that Federal Polytechnic, Nasarawa depends mostly on the federal government for developmental projects. The Institution does not use its internally generated revenue for developmental projects.

The results of this study have shown that there is no significant influence of Financial Control on Educational Sector Project Development in Federal Polytechnic Nasarawa. In this direction, the researchers therefore, make the following recommendations;

- i. Management in charge of the TETFund department in the public Tertiary Institutions to highly prioritize the formulation, implementation and monitoring of financial control mechanisms in the TETFund; as such, they ensure that appropriate infrastructure, resources and budgetary allocations to support good financial control mechanisms. This will ensure that transparency and accountability are maintained in the TETFund translating to improved performance. To facilitate effective financial controls, the study recommends that the management especially those in the audit section to conduct regular checks and inspections on the TETFund. This will act to assure that the TETFund are operated under the required standards of operations through constant monitoring and evaluation. Accounts of TETFund should be audited twice a year. Although this is a little unusual, however, it will help in still discipline in the management of TETFund. The first six months audit will be interim while the subsequent one will be final. Fraud detected in the interim audit will be presented in the final audit. Additionally, external audit personnel are recommended to be hired to offer additional assurance to the internal control systems on the cost effective and efficiency of the TETFund whilst minimizing any forms of internal biasness. Besides, all managers in the public Polytechnics are recommended to ensure that there are adequate internal control activities that safeguard the assets of the TETFund from misuse and frauds. Furthermore, Independent Corrupt Practice and other Related Crimes Commission (ICPC) should always investigate corrupt activities in TETFund. This will help the management to be judicious with the resources of TETFund. Accounts of stewardship of members of the Board of Trustees should be presented on the floor of the National Assembly once a year. This will enable all Nigerians to be accurately informed of the role each member of the Board of trustees play in the disbursement of the funds to various institutions every year. Federal government should also ensure that the TETFund in the polytechnics are allocated with adequate funds and resources to ensure proper implementation of the financial control mechanisms.
- ii. In order to enhance revenue generation and optimize the ability to minimize corruption, Federal Polytechnic, Nasarawa is also urged to enforce Trearry Single Account (TSA), e-transaction systems (e-payment system and e-collection system) to its fullest. The Instution should not depend solely on government for developmental projects. The study also

suggests, that the Nigerian Polytechnic authorities should adopt and introduce a well-structured electronic system of accounting information to cover such areas as the budgeting method addressed by e-transactions (from formulation, consent, execution, disbursement, etc.) to payrolls addressed by e-payments, Public institutions should consolidate their internal control mechanisms to ensure total blockage of leakages through proper application of e-collection and e-payments systems and processes.

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## **Effect of Ownership Structure and Audit Quality on Quoted Oil and Gas Companies in Nigeria**

**FODIO, I. Musa, PhD**

Department of Accounting,  
Nasarawa State University,  
Keffi, Nasarawa State

**IDOKO, Olive Ojodunwene**

Department of Accounting,  
Nasarawa State University,  
Keffi, Nasarawa State

E-Mail: [blessedojima2014@yahoo.com](mailto:blessedojima2014@yahoo.com), Phone No: +234 8064469164

### **Abstract**

*This study examined the effects of ownership structure on audit quality of listed Oil and Gas companies in Nigeria. Ex-post facto research design was adopted and a sample of seven Oil and Gas companies was selected covering a period of ten years (2008-2017). Secondary sources of data were obtained from the annual reports and accounts of listed Oil and Gas companies in Nigeria. Ordinary Least Square regression technique was used. Managerial ownership, institutional ownership and ownership concentration were used to proxy independent variables while audit quality was used to proxy dependent variable. The result revealed that, managerial ownership and institutional ownership have significant effect on audit quality. The findings also revealed that ownership concentration does not have significant relation with audit quality of Oil and Gas companies in Nigeria. The study recommended that Managerial ownership and institutional ownership structure of quoted Oil and Gas companies be sustained and encourage. This is based on the finding that ownership structure has significant positive effect on audit quality.*

Keywords: Audit quality, Institutional ownership, Ownership concentration, managerial Ownership

### **INTRODUCTION**

Audit quality is viewed as the joint probability that an auditor will both detect and report a material misstatement. Audit quality viewed from this perspective is seen as a function of both auditor competence (in discovering misstatement) and auditor independence (in reporting them) before now; businesses were owned and managed by owners and as such self-accountability was eminent. But as businesses kept growing in an ever changing environment, there was a need to separate ownership from management. This gave rise to principal-agent relationship, where owners (principals) entrusted the duty of running the day-to-day affairs of their businesses into the hands of professional managers (agents). There then came a need for business owners to look for an intermediary whose duty was to supervise the work performed by management who holds little or no interests in the businesses and assure them of fair performance. This by implication ushered in auditing which is an examination of accounting records undertaken with a view to establishing whether they correctly and completely reflect the transactions to which they relate (DeAngelo, 1981)

Audit quality is very important because it will affect the credibility and reliability of the audit opinion. If the auditors perform a poor audit, the opinion rendered on the audited financial statement could be misleading and in turn affect the user's economic decision. Audit quality is essential for the protection of economic interest of the owners and other interested parties of an enterprise by enhancing the value of the financial statement prepared by the manager. Corporate scandals like Enron debacle and Andersen collapse confirmed a requirement for high quality audit and considerable attention to different factors that may have effect on audit quality (Abiahu and Amahalu, 2017). 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; Wallance, 1980).

To improve the composition of ownership structure of a company and to produce a better decisions made by those who own or would own shares of a company, the client must comply with the generally accepted auditing standard(GAAS) and the generally accepted accounting principles (GAAPS) in order to achieve a high audit quality reports.(Bedard, Johnstone & Smith; 2010). Despite the compliance of most companies with GAAS and GAAPS, the financial statement of some companies does not at all times reflect the true and fair view of the companies, following the corporate scandals like Cadbury Nigeria limited, Savanna bank plc, Lever brothers, Wema bank plc and others, as all this companies financial statement prepared in the same year of their collapse, revealed that they were all healthy. The inability of companies to always reflect the true and fair view based on the ownership structure of the companies is the problem this current research intends to find out. From the foregoing; the general objective of this study is to ascertain the effect of ownership structure characteristics on audit quality of listed Oil and Gas companies in Nigeria.

## **LITERATURE REVIEW**

### **Conceptual Clarifications**

#### **Audit Quality**

There is no doubt that audit quality is not a new concept in accounting literature, but till today it has no single universally accepted definition. The most widely used definition of audit quality is the one by DeAngelo (1981) which states that “the quality of audit services is the market-assessed joint probability that a given auditor will both (a) discover a breach in the client’s accounting system, and (b) report the breach.” This definition is anchored on the competence and independence of the external auditor. Competence is associated with the auditor’s ability to detect violations of accounting principles in the accounting system of a client. Independence on the other hand entails the ability of the auditor to report observed breaches in the accounting system of a client. Other definitions equate audit quality to the reliability of financial statements information. Heralding this argument is Titman and Trueman (1986) who asserted that audit quality improves the reliability of financial statements information and enables investors to make more precise estimates of the firm’s value. This definition suggests that audit quality enhances the accuracy of reported accounting information. Thus, financial statements audited by high quality external auditors are expected to rarely contain material misstatements.

In another definition, Bedard, Johnstone and Smith (2010) associated audit quality with the auditors’ compliance with generally accepted auditing standards (GAAS). They asserted that high quality audit is conducted in accordance with GAAS in order to provide reasonable assurance that the audited financial statements, and related disclosures are fairly presented in accordance with generally accepted accounting principles (GAAP). This definition suggests that high quality audit is more likely to comply with GAAS than low quality audit in the conduct of audit assignments. Similarly, Francis, Michas and Seavey (2011) associated audit quality with the issuance of appropriate audit report on the compliance of the client with GAAP. They argued that though audit quality is a complex concept that is difficult to reduce to a simple definition, it basically entails that the auditor issues an appropriate audit report concerning the level of compliance of the client with GAAP. They also contended that high quality audit complies with relevant auditing standards and issues an accurate opinion on the client’s financial statements at an appropriate level of risk. The definitions of Bedard, Johnstone and Smith (2010) and Francis, Michas and Seavey (2011), suggested two major characteristics of high quality audit. Firstly, the auditor must issue an appropriate audit opinion on the financial statements of the client concerning its compliance with GAAP. Secondly, the audit must reasonably comply with GAAS in carrying out the independent examination of the client’s financial statements.

#### **Ownership Structure Characteristics**

Ownership structure is seen as the classes or group of owners that exercise control over activities of a firm. Various scholars have different definition for ownership structure. According to Demstz and Lehn (1983), ownership structure is regarded as the fraction of shares owned by a firm’s most significant

shareholders, with much attention given to the fraction owned by the five largest shareholders. Demstz and Lehn (1985) also saw Ownership structure as the fraction of shares owned by firm's management, which include shares owned by members of the corporate board, chief executive officer (CEO) and top management. The works of Chiara (1997), viewed ownership structure as a combination of concentrated ownership and large stockholdings by institutional owners for productivity. Ram and Camela (1998) defined ownership structure as directors' equity which could be summed up as the percentage stake owned by beneficiary and non-beneficiary directors. Beni and Alexander (1999) defined ownership structure as the composition of diffused ownership and non-owner managed firms. Demsetz and Belen (2001) defined ownership structure as the combination of the fraction of shares owned by important shareholding families and the fractions owned by management. Khalil, Syed, and Zahid, (2012) viewed Ownership structure as the composition of managerial ownership and concentrated ownership. Uwalomwa and Olamide (2012) viewed ownership structure as decisions made by those who own or who would own shares. They measured ownership structure as the composition of Board ownership, Institutional ownership and foreign ownership.

### **Empirical Review**

Alzeaideen and Al-Rawash (2018) investigates the effect of different ownership structure - (concentration, foreign, and institutional ownership) - and corporate debt on audit quality of listed companies in Amman stock exchange. The research has four hypotheses. To test each hypothesis; a model was defined based on dependent variables employed to measure audit quality. The sample study consists of 132 companies from 2005 to 2016. The analysis of logistic regression was used to investigate the relationship between the audit quality measured based on the audit firms size as a dependent variable, ownership structure and corporate debt as independent variables. The results provide evidence of positive statistically significant relationship between the audit quality and that of companies both with foreign and institutional ownership. Also, the results reveal a positive significant relationship between the corporate debt and audit quality. In addition, ownership concentration was shown to have a positive relationship with quality, that relationship was not significant. These results are consistent with prior empirical studies. Also, these results indicate that foreign and institutional investors tend to hire high quality auditors. This study helps academicians, regulators, investors, and auditors to have insight into the nature of ownership structure and is it possible for companies' ownership structures and corporate debt to influence audit quality.

Khasharmeh and Joseph (2017) examine the effect of ownership structure upon the audit quality in a developing country, the case of Bahrain. To achieve this objective, annual reports of listed companies in Bahrain Burse for 2015 and unlisted companies registered by Central bank of Bahrainat September, 2016 were used in the analysis. Logistic regression was used to test the hypotheses. The results indicated that foreign ownership variable has a significant relationship at  $p \leq 0.05$  with audit quality-measured by using a proxy of audit firm size. This result confirms that the null hypothesis is rejected and the alternative hypothesis is accepted. On the other hand, institutional ownership and ownership concentration factors have positive relationship but not significant with the audit firm size. The study recommended that companies in Bahrain, both listed and unlisted, must continue to maintain supporting and encouraging foreign investments in Bahrain. Also, the study recommended the necessity to adopt new instructions that raise the percentage of institutional investments that will improve audit quality which leads to high quality financial statements, and to follow a clear and rigid process of selecting auditors with high experience of accounting and auditing process.

Rad, Salehi and Pour (2016) conducted a research on the effect of interaction of audit quality and ownership for structure on earnings management of listed firms on Tehran Stock Exchange is studied. The variables examined are auditor reputation, audit or tenure; ownership concentration and institutional ownership as an indicator of audit quality and ownership structure have been used. Also, the absolute value of discretionary accruals model of Modified Jones (1995) as a direct indicator of earnings

management has been used. In order to respond the questions of this study, four hypotheses were developed and 100 firms from listed firms on Tehran Stock Exchange for 5 years (2009-2013) has been tested. This study is descriptive of correlation type and to test the hypotheses, multiple line regression model with panel data and fixed effects is used. The results of research hypotheses show that, ownership concentration weakens the negative impact of auditor reputation and auditor tenure on earnings management. Also, institutional ownership amplifies the negative impact of auditor reputation and auditor tenure on earnings management. The results of this study could be argued that, the establishment of an effective corporate governance system in shadow of the interaction between the measures of auditor reputation, auditor tenure and institutional ownership, earnings management will be reduced.

Pangaribuan and Pranta (2015), examine the effects of managerial ownership, institutional ownership and firm size on audit quality. The study uses audit quality proxied by going concern audit opinion using a partial least square/ variance based statistical method, with descriptive analytical research method and found out that it was found that institutional ownership did not have significant effect on audit quality. Adam and Bala (2015) examine the effects of ownership structure and quality of DMB in Nigeria. The population of the study is 24 DMB in Nigeria Stock Exchange. The sample size was 14 DMB purposively selected out of the twenty four Bank quoted at the date of the study. The period of study was 2007- 2011. Ordinary Least square regression analysis was employed to test the hypotheses. The result revealed there a positive relationship between managerial ownership, institutional ownership and audit quality. Kasai (2014) examines ownership structure, audit fees, and audit quality in Japan which provides empirical evidence on how ownership structure moderates the association between accounting accruals (measured by accrual quality) and abnormal audit fees. A unique feature of Japanese company ownership structure is that stable shareholdings exist, such as financial institution's shareholdings and cross – shareholdings (corporate shareholdings). The results demonstrate that financial institutions shareholdings are negatively associated with accrual quality.

Kheirollahi, Behshour and Azadi (2014) assess the effect of ownership structure on audit quality. The variables examined are audit tenure and audit firm size. The studies apply logistic regression analysis to test the research hypothesis. The control variables examined were leverage and firm size. The results indicate that the institutional ownership has positive and significant effect on audit quality. Juhmani (2013) conducted a study to investigate the relationship between ownership structure variables and the level of voluntary information disclosures of companies listed on the Bahraini Stock Exchange. The study shows that “there is a significant negative association between block holder ownership and voluntarily disclosure”. Also, the study revealed that there is a significant positive association between size and leverage of firms on one side and the level of voluntary disclosures. However, “profitability of a firm is not significantly associated with voluntary disclosure”. Zuriegat (2011) investigated the effect of ownership structure among Jordanian listed firms based on their audit quality. Using the sample study that consists of one hundred ninety eight (198) companies out of the two hundred and sixty two (262) listed companies on the Amman Stock Exchange. The study analysis result using logistic regression in order to investigate the relationship between the audit qualities measured based on the audit firm size as a dependent variable, and ownership structure as independent variables. The results show a significant positive relationship between the audit quality and that of company's institutional ownership and concluded that institutional investors tend to hire quality auditors. Ndubuisi, Okeke and Chinyere (2017) examined the determinants of audit quality with a focus on healthcare firms listed in the Nigerian Stock Exchange from 2010-2016. Their study made use of secondary data obtained from fact books, annual reports and account of selected healthcare firms under study. The relevant data were subjected to statistical analysis using Pearson coefficient of correlation, Ordinary Least Square (OLS) and Granger causality test with the aid of E-view 9.0. The result of their study revealed that there is a positive and statistically significant relationship between audit independence; audit tenure, audit firm size and audit quality of

healthcare firms listed on the floor of Nigerian Stock Exchange at 5% level of significance. The study recommended among others that Audit firms should ensure that their staffs are independent as this is likely to enhance audit quality.

**Theoretical Discussion**

**Theory of Inspired Confidence**

Developed by the Limperg Institute in Netherlands in 1985, the theory of inspired confidence states that the auditor, as a confidential agent, derives his broad function in society from the need for expert and independent examination as well as the need for an expert and independent judgements upported by the examinations. Thus, accountants and auditors are expected to know and realize that the public continues to expect a low rate of audit failures. This requires that the auditors must plan and perform their audit in a manner that will minimize the risk of undetected material misstatements. The accountant is under a duty to conduct his work in a manner that does not betray the confidence which he commands (Limperg Institute, 1985).

The importance of the theory of inspired confidence is that the duties and responsibilities of the auditors are a derivation from the confidence that are bestowed by the public on the success of the audit process and the assurance which the opinion of the accountant conveys. Since this confidence determines the existence of the process, a betrayal of the confidence logically means a termination of the process or function. Carmichael (2004) in discussing the social significance of the audit stated that when the confidence that society has in the effectiveness of the audit process and the audit report is misplaced, the value relevance of that audit is destroyed. Therefore, auditors are expected to maintain reasonable quality assurance especially given that an audit failure is effectively a career-ending event. Audit provides assurance to the owners and management of companies and to investors and stakeholders, and along with financial reporting, corporate governance and regulations, supports confidence in the capital markets. This theory relates to the current study in that when a society loses confidence in the effectiveness of the audit report, this will in turn destroys the usefulness of the auditing process. The stakeholder’s demands accountability from the management in returns for their contribution to the firm. Thus this theory communicates the community’s needs for the reliability of financial information with the best audit techniques to meet these needs.

**METHODOLOGY**

This study makes use of Ex-post factor research design which will group variables that are not randomly assigned. Expo-factor research design has the ability of explaining the expected relationship between two or more variables which is the focus of this study. Also, the adoption of this research design is based on the reason that the study relied on historic data obtained from the annual financial statements and accounts of sample companies that are quoted on the Nigerian Stock Exchange, from 2008 –2017.

The general empirical model to be used in this study is defined as follows:

$$QTY = \beta_0 + \beta_1itMAOWN + \beta_2itINSTOWN + \beta_3it + \beta_4itOWCON + \epsilon_{it}$$

Variable	Specification	Measurement
Audit Quality	AQ	A dummy value of 1 will be used if the audit report expresses a going concern opinion and 0 if otherwise. (Ruiz- Barbadillo, Gomez-Aguilar & Carrera, 2009)



Managerial Ownership	MANOWN	Measured as the total number of shares owned by Directors to total Number of issued Ordinary shares
Institutional Ownership	INSTOWN	Measured as proportion of shares held by institutional investors to total Number of issued ordinary shares
Ownership concentration	OWCONS	Measured as proportion of shares held by individuals with at least 5% of the equity shares to total shares issued.

## RESULTS AND DISCUSSION

**Table 2: Descriptive Statistics**

	AQ	MAOWN	INSTOWN	OWNCON
Mean	0.745763	-0.750458	0.395763	0.158305
Median	1.000000	-1.130000	0.350000	0.390000
Maximum	1.000000	9.850000	0.980000	9.850000
Minimum	0.000000	-3.900000	0.010000	-3.820000
Std. Dev.	0.439169	3.056830	0.267138	1.710953
Skewness	-1.128823	2.254127	0.584255	2.373760
Kurtosis	2.274242	8.117618	2.562509	19.61340
Jarque-Bera Probability	13.82491 0.000995	114.3478 0.000000	3.827170 0.147550	733.9206 0.000000
Sum	44.00000	-44.27700	23.35000	9.340000
Sum Sq. Dev.	11.18644	541.9641	4.139041	169.7868
Observations	60	60	60	60

**Source: E- view Output 2019**

Table 4.2 shows the descriptive statistics of the variables in the study. The result revealed that the mean of audit quality is 0.740 representing average across the Oil and Gas companies in Nigeria. It is also observed from the table that the difference the mean and standard deviation across the Oil and Gas is 0.44 indicating low variability around the means. The table also showed the minimum and the maximum of audit quality are 0.00 and 1.00 indicating a very close range.

**Table 3: Regression Result**

Dependent Variable: AQ  
 Method: Least Squares  
 Date: 11/08/19 Time: 10:54  
 Sample (adjusted): 1 60  
 Included observations: 59 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.544805	0.089257	6.103781	0.0000
MAOWN	0.058057	0.016881	3.439291	0.0011
INSTOWN	0.615179	0.185457	3.317096	0.0016

OWCON	0.006711	0.030163	0.222494	0.8248
R-squared	0.770311	Mean dependent var		0.745763
Adjusted R-squared	0.722147	S.D. dependent var		0.439169
S.E. of regression	0.377239	Akaike info criterion		0.953515
Sum squared resid	7.827026	Schwarz criterion		1.094365
Log likelihood	-24.12870	Hannan-Quinn criter.		1.008498
F-statistic	7.868797	Durbin-Watson stat		0.944860
Prob(F-statistic)	0.000186			

**Source: E- view Output 2019**

The regression line for quoted oil and Gas companies in Nigeria ( $AQ = 1.054 + 0.58MAOWN + 0.615INSTOWN + 0.007OWCON$ ) indicates that audit quality will increase by 0.058 for 1% increase in managerial ownership, increase by 0.615 and 0.007 respectively for every 1% increase in the institutional ownership and ownership concentration respectively. The significant value of the p-value of 0.000000 is less than the t-value of 0.05, therefore, the study accepts the Null hypothesis and rejects the alternative hypothesis that the effect of ownership structure on audit quality has a significant relationship with audit quality. The correlation coefficient (r) of 0.77% shows a strong relationship and the coefficient of determination ( $r^2$ ) of 0.72% indicates that about 72% of the variation in the audit quality can be explained by the independent variables examined or the ability of the regression line to predict the dependent variable is about 65%. The remaining 28% is explained by variables not captured by this study. The Durbin Watson statistic, a measure of detecting the presence or absence of autocorrelation, stood at 1.87. This demonstrates that if the value of Durbin Watson is less than 1.8, there is an indication of the presence of autocorrelation in the model. Along this line, the study Durbin Watson statistics signals the absence of autocorrelation.

**Correlation matrix**

	AQ	C	MAOWN	INSTOWN	OWCON
AQ	1.000000	NA	0.399973	0.377169	-0.093973
C	NA	NA	NA	NA	NA
MAOWN	0.399973	NA	1.000000	0.008535	-0.280174
INSTOWN	0.377169	NA	0.008535	1.000000	-0.018436
OWCON	-0.093973	NA	-0.280174	-0.018436	1.000000

**Source: E- view Output 2019**

From the table above, audit quality is positively correlated with managerial ownership and institutional ownership (0.40, and 0.378) and negatively correlated with ownership concentration. This signifies that companies with higher institutional ownership and managerial ownership have more audit quality. Also, the correlation between managerial ownership and institutional ownership on audit quality were positive and significant at 0.05. Also, the ownership concentration is negative and not significant since the significance value of 0.8248 is more than the t-value of 0.05.

**CONCLUSION AND RECOMMENDATIONS**

Based on the findings of this study, the following conclusion has become imperative: Managerial ownership has a positive significant effect on the audit quality of quoted Oil and Gas companies in Nigeria. This finding is in line with Lin & Liu (2009); Kasai (2014), Zuriagat (2011) and not in line with Azadi (2014). The result also revealed that institutional ownership has a positive

significant effect on audit quality. A positive relationship indicates that firms with higher institutional ownership are likely to have high quality report. Also, with respect to ownership concentration the result revealed that it is not significant at 0.05.

In view of the foregoing, the following recommendations are being put forward:

- i. Ownership structure of quoted Oil and Gas companies be sustained and encourage. This is based on the finding that ownership structure has significant positive effect on audit quality.
- ii. That more room should be given to institutional investors to own shares in the oil and gas companies since institutional investors has a positive significant effect on audit quality.
- iii. The director's holdings inability to constrain audit quality may be as a result of poor corporate governance practice. Therefore, emphasizes should be laid on numbers of directors holdings the company should have.

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## **Effects of Tax Treaties on Foreign Direct Investment in Nigeria**

**MUSA, Amos Omale**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail:musaamosomale@gmail.com, Phone No: +234 8131848188

### **Abstract**

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### **INTRODUCTION**

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## **Economic Impact of Treasury Single Account Management on the Growth of Nigerian Economy**

**AKINYELURE, Titilayo Fidelity**

Federal Polytechnic,  
Nasarawa, Nasarawa State

E – Mail: [aftitilayo@gmail.com](mailto:aftitilayo@gmail.com), Phone No: +234 8121171661

### **Abstract**

## **Effect of Financial Control on Educational Sector Project Development: Evidence from Federal Polytechnic, Nasarawa**

**GOFWAN, Hassan**

Federal Polytechnic, Nasarawa  
Nasarawa State

E – Mail:hgofwan@gmail.com, Phone No: +234 7067248890

**YASHIM, Caleb Yahaya**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: karlfancy@gmail.com, Phone No: +234 7035303440

**YUSUF, Paul Yaki**

Bursary Department,  
Bingham University,  
Karu, Nasarawa State

E – Mail:paulyyusuf@gmail.com, Phone No: +234 8064670970

### **Abstract**

## **Effect of Ownership Structure and Audit Quality on Quoted Oil and Gas Companies in Nigeria**

**FODIO, I. Musa, PhD**

Department of Accounting,  
Nasarawa State University,  
Keffi, Nasarawa State

**IDOKO, Olive Ojodunwene**

Department of Accounting,  
Nasarawa State University,  
Keffi, Nasarawa State

E-Mail: [blessedojima2014@yahoo.com](mailto:blessedojima2014@yahoo.com), Phone No: +234 8064469164

### **Abstract**