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The journal accepts articles from the field of management sciences such as: accounting, business administration and management, banking, finance, entrepreneurship, human resource management, insurance, actuarial sciences, marketing, management information technology, transportation management, purchasing management, project management, and studies in related behavioural sciences.

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ASSET-LIABILITY-MIX AND FINANCIAL PERFORMANCE OF DEPOSIT MONEY BANKS IN NIGERIA

By

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ABSTRACT

One of the key issues faced by Deposit Money Banks is that of liquidity which arises as a result of poor decisions regarding the right mix of assets and liabilities used in financing the business. The purpose of this study was to examine how asset-liability-mix of DBMs in Nigeria affect their financial performance. Specifically, we examined the relationship between cash and cash equivalents; loans and advances; other assets; deposits; and other liabilities and financial performance. Employing the descriptive and correlational design approaches we surveyed all the 22 DMBs in Nigeria. Secondary data was obtained from the Statistical Bulletin of the CBN and analyzed using statistical cost accounting OLS model to examine the relationship between asset-liability-mix and financial performance. The study established significant positive relationships between cash and cash equivalents; loans and advances; and other assets, on one hand, and financial performance, on the other. Deposits had insignificant positive relationship, while other liabilities had insignificant negative relationship with financial performance. It was recommended that bank directors and managers should closely monitor asset and liability levels and quality by ensuring strict compliance with the CBN Prudential Guidelines, Circulars, and bank specific risk thresholds as a means of achieving optimal asset-liability-mixes for enhanced financial performance; and the CBN should occasionally tinker with the regulatory policy requirements towards a more convenient environment to enhance bank performance.

Keywords: Asset-liability-mix, financial performance, deposit money banks, Nigeria

1.0 INTRODUCTION

1.1 Background of the Study

The banking industry in Nigeria plays a very significant role in economic development of the country. According to the World Bank (2016) the banking industry in particular plays a vital role in the economic development of Nigeria by mobilizing savings and channeling them for investment in the real sector of the economy. Real sector such as agriculture, trade, manufacturing, mining and construction contribute significantly to GDP. According to a report by Businessday newspaper in February 2019, Nigerian Bureau of Statistics reported that the Nigeria Gross Domestic Product (GDP) at basic constant price (real GDP) grew by 2.27 per cent year-on-year (YoY) from ₦69.80 trillion in 2018 to ₦71.39 trillion in 2019 compared to 1.91 per cent in 2018. The growth was largely due to the contributions of the agricultural sector (₦10.50 trillion), trade sector (N5.94 trillion) and the information and communication sector (₦4.66 trillion) with 25.2 per cent, 16 per cent and 13 per cent shares of the total GDP respectively in 2019. Without the contribution of the banking industry in financing these sectors, it may be hard if not impossible to achieve such growth rate in GDP. This may partly explain why the financial performance of the banking sector is of interest not only to government but researchers as well.

To this end, several researchers have paid significant interest on factors that promote the financial performance of banks in Nigeria. Empirically, scholars have examined the relationship between risk management and financial management of banks in Nigeria (Adeusi, Akeke & Adebisi, 2014), Operational risk and financial performance of the banks (Fadun & Oye, 2020), credit risk and financial performance (Afolabi, Obamuyi & Egbetunde, 2020). Other scholars attribute financial performance of the banks to tax planning (Olamide, Azeez & Adewale, 2019). In addition, there is a lot of interest on how corporate governance variables influence financial performance of the banks (Uwuigbe, 2011; Uwuigbe & Fakile, 2012; Bebeji, Mohammed & Tanko, 2015). Though these studies have provided an understanding of the factors associated with financial performance of Deposit Money Banks (DMBs), they seem to ignore the role of asset-liability-mix in explaining variations in financial performance of DMBs. This study is set to fill the knowledge gap by examining the relationship between assets-liability-mix and financial performance of DMBs in Nigeria.

Asset liability mix is the matching of assets and liabilities in such a proportion that guarantees financial performance since excess of either assets or liability can result to sub-optimal performance (Pandey, 2010). Asset-liability-mix is an important aspect of banking strategic decision. As an integral component of banking strategic decision, it helps in businesses, including banks, to be profitable and sustainable in the short and long terms (Pandey, 2010; Van-Horne & Wachowicz, 2001). A bank also needs to be able to match its assets with its liabilities to optimize the yield (Baker, 1983), which also determines its credit and liquidity risks, both of which affect its financial performance (Belete, 2013). The relationship between balance sheet elements (assets and liabilities) and results in the income statement is the basis of the classical organic balance sheet theory (Ware & Amankwah, 2014; Dumitru & Doina, 2008), which considers the balance sheet as comprising assets and liabilities (resources) that when effectively composed and utilized result in profits.

1.2 Statement of the Problem

Considering the significant roles banks play in the economy, an analysis of the factors that influence their financial performance is considered paramount to aid them ascertain areas to improve in order to achieve better results. Regulators and policy makers are also interested in knowing these factors to help them in making more effective policies that would strengthen the banking sector, and by implication the economy. This largely explains the level of research interest in this area.

The literature indicates several studies have been undertaken on the determinants of financial performance of banks globally (Afolabi, Obamuyi & Egbetunde, 2020; Olamide, Azeez & Adewale, 2019; Fijalkowska, Dworcszak & Garsztka, 2018; Ashraf, Khan & Tariq, 2017; Mamati, Ayuma & Mwrigi, 2017; Raparia, 2017; Oppong, 2016; Uddin & Haque, 2016; Alshatti, 2015; Belete, 2013; Kavitha, 2012; Abbas, Tahir, & Rahman, 2012; Kamau, 2011; Samuel, 2011; Sangmi & Nazir, 2010; Al-Tamini, 2010; Asiri, 2007). However, results of these studies have been rather conflicting. While some studies conclude significant relationships among selected factors and financial performance, others have concluded no significant relationships.

In the Nigerian context, empirical literature reveals the absence of research in the area of asset-liability-mix and financial performance of DMBs (Ajibola, 2016; Obrimah & Ebere, 2014; Ayodele, 2012). Again, of the few studies that ventured close to this area, they have avoided carrying out a census of the banks, which this study considers possible. These factors have created gaps which this study sets out to fill. It is in line with this that the study seeks to examine the relationship between asset-liability-mix and the financial performance of DMBs in Nigeria. In addition, it seeks to evaluate if differences in terms of asset-liability-mixes and financial performance of the banks in Nigeria.

1.3 Objectives of the Study

The main objective of this study is to examine the relationship between asset-liability-mix and the financial performance of DMBs in Nigeria. Specifically, the objectives of the study are:

i) To examine the relationship between assets and financial performance.
ii) To assess to relationship between liabilities and financial performance.

1.4 **Statement of Hypotheses**

The following hypotheses, stated in their null forms, were postulated:

H_{O1a}: Cash and cash equivalents have no significant relationship with the financial performance.

H_{O1b}: There is no significant relationship between loans and advances and the financial performance.

H_{O1c}: Other assets have no significant relationship with the financial performance.

H_{O2a}: There is no significant relationship between deposits and the financial performance.

H_{O2b}: Other liabilities have no significant relationship with the financial performance.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

The study is underpinned on the organic theory of the balance sheet, propounded by Fritz Schmidt in 1921 (Clarke & Dean, 2013; Karelskaya & Zuga, 2012; Mattessich, 2008), which assumes the balance sheet has two functions: finding the results at a certain moment and determining the means and the resources at work. Thus, the balance sheet displays both the company's wealth at a particular moment and some results. This theory considers the balance sheet as a means for finding the results (profits) and explaining the resources (assets and liabilities) at work in a company that produce the results. This effectively relates assets and liabilities to profit or financial performance (Karelskaya & Zuga, 2012; Mattessich, 2008), which is the subject matter of this study. The organic balance sheet theory, thus, effectively have a direct relationship with the study on asset-liability-mix and financial performance of Deposit Money Banks.

2.2 Conceptual Review

Assets have been defined by the Conceptual Framework for Financial Reporting as a resource controlled by the entity as a result of a past event and from which future economic benefits are expected to flow into the entity (IASB, 2010). Thus, the exercise by an entity of control over a resource emanating from a past event; and ability of the resource to generate future economic benefits into the controlling entity are sine-qua-non requirements for classification as an asset. Bank assets such as loans and advances generate economic benefits through interest income and repayments. Investments in securities earn interests or dividends depending on whether they are in debt or equity instruments. Leases, on the other hand, earn rental income. Furthermore, as a principle, an asset that falls out of the control of an entity or no longer has the ability to generate future economic benefits to the entity is to be de-recognized as such. An asset may gradually and systematically lose its ability to generate future economic benefit through depreciation or amortization and impairment, which are treated as expenses in the income statement (IAS 16, 2008; IAS 36, 2008).

The Conceptual Framework defines a liability as a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits (Melville, 2014). A liability that can only be measured by using a substantial degree of estimation is referred to as a provision (IAS 37, Provisions, Contingent Liabilities and Contingent Assets, 2008). Liabilities may be short term (settled within twelve months) or long term (settled after twelve months). They may carry a cost or may not, depending on if they carry interest or coupon rates. Those that carry coupon rates incur costs to the entity carrying them. In the banking industry these fall into the category of deposits, classified as savings, demand or time deposits. The interests accruable on these liabilities are costs to the bank which are charged against interest income, leading to profits or losses. This means they also have the capacity to affect a bank's performance.

Bank assets comprise generally of investments, loans and advances, and non-current assets, while their liabilities are made up of deposits, which may be in the form of savings, current and fixed/term, and equity, which are contributed by the owners. Mishikin (2004), posited that a commercial bank's liability which is mainly financed by current, savings, and fixed deposits and equity represent its sources of funds; while assets which comprise mainly of investments, loans and advances represent its use of funds.

A bank's asset-liability-mix represents the proportion of its assets in relation to its liabilities, which may be classified into their various components. Mishikin (2004) posits that given the legal requirements of commercial banking, each commercial bank determines its own mix of assets and liabilities, which determine its specific operating objective; maximizing shareholders' equity (profit). It follows, therefore, that the mix of a bank's assets and liabilities has the tendency to affect its financial performance.

Aburime (2008) observed that the importance of financial performance of banks can be appraised at the micro and macro levels. At the micro level, the basic aim of every bank management is to maximize profit, as an essential requirement for conducting business. At the macro level, profits provide an important source of equity especially if reinvested into the business (Flamini, Valentina, McDonald & Liliana, 2009). Sahajwala and Bergh (2000) viewed financial performance as measured in terms of *Assets Ratios* – the Return on Assets (ROA); *Operating Ratios* – Return on Income (ROI); and *Operating Equity Ratios* – Return on Equity (ROE). They said ROA is widely recognized as the most useful measure to test performance.

Several studies have shown a number of factors that determine bank performance, which include the type of bank, changes in interest rates, exchange rates, unemployment and aggregate demand. Other factors include liquidity and concentration; cost to number of branches; bank asset to GDP ratio and market concentration ratio; cost efficiency of banks; capital size, size of credit portfolio and extent of ownership concentration; size of deposit liabilities, labour productivity, state of IT, ownership, control-ownership disparity and structural affiliation (Hefferman & Fu, 2010; Clair, 2004; Al-Tamini, 2010; Demirguc-Kunt & Huizinga, 1999; Wong, Fong, Wong & Choi, 2007; Aburime, 2008).

2.3 Empirical Review

The banking sector is vital for the smooth operation of a country's financial system and economy. Thus, the sector's financial performance is of major concern to those who are responsible for policy making and its day-to-day operation. Several studies have been carried out in the direction of the financial performance or financial performance of banks.

Among the several factors that affect banks financial performance, asset liability management (ALM) is a major (Asiri, 2007), in relation to which, different authors have studied the determinants of commercial banks financial performance. For example, Raparia (2017) found a positive maturity mismatch for the 1-7 days bracket to have a significant negative impact on profit of Indian banks, but that a negative maturity mismatch for the 8 days to 12 months was found to have a significant positive impact on profit. On the other hand, for the 3 to 5 years and greater than 5 years' maturity bracket, the values were insignificant.

Belete (2013) found the financial performance of banks in Ethiopia to be positively affected by assets management and negatively affected by liability management, real growth in GDP and the general rate of inflation. Similarly, Asiri (2007) had documented that assets management positively and liabilities management negatively related to the financial performance of Kuwaiti banks. Corporate social and environmental responsibility were found to have a significant impact on financial performance of banks in Central and Eastern European and Asian Countries (Fijalkowska, Zyznarska-Dworczsak & Garsztka, 2018; Ashraf, Khan & Tariq, 2017). Mohammed (2012) established that corporate governance positively affected the performance, but poor asset quality had a negative effect on banks in Nigeria. Chibuzor, Tella and Akingunola (2011) found no significant relationship between regulation and banks performance in Nigeria.

Studies related to asset-liability-management and financial performance of Bangladeshi, Nigerian and Ethiopian banks established loans and advances had a significant positive relationship with financial performance (Uddin & Haque, 2016; Ajibola, 2016; Belete, 2013); balances with other banks, investments, term deposits, total other deposits, and borrowings from other banks were all found to have an insignificant relationship with financial performance (Uddin & Haque, 2016; Ajibola, 2016).

However, Belete, 2013), found deposits in other banks, other investments and debit balances, and fixed assets had no significant effect on banks financial performance.

Comparing the financial performance of Indian banks, Kavitha (2012) and Sangmi and Nazir (2010) established significant differences among banks. In a similar study in Pakistan, Abbas, Tahir and Rahman (2012) also established significant differences in all the measures of financial performance and total assets among banks.

Although, as can be seen from the foregoing paragraphs, much studies have been carried out on the determinants of bank performance, generally, both globally and in Nigeria, its relationship with asset-liability-mix has been largely ignored, which is considered very important since DMBs basically deal in assets and liabilities to generate profits. Furthermore, there is complete absence of literature that examines differences among DMBs in relation to their asset-liability-mix, as well as in their financial performance in Nigeria. Theoretically, also, nearly all the studies based on economic theories that are market based ignoring accounting-based theories. This study is based on the organic balance sheet theory, which is accounting-based. The study, therefore, sets out to close these identified gaps.

3.0 METHODOLOGY

3.1 Research Design

The study employed the descriptive and correlational designs, based on the positivistic philosophical paradigm. A descriptive design describes the characteristics of the phenomenon without controlling the variables. On the other hand, a correlational design is one in which the investigator does not intervene in any way or expose subjects to a manipulation. Instead, measurements are taken on a group of individuals or social entities, and relationships are determined among the measures (Mustapha, 2017), with a view to drawing conclusions.

3.2 Population

Overall, the population of this study comprises of all the 22 DMBs licensed by the CBN and operating in Nigeria at December 31, 2017 (CBN, 2017).

3.3 Sample and Sampling Technique

The study is a census of the entire 22 DMBs, considering the small number of players in the industry, and the availability of data from the CBN Statistical Bulletin.

3.4 Variable Definition and Measurement

The variables used in the study naturally flow from the assumptions of the organic balance sheet theory, which states that the balance sheet identifies and measures the assets owned and liabilities owed by an entity with which it achieves results (Dumitru & Doina, 2008). Empirical studies were also reviewed to aid the selection and definition of variables. Furthermore, to finally select the variables of the study, the classification criteria of the CBN and the DMBs were considered. The independent variables are assets and liabilities, while the dependent variable is financial performance. Control variables introduced are real growth rate in GDP and annual inflation rate. Equity was not included in this study, because the study specifically seeks to examine the relationship between assets and liabilities with financial performance, basing on the organic balance sheet theory. A summary of the definition and measurement of the variables is given in Table 1.

Table 1: Variable Definition and Measurement

S/No.	Variable	Symbol	Measurement	Source
1	Return on Assets	ROA	$\frac{\text{Operating profit}}{\text{Total assets}}$	ICAN (2014)
2	Cash and Cash Equivalents	CCE	$\frac{\text{Currency + balances with banks + money at call with banks + cheques for collection}}{\text{Total assets}}$	Hester and Zoellner (1966)
3	Loans and Advances	LADVS	$\frac{\text{Loans and advances to banks + loans and advances to customers}}{\text{Total assets}}$	Hester and Zoellner (1966)
4	Other Assets	OASSETS	$\frac{\text{Stabilization securities + CBN bills + Bills discounted + treasury bills + treasury certificates + Government bonds + bankers unit funds + ordinary shares + preference shares + debentures + other bonds + subsidiaries + other investments + commercial papers + bankers acceptances + factored debts + financial derivatives + placements with discount houses + inter-bank placements + certificates of deposits + property and equipment's + receivables + prepayments + bills receivables + sundry debtors + intangible assets + unamortized foreign inward transfers + FEM + CBN naira depreciation + NDIC + miscellaneous}}{\text{Total assets}}$	Hester and Zoellner (1966)
5	Deposits	DEPS	$\frac{\text{Demand deposits (private + governments) + savings deposits (private + governments) + time deposits (private + governments) + foreign currency deposits (private + governments)}}{\text{Total assets}}$	Hester and Zoellner (1966)
6	Other Liabilities	OLIABS	$\frac{\text{Money market instruments + bonds + foreign liabilities + Government other deposits + credit from CBN + unclassified liabilities + accounts payables + suspense accounts + provisions for tax payables + sundry creditors + forex revenue reserves + exchange difference liabilities deposits for shares + miscellaneous}}{\text{Total assets}}$	Hester and Zoellner (1966)
7	Asset-Liability-Rate	ALR	$\frac{\text{Total assets}}{\text{Total Liabilities}}$	
8	Real Growth Rate of GDP	RGDPR	Annual real growth rate of GDP	CBN (2017)
9	Inflation Rate	INFLR	Annual inflation rate	CBN (2017)

3.5 Method of Data Analysis

3.5.1 *Statistical Cost Accounting Model Specification*

To examine the relationship between asset-liability-mix and financial performance, the modified Statistical Cost Accounting (SCA) model, a variant of the OLS, developed by Hester and Zoellner (1966), which examines how operating profit is regressed by ALM in banks, was employed. The method has been tested in US, UK, Indian, Greek, Italian, Kuwaiti, Bangladeshi, and Jordanian banks (Belete, 2013). The SCA model for this study is:

$$ROA_t = a_0/A_{bt} + \sum a_{1i}LogCCE_{ibt}/A_{bt} + \sum a_{2i}LogLADVS_{ibt}/A_{bt} + \sum a_{3i}LogOASSETS_{ibt}/A_{bt} + \sum a_{4j}LogDEPS_{jbt}/A_{bt} + \sum a_{5j}LogOLIABS_{ibt}/A_{bt} + a_6RGDPGR_t + a_7INFLR_t + \mu_{bt}$$

Where: ROA = Return On Assets; CCE = Cash and Cash Equivalents; LADVS = Loans and Advances; OASSETS = Other Assets; DEPS = Deposits; OLIABS = Other Liabilities; RGDPGR = annual growth rate of real GDP; and INFLR = annual inflation rate. a_0, a_1 to a_7 = the intercept and coefficients of the independent variables, respectively; A_b = Total Assets of banks; t = time t; while μ_b is error term, representing all other factors (variables) not considered in the model.

3.5.2 *Diagnostic/Robustness Tests*

In order to test the association between the study variables, the OLS regression model was employed. For a regression model to be considered good for the purpose of analysis: the residuals must be normally distributed, must not be serially correlated, must be homoskedastic, and must be free from Multicollinearity (Hossain, 2013; Gujarati, 2004). Table 2 shows results of Shapiro-Wilk test for normal data, Serial Correlation (autocorrelation) and Heteroskedasticity tests, while result of Variance Inflation Factor (VIF) and Tolerance for Multicollinearity is depicted in Table 3.

Table 2: Diagnostic/Robustness Tests

Test	Type of Test	HO	F-Statistic/ Chi^2/ z	Prob. Values	Remark
Normality	Shapiro-Wilk test for normal data	Residuals are normally distributed	-1.387	0.9173	Residuals are normally distributed
Serial Correlation (Autocolinearity)	Breusch-Godfrey LM test	Residuals are not autocorrelated	2.127	0.1447	Residuals are not autocorrelated
Heteroskedasticity	Breusch-Pagan/Cook-Weisberg test	Residuals are homoskedastic	0.61	0.4354	Residuals are homoskedastic

The assessment of the normality shows p=0.9173>0.05, confirming the data meets the assumption of normality. The Breusch-Godfrey LM test indicates *p*=0.1447>0.05, implying no serial correlation. The result of homoskedasticity test shows *p*=0.4354>0.05, which implies the data is homoskedastic, and fit for analysis.

To screen for multicollinearity, Variance Inflation Factor (VIF) and Tolerance level were examined. The general rule of the cut-off points is that the VIF and the Tolerance values should not exceed 10 and supposed not to be less than 0.10, respectively (Nyahas, 2017; Hossain, 2013; Gujarati & Porter, 2009). Table 3 establishes all the independent variables conform to both assumptions, depicting the absence of multicollinearity and implying that the data qualify for further statistical tests.

Table 3: Variance Inflation Factor (VIF) and Tolerance for Multicollinearity

Variable	VIF	1/VIF
CCE	1.34	0.7445
LADVS	1.56	0.6405
OASSETS	1.91	0.5238
DEPS	1.36	0.7341
OLIABS	1.10	0.9130
DRGDPGR	1.25	0.7997
DINFLR	1.12	0.8897
Mean VIF	1.38	

4.0 RESULTS/INTERPRETATION AND DISCUSSION

4.1 **Results**

4.1.1 *Descriptive Statistics*

The descriptive statistics for the study variables are presented in Table 4.

Table 4: Descriptive statistics for the study variables

	Count	Mean	Standard Deviation	Minimum	Maximum	Sum
DROA	37	-0.1817	12.3221	-36.5773	31.3914	-6.7213
CCE	37	0.0090	0.2484	-0.9644	0.5282	0.3324
LADVS	37	-0.0002	0.0520	-0.1129	0.1572	-0.0087
OASSETS	37	-0.0016	0.0594	-0.1468	0.0984	-0.0615
DEPS	37	-0.0033	0.0319	-0.1152	0.0669	-0.1233
OLIABS	37	0.0359	0.1979	-0.4081	0.4267	1.3285
DRGDPGR	37	0.0594	12.3829	-36.5773	31.3914	2.2017
DINFLR	37	0.3772	4.5854	-12.1796	11.3413	13.9540

Results in Table 4 indicate that the mean scores of the variables range between -0.1817 and 0.0002, while the standard deviation ranges between 0.0319 and 12.3829. The standard deviations are large relative to their respective means, implying that the statistical means do provide a good fit of the observed data (Nyahas, 2017, citing Field, 2009).

4.1.2 *Correlations*

A preliminary test was carried out using the Pearson correlation (r) to find out if the variables in the study are correlated (see Table 5) with the dependent variable, and with one another (Nyahas, 2017; Hossain, 2013).

Table 5: Correlations of All DMBs

	DROA	DA1	DA2	DA3	DL1	DL2	DRGDPGR	DINFLR
DROA	1							
DA1	0.2622	1						
DA2	-0.1756	0.0633	1					
DA3	0.3804	-0.3663	-0.4420	1				
DL1	0.4271	-0.0281	-0.0583	0.4212	1			
DL2	-0.0128	0.1864	0.1312	-0.1749	-0.0904	1		
DRGDPGR	-0.5753	0.1467	0.3753	-0.1641	-0.1611	0.0046	1	
DINFLR	-0.2503	-0.2190	-0.0515	-0.0192	-0.1595	-0.1830	0.0294	1

Table 5 reveals the following positively correlate with Return on Assets (DROA): Cash and Cash Equivalents (CCE [DA1], r=0.2622); Other Assets (OASSETS [DA3], r=0.3804); and Deposits (DEPS [DL1], r=0.4271). Variables with negative correlation with DROA are Loans and Advances (LADVS [DA2], r=-0.1756); Other Liabilities (OLIABS [DL2], r=-0.0128); Real Growth Rate of GDP (DRGDPGR, r=-0.5753); and Inflation Rate (INFLR, r=-0.2503). All the variables have shown evidence of correlation with one another, which is desirable.

4.1.3 *Tests of Hypotheses/Interpretation*

In testing the hypotheses, results of the modified OLS analysis presented in Table 6 were used, which indicates that the independent variables account for 73.6% variation and significantly explain the dependent variable, financial performance *(F=11.55, p=0.0000<0.05)*. To test the hypotheses, *coefficients and p* values for each variable was used. The results indicate that Cash and Cash Equivalents is positively significant in explaining variations in financial performance (*Coef=26.3484, p=0.0000<0.05*), thus hypothesis 1 was not supported, resulting in the acceptance of the alternative. Loans and advances was found to positively and significantly relate to financial performance (*Coef=66.5278, p=0.0260<0.05*), thus hypothesis 2 was not supported, resulting in the acceptance of the alternative form. Other Assets was found to be positively and significantly related to financial performance (*Coef=110.7752, p=0.0000<0.05*), thus hypothesis 3 was not supported and the alternative form is accepted.

Deposits was found to be positive but insignificant in explaining variations in financial performance (*Coef=42.5486, p=0.3310>0.05*), thus hypothesis 4 was supported. Other liabilities was found to be negative and insignificant in explaining financial performance (*Coef=-3.5768, p=0.5690>0.05*), thus hypothesis 5 was supported. With respect to the control variables, both Real Growth Rate of GDP and Annual Inflation Rate were found to be negative. However, while Real Growth Rate of GDP was significant, Annual Inflation Rate was insignificant (*Coef=-0.6472, p=0.0000<0.05* and *Coef=-0.2223, p=0.4180>0.05*).

Table 6: Stata Output of SCA (OLS) Analysis

Source	SS	Df	MS		
				Number of obs =	37
				F (7, 29) =	11.55
Model	4022.8230	7	574.6890	Prob > F	0.0000
Residual	1443.1816	29	49.7649	R-squared =	0.736
				Adj R-squared =	0.6722
Total	5466.0064	36	151.8335	Root MSE =	7.0544

DROA	Coef.	Std.Err.	t	P>|t|	[95% Conf.	Interval]
CCE	26.3484	5.4854	4.8	0.0000	15.1295	37.5672
LADVS	66.5278	28.2531	2.35	0.0260	8.7438	124.3118
OASSETS	110.7752	27.3348	4.05	0.0000	54.8692	166.6812
DEPS	42.5486	43.0198	0.99	0.3310	-45.4368	130.5340
OLIABS	-3.5768	6.2161	-0.58	0.5690	-16.2902	9.1366
DRGDPGR	-0.6472	0.1062	-6.1	0.0000	-0.8647	-0.0430
DINFLR	-0.2223	0.2718	-0.82	0.4180	-0.7793	0.3326
_cons	0.1652	1.1921	0.14	0.8910	-2.2730	2.6033

4.2 Discussion of Findings

The test of hypothesis 1 indicates that cash and cash equivalents have a significant positive relationship with financial performance, implying that an increase of ₦1 in cash reserves will translate to a ₦26.35 increase in profits, and vice versa. This can be considered from the view that when a bank maintains an optimum cash reserve it is able to meet customers' withdrawal demands, more effectively, while still been able to make advances to its borrowers. This has the capacity to translate to happy and more confident customers who will continue to patronize the bank, and possibly attract more customers to the bank, which can grow the bank's business leading to higher financial performance.

The test of hypothesis 2 established that loans and advances have a significant positive relationship with financial performance, indicating that an increase of ₦1 in loans and advances will lead to a ₦66.53 increase in profits, and vice versa. This is connected with the view that increased advances lead to increased interest income which boosts the profits of the banks. This finding is consistent with Ajibola (2016) and Belete (2013) who documented that loans and advances have a significant positive relationship with financial performance. It however differs from the findings of Mohammed (2012) who found a negative effect of loans to deposit ratio on financial performance. This difference in findings may be accounted for by the fact that while the work by Mohammed (2012) was a survey of 9 banks only; this study is a census of all the DMBs operating in Nigeria. Furthermore, while the study by Mohammed (2012) covered only ten years (2001-2010), this study covers a period of 37 years from 1981 to 2017.

The test of hypothesis 3 showed that other assets have a significant positive relationship with financial performance, which means that a ₦1 increase in other assets will result in an increase of ₦110.775 in profits, and vice versa. It is important to note that a good portion of other assets include investments in securities, such as treasury bills, subsidiaries, associated companies, bonds, and investment properties from where the banks make additional income. The finding of Belete (2013) that other assets like deposits in other banks, other investments and debit balances had no significant effect on commercial bank financial performance, however, differs significantly from this finding. Differences with the Belete (2013) results may be accounted for by the difference in context. Countries do encounter differences in economic realities that affect their businesses. Again, while the study of

Belete (2013) covered only 6 years, this study extends to 37 years. Methodologically, while Belete (2013) relied on pooled OLS panel data analysis, this study relied on time series data from the CBN; therefore, employing the SCA OLS model in carrying out analysis.

Hypothesis 4 tested the relationship between deposits and the financial performance of DMBs in Nigeria and found an insignificant positive relationship between deposits and the financial performance, indicating that a ₦1 increase in deposits will result in an increase of ₦45.548 in the profits of the banks, although in an insignificant way, and vice versa. This confirms the finding of Uddin and Haque (2016) who documented that deposits had insignificant relationship with financial performance. The finding of Ajibola (2016) of a negative but significant effect of both demand deposits and savings and fixed deposits on financial performance is not supported by this study. Meanwhile, while Ajibola (2016) was a survey of some selected banks, this study took a census of all the banks. Again, the result of Belete (2013) is in variance with this one as it concluded that, along with other liabilities, deposits significantly cost the financial performance of commercial banks. Causes of differences with the Belete (2013) finding have been highlighted earlier.

The test of hypothesis 5 established a negative and insignificant relationship of other liabilities and financial performance, indicating that a ₦1 increase in other liabilities will result in a decrease of ₦3.576 in the profits of the banks and vice versa, in an insignificant way. This finding agrees with Uddin and Haque (2016) who established an insignificant relationship with financial performance, but disagrees with Belete (2013) who found other liabilities and credit balances significantly cost the financial performance of commercial banks. Again. The differences in result could be explained by the presence of a large portion of other liabilities comprising of current income tax liabilities, deferred tax liabilities, and others that are not income generating liabilities. It is also made up of long-term borrowing, debts, bonds, and others that have large cost implications on the banks, which reduce their capacity to report profits. Thus, DMBs would do well to reduce the quantum of these liabilities.

5.0 CONCLUSION, RECOMMENDATIONS AND IMPLICATIONS

5.1 Conclusion

The main objective of this study was to examine the relationship between asset-liability-mix and financial performance of DMBs in Nigeria. Specifically, the study examined the relationship between each of cash and cash equivalents; loans and advances; other assets; deposits; and other liabilities and the financial performance of DMBs in Nigeria. From the findings, the study concludes a significant positive relationship between asset-liability-mix and financial performance.

Specifically, the study concluded a significant positive relationship between cash and cash equivalents and financial performance, underscoring the importance of this resource in furthering the financial performance of DMBs in Nigeria. Loans and advances are significant and positive. Other assets have a positive and significant. Deposits are positive but insignificant. Other liabilities and financial performance have a negative and insignificant relationship.

5.2 Recommendations

Consequent upon the findings, the following recommendations are put forward:

Directors and Managers of DMBs should pay close attention to cash and cash equivalents to ensure they are at the optimum levels at all times, especially by observing the CBN cash reserve requirement, to ensure continued customer satisfaction and retention, as well as avoidance of sanctions from the regulator, and availability of funds to finance advances to borrowers. DMBs Directors and Managers should more closely monitor the performance of loans and advances through strict compliance with the CBN Prudential Guidelines, Circulars, and bank specific risk thresholds, to ensure they remain performing and to maintain an acceptable risk level that will continue to enhance their financial performance.

DMBs need to elaborately analyze other assets and institute good controls over investments in them to ensure their quality and earning capacities remain intact for enhanced performance. Managers of DMBs should ensure compliance with the loan-to-deposit-ratio issued by the CBN. They should also seek to obtain deposits from cheaper sources that will ensure the cost incurred in sourcing and maintaining them is kept at the minimum to ensure the banks achieve better performance through a wider interest spread. Bank Managers should keep very close watch over the management of other liabilities to ensure they are incurred economically, efficiently, and effectively. Liabilities, like taxation, and other short-term payables should be settled at the appropriate regulatory or contractually agreed time to avoid unnecessary penalties that could have negative impacts on financial performance and financial performance.

5.3 **Implications**

Theoretically, the study finds support for the organic balance sheet theory of Fritz Schmidt, that bank resources (balance sheet elements) do explain the results (financial performance) of DMBs. Methodologically, results also provide support that the statistical cost accounting (SCA) model of Hester and Zoellner (1966) can be used to explain the relationship between bank assets and liabilities elements and their financial performance in Nigeria. In practical terms, asset-liability-mix has been shown to explain the financial performance of DMBs in Nigeria. Thus, DMBs can arrange their asset-liability-mix in such a way that maximizes their financial performance. Policy makers like the CBN can also use this knowledge to, once in a while, alter the policy requirements towards entrenching a more favourable environment to enhance the performance of DMBs in Nigeria. Researchers too can underpin studies in this direction on the organic balance sheet theory.

5.4 **Limitations of the Study**

Due to large unavailability of complete sets of financial statements of many of the DMBs, Time Series data available from the CBN Statistical Bulletin was relied on to carry out the study. This limited the ability to undertake many of the comparative analysis between banks hitherto contemplated. This also limited the study's ability to examine the influences of firm specific factors such as age, size, ownership, and others, on financial performance. Again, the study centered on DMBs in Nigeria only, which means that since different jurisdictions may experience differences in economic and banking policies and realities due to their peculiarities, the findings of this study may not be generalized to other jurisdictions without modifications.

5.5 **Suggestions for Further Study**

Further research may be carried out using a sample of DMBs with complete range of financial statements to enable the examination of the influences of firm specific factors such as age, size, ownership, and others, on financial performance. Considering the Nigerian contextualization of the work, which limits the generalizability of findings across jurisdictions, future studies may need to be carried out in other countries or regions, for example like the ECOWAS, to provide external validity to the findings.

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APPENDIX A1

Data of Total Assets (TA), Total Liabilities (TL), Assets-Liability-Ratio (TATLR), Operating Profits (OPPROFIT), and Return on Assets (ROA) of Access Bank Plc, Diamond Bank Plc, and Guaranty Trust Bank Plc, for the years 2001 to 2017

YEAR	BANK	TA ₦'B	TL ₦'B	TATLR (Ratio)	OPPROFIT ₦'B	ROA (%)
2001	ACCESS	8.027	7.108	1.129	0.116	1.445
2002	ACCESS	11.342	9.399	1.207	-0.017	-0.150
2003	ACCESS	22.582	20.082	1.124	0.811	3.591
2004	ACCESS	31.342	28.339	1.106	0.952	3.037
2005	ACCESS	66.918	52.846	1.266	0.751	1.122
2006	ACCESS	174.554	145.660	1.198	1.120	0.642
2007	ACCESS	328.615	300.230	1.095	8.043	2.448
2008	ACCESS	514.415	412.597	1.247	12.990	2.525
2009	ACCESS	700.215	524.963	1.334	17.937	2.562
2010	ACCESS	796.216	631.569	1.261	12.584	1.580
2011	ACCESS	1629.003	1436.938	1.134	27.107	1.664
2012	ACCESS	1745.177	1505.841	1.159	44.880	2.572
2013	ACCESS	1835.466	1590.984	1.154	44.996	2.451
2014	ACCESS	2104.361	1826.950	1.152	52.022	2.472
2015	ACCESS	2591.330	2223.529	1.165	75.038	2.896
2016	ACCESS	3483.866	3029.371	1.150	90.339	2.593
2017	ACCESS	4102.243	3586.795	1.144	80.072	1.952
2001	DIAMOND	47.372	43.286	1.094	2.225	4.697
2002	DIAMOND	53.063	47.498	1.117	1.946	3.667
2003	DIAMOND	61.741	56.599	1.091	0.047	0.076
2004	DIAMOND	73.093	66.250	1.103	1.265	1.731
2005	DIAMOND	130.654	109.817	1.190	3.514	2.690
2006	DIAMOND	227.833	192.629	1.183	5.445	2.390
2007	DIAMOND	320.419	266.108	1.204	9.008	2.811
2008	DIAMOND	625.078	507.822	1.231	16.214	2.594
2009	DIAMOND	682.078	567.640	1.202	5.902	0.865
2010	DIAMOND	594.795	487.709	1.220	4.773	0.802
2011	DIAMOND	803.707	710.374	1.131	-16.261	-2.023
2012	DIAMOND	1178.104	1069.248	1.102	27.482	2.333
2013	DIAMOND	1518.856	1380.003	1.101	32.080	2.112
2014	DIAMOND	1933.123	1724.099	1.121	28.101	1.454
2015	DIAMOND	1753.232	1538.623	1.139	7.093	0.405
2016	DIAMOND	2049.799	1823.091	1.124	3.369	0.164
2017	DIAMOND	1714.807	1491.494	1.150	-11.547	-0.673
2001	GTBANK	45.472	41.324	1.100	2.153	4.735
2002	GTBANK	65.021	56.959	1.142	3.176	4.885
2003	GTBANK	90.245	80.472	1.121	4.210	4.665
2004	GTBANK	133.835	121.842	1.098	4.976	3.718
2005	GTBANK	185.151	153.751	1.204	6.781	3.662
2006	GTBANK	308.411	267.652	1.152	10.489	3.401
2007	GTBANK	486.491	436.505	1.115	15.716	3.230
2008	GTBANK	732.038	568.693	1.287	27.368	3.739
2009	GTBANK	959.184	777.149	1.234	35.329	3.683
2010	GTBANK	1066.504	874.258	1.220	27.963	2.622

2011	GTBANK	1608.653	1378.259	1.167	62.080	3.859
2012	GTBANK	1734.878	1453.051	1.194	103.028	5.939
2013	GTBANK	2102.846	1770.493	1.188	107.091	5.093
2014	GTBANK	2355.877	1991.162	1.183	116.386	4.940
2015	GTBANK	2524.594	2111.032	1.196	120.695	4.781
2016	GTBANK	3116.393	2611.491	1.193	165.136	5.299
2017	GTBANK	3351.097	2725.929	1.229	200.242	5.975

Source: *Access Bank Plc, Diamond Bank Plc, and Guaranty Trust Bank Plc Annual Financial Statement for Various Years.*

APPENDIX A2

Data of Return on Assets (ROA), Cash and Cash Equivalents (CCE), Loans and Advances (LADVS), Other Assets (OASSETS), Deposits (DEPS), Other Liabilities (OLIABS), Total Assets (TA), Total Liabilities (TL), Capital (CAP), Real Gross Domestic Product Growth Rate (RGDP), and Annual Inflation Rate (INFLR) of all the DMBs covering the years 1981 to 2017.

YEAR	ROA (%)	CCE ₦'B	LADVS ₦'B	OASSETS ₦'B	DEPS ₦'B	OLIABS ₦'B	TA ₦'B	TL ₦'B	CAP ₦'B	RGDPGR (%)	INFLR (%)
1981	7.43	1.97	8.24	9.27	18.83	0.15	19.48	18.98	0.50	-13.13	20.80
1982	7.17	2.36	9.88	10.42	21.65	0.35	22.66	21.99	0.67	-1.79	7.70
1983	8.07	2.39	10.26	14.05	25.49	0.37	26.70	25.86	0.85	-7.58	23.20
1984	5.14	2.00	10.81	17.26	28.89	0.21	30.07	29.10	0.97	-0.51	17.80
1985	0.89	1.38	11.72	18.89	30.59	0.28	32.00	30.87	1.13	8.52	7.40
1986	15.88	3.53	14.85	21.29	37.51	0.87	39.68	38.38	1.30	1.90	5.70
1987	8.68	6.42	16.61	26.80	47.29	0.99	49.83	48.28	1.55	0.17	11.30
1988	4.69	9.37	19.46	29.20	55.60	0.50	58.03	56.09	1.93	6.23	54.50
1989	11.41	9.52	21.85	33.50	60.99	1.19	64.87	62.18	2.69	6.66	50.50
1990	7.16	12.31	25.78	44.87	78.69	0.56	82.96	79.25	3.71	11.63	7.40
1991	18.56	25.13	32.40	59.98	112.17	1.05	117.51	113.21	4.30	-0.55	13.00
1992	-18.02	57.30	42.84	59.05	129.94	2.76	159.19	132.70	26.49	2.19	44.60
1993	13.37	80.20	46.00	99.96	190.39	6.19	226.16	196.57	29.59	1.57	57.20
1994	-1.09	83.64	89.36	122.03	244.11	18.78	295.03	262.89	32.14	0.26	57.00
1995	8.73	134.99	128.23	121.93	314.00	27.96	385.14	341.96	43.18	1.87	72.80
1996	7.28	131.87	158.22	168.68	365.57	37.57	458.78	403.14	55.64	4.05	14.31
1997	5.48	157.92	218.58	207.88	464.49	46.00	584.38	510.49	73.88	2.89	10.21
1998	13.22	174.02	251.93	268.67	550.50	42.76	694.62	593.25	101.36	2.50	11.91
1999	10.60	297.33	326.90	445.80	848.95	79.10	1070.02	928.05	141.97	0.52	0.22
2000	8.15	424.42	457.82	686.60	1240.62	131.55	1568.84	1372.18	196.66	5.52	14.53
2001	14.70	717.79	759.54	769.70	1730.22	152.56	2247.04	1882.78	364.26	6.67	16.49
2002	11.12	786.63	853.59	1126.66	2097.13	169.00	2766.88	2266.13	500.75	14.60	12.17
2003	-6.44	857.61	1068.74	1121.51	2312.40	198.25	3047.86	2510.65	537.21	9.50	23.81
2004	4.41	961.59	1374.94	1416.74	2767.66	299.54	3753.28	3067.20	686.08	10.44	10.01
2005	9.91	1019.92	1706.55	1788.65	3240.91	323.65	4515.12	3564.57	950.55	7.01	11.57
2006	12.60	2417.98	2246.08	2508.88	4720.94	1063.14	7172.93	5784.08	1388.86	6.73	8.55
2007	17.54	1947.95	4145.46	4888.28	7776.67	979.63	10981.69	8756.30	2225.39	7.32	6.56
2008	13.56	2699.80	6605.87	6613.89	11242.80	1312.07	15919.56	12554.87	3364.69	7.20	15.06
2009	-3.82	1313.15	8230.93	7978.78	10719.58	1872.66	17522.86	12592.25	4930.61	8.35	13.93
2010	-14.79	148.53	7208.31	9974.71	13033.43	2080.32	17331.56	15113.75	2217.80	9.54	11.80
2011	16.60	528.11	6923.99	11944.54	13945.27	1769.24	19396.63	15714.51	3682.12	5.31	10.30
2012	0.20	1489.07	7984.01	11830.87	15594.54	2068.73	21303.95	17663.27	3640.68	4.21	12.00
2013	1.87	4106.34	9478.86	10883.18	16488.01	4064.95	24468.37	20552.96	3915.41	5.49	7.96
2014	3.39	5715.52	12402.69	9571.90	19938.65	3235.20	27690.11	23173.85	4516.26	6.22	7.98
2015	3.95	4878.49	12503.71	10986.82	20307.31	3010.30	28369.03	23317.61	5051.42	2.79	9.55
2016	2.20	4678.06	15318.94	12133.45	22602.17	3843.30	32130.45	26445.47	5684.98	-1.58	18.55
2017	0.71	7302.06	13955.10	13889.68	24484.79	4695.62	35146.84	29180.41	5966.43	0.82	15.37

<u>Source</u>: CBN Statistical Bulletin, 2017 Edition.

APPENDIX B

Central Bank of Nigeria
List of Financial Institutions
Deposit Money Banks (DMBs)

1	Access Bank Plc
2	Citibank Nigeria Limited
3	Diamond Bank Plc
4	Ecobank Nigeria Plc
5	Enterprise Bank
6	Fidelity Bank Plc
7	First Bank of Nigeria Limited
8	First City Monument Bank Plc
9	Guaranty Trust Bank Plc
10	Heritage Banking Company Ltd.
11	Key Stone Bank
12	Main Street Bank
13	Skye Bank Plc
14	Stanbic IBTC Bank Ltd.
15	Standard Chartered Bank Nigeria Ltd.
16	Sterling Bank Plc
17	SunTrust Bank Nigeria Limited
18	Union Bank of Nigeria Plc
19	United Bank For Africa Plc
20	Unity Bank Plc
21	Wema Bank Plc
22	Zenith Bank Plc

Source: Central Bank of Nigeria.

BOARD GENDER DIVERSITY AND SIZE: IMPLICATION ON THE MARKET PRICE PER SHARE OF LISTED MANUFACTURING COMPANIES IN NIGERIA

By

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ABSTRACT

This study examines the effect of board gender diversity and board size on the market price per share of listed manufacturing companies in Nigeria. The study population consists of sixty-three manufacturing companies whose shares are listed on the Nigerian stock exchange between 2008 and 2018. A sample size of fifty-one firms was selected using some filters. The data were collected from annual reports and accounts of the sampled companies for eleven years from 2008 to 2018. Multiple regression with Ordinary Least Square (OLS) estimation technique was used to test the study hypotheses through STATA software version 13.0. Board size and board gender diversity have a significant positive impact on the market price per share. However, It is, therefore, recommended that for the effective and efficient discharge of the responsibilities of the board of directors of listed manufacturing firms, there should be an appropriate balance of skills and diversity (including experience and gender) without compromising competence, independence and integrity of the board and not just its size. Emphases should be on the quality of members on the board (male or female), as this will go a long way in creating enabling atmospheric conditions for enhanced productivity and profit maximization that could enhance the wealth of the shareholders.

Keywords: Board Gender Diversity, Board Size and Market Price per Share

1.0 INTRODUCTION

The board of directors' role in corporate governance has recently re-emerged as a topical research topic following the collapse of US giant business enterprises like Tyco, Enron Corporation, WorldCom in the USA, and Parmalat in Italy, Adelphia Communication Corporation in Pennsylvania (Sterling, 2002). The board structure is a mechanism of corporate governance that becomes a contemporary matter for the reason that it has a massive contribution to the sustainable company's financial performance, build the shareholder confidence, the optimization of the shareholders' wealth through an efficient and effective financial decision of the companies' board. Board character is substantially central in achieving and maintaining shareholders' trust and confidence regarding their affairs, especially financial decisions (Suwabe, 2006). However, cases of financial scandals around the world by various institutions, particularly Cadbury Nigeria Plc, Oceanic Bank Nigeria Plc, Intercontinental Bank Nigeria Plc and recently Diamond Bank of Nigeria Plc have re-candled interest in corporate governance for a possible solution to unethical business practice (Adegbite, 2010).

The Nigerian code of corporate governance 2018 specified that the board should be of sufficient size to fulfill its business effectively, oversee, monitor, direct, and control the Company's activities and be relative to its operations' scale and complexity. The Board for a serious company should assume responsibility for its composition by setting the direction and approving the processes for it to attain the appropriate balance of knowledge, skills, experience, diversity, and independence to objectively and effectively discharge its governance role and responsibilities. Existing empirical evidence from around the world has mixed results, suggesting that board characteristics indeed impact shareholders' wealth. Shittu, Ahmad, and Ishak (2016) argued that board gender diversity had been associated with shareholders' wealth because; when the board is diversified with female directors, strategy decisions will be less aggressive and more risk-averse. Marinova, Plantenga, and Remery (2010) reveal that if the fraction of women on the board is few, there will be a negative effect on shareholders' wealth owing to ineffective financial decisions. Chen, Leung, and Goergen (2017) revealed that firms with a larger fraction of female directors on their boards have a greater efficient and effective decision and effectively promote shareholders' wealth.

Also, board size has conflicting views about its influence and direction on previous studies' wealth. Shittu, Ahmad and Ishak (2016) and Yusuff and Adamu (2012) argued that an increased number of board members positively affect shareholders' wealth because when the board has a better composition, it can combine expertise skills to take an effective decision. Ahmad and Hamdan (2015) and Cheema and Din (2013) argued that large or small size of directors sitting on the board do not affect shareholders' wealth of firms because the quality of the decision made by the members of the board is what matters and not the size of the board. However, Ghosh (2006) and Zahra and Pearce (1989) posited that a large board of eight to nine members would perform better than a small board of five members due to their resources, capabilities and broader external contractual relationships. Therefore, the board's size may have a significant influence in determining its direction and effect on shareholders' wealth.

The board's size is the total number of board members, including executive directors, non-executive directors, independent directors, female directors, and foreign directors. The ideal size of a board is likely to differ from organization to organization and from country to country in the business environment. The board's size depends on the complexity of the business needs and the organization's resources to match the cost of maintaining them. However, the code of corporate governance in Nigeria prescribes board members of not less than five. However, according to Jensen (1993), the optimal board size is seven to eight and according to Lipton and Lorsch (1992) eight to nine. Thus, the optimum board size is that which improves the wealth of the shareholders.

In this paper, the researchers’ interest is to examine the relationship between board size and shareholders’ wealth. Also to address the question of whether or not board gender diversity, as presented by the number of woman directors, improves shareholders’ wealth as propagated by studies such as Yermack (1996) which shows that a larger board, in general, destroys shareholders’ value because of the costs involved in coordinating the decision making the process of a large number of people. Also, Carter, Simkins, and Simpson (2003) suggest that a more diverse board is associated with shareholders’ value boost. The inconsistency, in result calls for further investigation on board gender diversity and size on the market price per share. Furthermore, to the best of the researcher knowledge, there is the dearth of Nigeria's studies that specifically investigates issues of board gender diversity and board size on the market price per share despite the possible influence between the two constructs. However, two aspects of board characteristics are the focus of this study which are board gender diversity and board size.

Hence, the objective of this study, therefore, is to examine the effect of board gender diversity on the market price per share of listed manufacturing companies in Nigeria and to examine the effect of board size on the market price per share of listed manufacturing companies in Nigeria. In line with the study's objective, the following null hypotheses has been formulated for testing**:**

Ho_1 - there is no significant effect of board gender diversity on the market price per share of listed manufacturing companies in Nigeria.

Ho_2 - there is no significant effect of board size on the market price per share of listed manufacturing companies in Nigeria.

This paper's remaining parts are organized as follows: Section two reviews the study's relevant existing literature. Section three discusses the methodology of the study. Section four presents the analyses and discussion results, while the last section (section five) concludes the study and presents recommendations.

2.0 LITERATURE REVIEW

2.1 Conceptual Review

Gender representation on corporate boards of directors refers to the proportion of men and women who occupy board member positions. Good corporate decision-making requires hearing and considering different points of view, which comes from people who have different backgrounds, experiences, and perspectives. There is a consensus that companies with women directors and executive officers lead by example (Solal & Smellman, 2019 and González, Guzmán, Pablo & Trujillo, 2020). They recognize why the gender of boards has a changeable effect on the success of corporate firms. Invariably, high financial decisions increase the market price of the share. As they usually send a clear message that they value the diversity of thought and experience. Women on boards bring different perspectives to the challenging issues facing today's corporations because a diversity of thought results in better decision making, which can reflect on the market price per share. Gender diversity on boards issue is rooted in the principle of equality of treatment; thus, gender representation on boards can be combatted through equality of opportunity. Governments and corporations have attempted to address gender representation's disproportionality on corporate boards through both types of measures, including legislation mandating gender quotas and comply with guidelines.

Globally, men occupy more board seats than women. Indeed, in 2015 statistics show that women held 17.9% of the board seats on fortune one thousand companies. The reasons behind the disproportionate gender ratio of directors have been the subject of much debate. Researches on board gender revealed that the statistics of women representation on the board exist in twin views, the percentage of board seats held by women, and the percentage of organizations with one or more women on their board. As such, studies such as Al-Mamun, Yasser, Entebang, Nathan and Rahman (2013) and Catalyst (1998) on women directors on the boards have focused on women's under-representation on board of director and this continues to be well documented by many researchers. A lower percentage of board seats are held by women than the percentage of companies with a woman on their board (Catalyst, 1998). Diversity promotes a better understanding of the market place by matching directors' diversity to customers and employees (Catalyst, 1998). Again, studies on gender issues focus on female board directors' effects on firm value, market and financial performance, e.g., Chen, Leung and Goergen (2017) and risk-taking (see, e.g., Faccio Marchica & Mura, 2016). Besides, Chen, Leung and Goergen (2017) revealed that firms with a larger fraction of female directors on their board have more excellent financial Performance which stimulates a rise in the market price per share.

The board's size is the total number of board members which comprises executive directors, non-executive directors, independent directors, and female directors on the board of a company. The ideal size of a board is likely to differ from organization to organization and from country to country in the business environment. The board's size depends on the complexity of the business needs and the resources available to the organization to match the cost of maintaining them. Therefore, the question of what should be an ideal board size should not exist. Possibly, the ideal size is likely to be different for each board. One size may not fit all because each board needs to define its optimal capacity at any given time (Coles, Daniel & Naveen, 2008). As such what a board needs to accomplish might be a different from other boards Thus, optimum board size may vary according to the moment in the board's life cycle, its mission, and its fundraising necessities.

Most countries around the globe have their states laws dictating the minimum size for non-profit boards. Usually it is three, but in some states, only one board member is required. Some boards function under a representational mandate and their composition needs to reflect the constituency; this creates upward pressure on the size. For instance, productive communication is affected by the size of a gathering; group dynamics may become a criterion for structuring your board. However, the code of corporate governance in Nigeria prescribes a board member of not less than five.

2.2 Empirical Review

Isa and Salawudeen (2019) examine the relationship between board gender diversity on the market price per share in Nigeria using sixty-three manufacturing companies whose shares are listed on the Nigerian stock exchange between 2008 and 2018. A sample size of fifty-one firms was selected using some filters. The data were collected from annual reports and accounts of the sampled companies for eleven years from 2008 to 2018 using path analysis via SEM as the estimation technique to test the study hypothesis. Board gender diversity was found to positively significantly affect shareholders' wealth (market price per share) at a 1% level of significance. However, the current study use regression analysis with Ordinary Least Square (OLS) estimation technique to test the study hypotheses through STATA software version 13.0. Ferrari, Ferraro, Profeta, and Pronzato (2018) examine the relationship between board gender diversity on the market price per share. In Germany. The study used a sample of 245 United States companies. Data were collected from the annual report for a period of four years from 2011 to 2014. The ordinary least square method of estimation was used to estimate board gender diversity's effect on the market price per share.

The result provides significant positive support on the relationship between board gender diversity on the market price per share. Similarly, Ferrer and Banderlipe (2012) examine the relationship between board gender diversity on the market price per share in Philippines companies. The study used a sample of 29 Philippines companies. The regression analysis method of estimation was used to estimate the board gender's effect on the market price per share. The result provides a significant positive effect of board gender diversity on the market price per share. However, Dobbin and Jung (2008) examine the relationship between board gender diversity on the market price per share. The study used a sample of 432 United States companies. Data were collected from the annual report for a period of nine years from 1997 to 2005. The ordinary least square method of estimation was used to estimate board gender diversity's effect on the market price per share. The result provides significant negative support on board gender diversity's relationship on the market price per share.

Isa and Salawudeen (2019) examine the relationship between board size on the market price per share in Nigeria using sixty-three manufacturing companies whose shares are listed on the Nigerian stock exchange between 2008 and 2018. A sample size of fifty-one firms was selected using some filters. The data were collected from annual reports and accounts of the sampled companies for eleven years from 2008 to 2018 using path analysis via SEM as the estimation technique to test the study hypothesis. Board size was found to have a positive significant direct effect on shareholders' wealth market price per share at a 1% level of significance. The current study used regression analysis with Ordinary Least Square (OLS) estimation technique was used to test the study hypotheses through STATA software version 13.0. Sayumwe and Amroune (2017) examine the relationship between board size on the market price per share in Canada. The study used a sample of 50 Canadian companies that are listed on the Toronto Stock Exchange. Data were collected from the annual report for a period of five years from 2009 to 2013. The regression analysis technique was employed to analyze the effect of board size on the market price per share. The result provides significant and positive support on board size's effect on the market price per share.

Similarly, Dobbin and Jung (2008) examine the relationship between board size on the market price per share in United States companies. The study used a sample of 432 United States companies. Data were collected from the annual report for a period of nine years from 1997 to 2005. The ordinary least square method of estimation was used to estimate board size's effect on the market price per share. The result provides significant and positive support on board size's relationship on the market price per share. However, Ferrer and Banderlipe (2012) examine the relationship between board size on the market price per share in Philippines companies. The study used a sample of 29 Philippines companies. The regression analysis method of estimation was used to estimate board size's effect on the market price per share. The result provides an insignificant effect of board size on the market price per share.

The previous studies provided for mixed results on the issues of the impact of board size and board gender diversity on the market price per share. The mainstream of these studies found a positive association between board size and board gender diversity and market price per share while some other found negative association on board size and board gender diversity and market price per share. On the other hand, some studies did not find any association between board size and board gender diversity and market price per share. As such the position of the literature on whether or not board size and board gender diversity impact the market price per share remains unclear. Also, The result of the previous studies on impact of board size and board gender diversity on the market price per share are not directional More so, methodology such as path analysis via structural equation modelling (SEM), simple regression, panel regression, logit, Probit regression and GMM analysis were employed but most of these studies failed to conduct robustness check. As such failure may render their findings and recommendation unreliable.

2.3 Theoretical Review

Agency theory directs that a greater proportion of independent directors will be more capable of monitoring company because managers will have less opportunity to pursue self-interest (Kiel & Nicholson, 2007). Carter, Simkins and Simpson (2003) state that a more diverse board might be better in monitoring management; because board diversity increases board independence. Board of directors with heterogeneity in gender, ethnicity or cultural backgrounds might bring issues or questions that would not come from directors with traditional characteristics. This leads to a more active board. Again, directors' high equity ownership increases the willingness of directors to monitor management (Jensen, 1993 and Carter, D'Souza, Simkins & Simpson, 2010). According to Jensen (1993), the optimal board size is seven to eight and according to Lipton and Lorsch (1992) eight to nine. Agency theory also directs that women often bring fresh perspectives on complex issues in the board room. Thus, this might help to cope with the board's informational bias or limitations in decision-making. Board diversity is associated with the effectiveness and quality of the monitoring function of the boards. Based on the above discussion, this study adopts agency theory due to its relevance in resolving the conflict of interest that may arise between managers (agents) and the shareholders (principal) of the sampled companies through the use of the size of the board members, number of women sitting on the board and its composition.

3.0 METHODOLOGY

The correlational research design was used for this study. This study is based on the functional/ positivist paradigm. As the study is quantitative, and it uses secondary sources of data. The data were collected from the sampled listed manufacturing companies' annual reports and financial statements filed with SEC and NSE. This study's population covers the manufacturing companies listed on the Nigerian stock exchange as at 31st December 2008 up till 2018. This study sampled listed manufacturing companies on the stratified random sample due to similarity in their assets allocation from other sectors. Thus, the strata are formed based on five key sectors (conglomerates, construction and real estates, consumer goods, industrial goods, and natural resources) having common characteristics. Therefore, sixty-three companies from the subsectors are included in this study, which enhances the study's value and its analysis. The sample size was arrived at using a filter to eliminate some of the firms that were considered unsuitable for the study. Thus, a-point filter eliminates companies whose shares were delisted before the end of the study period as the company's shares must be listed for the entire period of study and must have filed their published audited financial statements with the Nigerian Stock Exchange (NSE) for the entire period 2008 to 2018.

Table 3.1: Operationalization of Variables and Measurement

Variable	Measurement
	Dependent Variable
Market Price Per Share (MPS)	The opening price of the year plus the ending price of the year (average stock price) divided by two as used by SabariPriya & Azhagaiah 2008, Khan (2009) Bawa & Kmaur (2013).
	Independent Variable
Board Size (BSZ)	Number of directors on the board as used by Pelt (2013), Batool and Javid (2014), Shehu (2015)
Board Gender Diversity (BGD)	Proportions of female director to the size of the board as used by Bolbol (2012), Harvath and Spirollari (2012) and Dao, Brown, and Hsu (2016)

Source: Researchers' Compilation 2019

3.2 Method of Data Analysis

Multiple regression was used to determine the variability of dependent variable market price per share because of changes in any explanatory variables board size and board gender diversity. Panel data of fifty-one (51) companies for eleven (11) years were used to analyze the study's data due to its longitudinal nature. The study used multiple regressions to test all the hypotheses of the study using OLS regression. Thus, in line with the previous studies, such as the work of Shittu, Ahmad and Ishak (2016) and Yusuff and Adamu (2012). STATA 13.0 is the statistical package that was used to test the hypothetical relationships between the variables. The following regression model is specified for the study.

3.3 Model Specifications

$$MPS = f\,(BGD \text{ and } BSZ_{)} \qquad \ldots 1$$

$$MPS = \beta_0 + \beta_1 BSZ_{it} + \beta_2 BGD_{i,t} + \mu_{it} \qquad \ldots 2$$

Where:

MPS: Market Price per Share of Firm i at Period t, BSZ: Board Size of Firm i at Period t, BGD: Board Gender Diversity of Firm i at Period t, α_0 Constant $\beta_{1\ldots}$ β_4 efficient for each of the independent variables, λ is the parameters of the control variables, μ is the random error, t Time dimension of the Variables and i represent firms under consideration

4.0 RESULT AND DISCUSSION

Table 4.1: Descriptive Statistics

Variables	Mean	Std Dev	Min	Max	Skewness	Kurtosis	Obs
MPS	0.3683	1.2424	0.2500	11.820	0.0000	0.0000	561
BGD	0.0729	0.1056	0.0000	0.0400	0.0000	0.0000	561
BSZ	8.7558	2.6463	4.0000	18.000	0.0000	0.4919	561

Source: Descriptive Statistics Result Using STATA 13.0

The average share price in which investors are willing to pay for one share of the sampled manufacturing companies in Nigeria over eleven years is ₦0.37k implying that the sampled firms' investment may be worthwhile. The standard deviation is 1.24 implying the data points are spread out over a large range of values ₦11.57k, the difference between the minimum and the maximum values of N0.25k and ₦11.82k. The market price per share as a dependent variable to be stable. More so, the sample firms' different share prices and heterogeneous nature could also explain the wide range. The average board members on the board of sample manufacturing companies are about nine members. The standard deviation of 2.64 shows a significant variation on the board size of the sampled companies. The minimum value of board size is four (4) and the maximum value of eighteen (18) indicating that the sampled manufacturing companies record four as the lowest numbers of board members on the board, while the maximum members are eighteen. The mean of women directors of the sampled manufacturing companies for the eleven years stood at 0.007, implying that sampled manufacturing companies have 0.7% women representative on the board of directors. The standard deviation was 0.11 lower than the mean, indicating many variations of the data points amongst the sampled companies. The minimum value was zero while the maximum 4% indicated that some sampled manufacturing companies do not have women on their board within the study period.

On the other hand, some sampled manufacturing companies have 4% of women sitting on their board. However, all the variables under study are positively skewed, meaning that more results were obtained in the lower values; this happens because the right side of the axis has the peak of the histogram. The kurtosis of the variables in the study exhibits the characteristics of a platykurtic and leptokurtic curve shape. In that, the peak of the curves is less peaked than the normal curve in all the variables except board composition which exhibits more peaked than the normal curve.

Table 4.2: Correlation Matrix

Variables	MPS	BSZ	BGD	VIF
MPS	1.0000			
BSZ	0.3826	1.0000		1.39
BGD	0.2204	0.1618	1.0000	1.16

Source: Computation using STATA 13.0

Table 4.2, the Market price per share has a weak and positive correlation with board size, board gender at the values of 38% and 22% respectively. Board size has a positive correlation with board gender, at the value of 16%. The VIF indicates no presence of Multicollinearity in the data used for the study.

Table 4.3: Regression Result of Gender and Size on Market Price per Share

	Direct Effect (Path C)		
Variables	Path coef	t-value	p-value
Constant	-3.6347	-4.53	0.000***
BSZ	0.6945	3.50	0.000***
BGD	0.5287	2.35	0.019**
R^2			0.580
Adj. R^2			0.500
Obs			561.0
F(sig)			53.56***
Prob >F			0.000
VIF mean			1.600
Hettest chi^2			14.25
Hettest Prob>chi^2			0.079
Sktest			4.250
Sktest Prob>chi^2			0.084
Root Mean			0.524

Source: Computation using STATA 13. Note *, **, *** indicate significance levels at 10%, 5% & 1% respectively.

This measures the extent to which board gender diversity and size predict shareholders' wealth. However, the influence of board gender diversity and size, predicting shareholders' wealth is good. The p-value of the model of 0.0000 shows that the relationship between board characteristics and shareholders' wealth of the sampled manufacturing firms is statistically significant. More so, the estimation Log-likelihood (F-Statistics) value of 53.56 indicates that the study model is reasonably fit, and as such, the variables in the model were adequately selected, combined, and used. It also implies that the relationship between the dependent variable and the independent variables is not due to chance as the outcome and inferences made from the findings could be relied upon by 99% base on the significance level of 1% that is Prob > chi2 = 0.0000. As such, the p-value of Prob > chi2 is statistically significant at 1%, which means that its predictors reliably predict dependent variables.

The model accounts for an overall R2 of 0.58; this shows the extent of association between independent variables and dependent variables. This implies that the explanatory variables board gender could explain 58% of the total variation in shareholders' wealth, board size and control variable growth, firm size, and age. Only 42% are responsible for factors not captured in this model. The adjusted R2 shows 50% leaving an error of 50%; this shows the models' strength, applicability, and usefulness in ascertaining the extent to which board gender diversity and board size impact market price per share of sampled manufacturing companies in Nigeria. This is considered satisfactory because R-square of 10% is generally accepted for studies in the field of arts, humanities and social sciences for the reason that human behavior cannot be accurately predicted; therefore, a low R-square is often not a problem in studies in the arts, humanities and social science field.

To determine the presence of collinearity problem, a Variance Inflation Factor (VIF) test was conducted with a mean of 1.6 which is less than 10; this result provides evidence of the absence of collinearity. The result shows the presence of heteroscedasticity, which implies that the variability of the error term is not constant as the coefficient of 14.25 with its significant value of 0.079. A heteroscedasticity robust standard error test was conducted to correct that. However, the study predicts error term (e) by running test e, and the result reveals a significant p-value at 0.084 which means that the standard error is not normally distributed.

Board gender diversity of listed manufacturing companies in Nigeria and their market price per share have a direct pathway coefficient and t-value of 0.529 and 2.35, respectively, which is significant at the value of 0.019 or 1.9%. This indicates that board gender diversity has a significant positive direct effect on the market price per share of listed manufacturing companies in Nigeria, meaning that an increase in the number of women directors sitting on the board will increase the market price per share by 1.9%. This indicates that more women directors on the board will improve in the financial decision because women on the board bring different perspectives to the difficult issues confronting today's corporation as diverse of thought results in better decision making, especially dividend payout which improves the wealth of the shareholders of listed manufacturing companies in Nigeria. The apriori expectation of the impact of board gender diversity on the market price per share is that it has a positive impact as the study of Marinova, Plantenga, and Remery (2010) conclude that if the fraction of women on the board is increased, it will be advantageous as this will improve the effectiveness of the board's decision. However, this observes that some companies' fraction of women on the board is few and some cases zero, thus the need to encourage the inclusion of more female directors on the board to ensure effective decision making the improve shareholders' wealth. Otherwise, the positive effect of this result undermined will be defeated. However, this result confirms the existing literature on this phenomenon. For instance, the studies of Ferrer a Banderlipe (2012) and Ferrari, Ferraro, Profeta, and Pronzato (2018) found a positive effect of board gender on the market price per share. However, Dobbin & Jung (2008) found a negative effect of board gender on the market price per share.

The board size of listed manufacturing firms in Nigeria and their market price per share have a direct pathway coefficient and t-value of 0.694 and 3.50 respectively, and this is significant at the value of 0.000 or 1%. This connotes that board size has a significant positive direct effect on the market price per share of listed manufacturing companies in Nigeria, indicating that an increase in the number of directors sitting on board will increase the market price per share of listed manufacturing companies in Nigeria by 1%.

This indicates a productive board which means quality and not just the size of board matters after all. Thus, companies with a few board members can be encouraged to appoint more high-quality individuals to the board whose decision will continue to impact the shareholders' wealth positively. Granting the apriori expectation of the impact of board size on the market price per share which is to have a positive impact as the theoretical backing proposed by Lipton and Lorsch (1992) prescribed eight to nine board members to perform better than the small board of five members because of their resources, capabilities and broader external contractual relationship. However, this study observed that most companies have up to eighteen (18) board members who are large enough to positively impact the shareholders' wealth, while some companies still have less than the prescribed board membership of not less than five in the code of corporate governance in Nigeria. For instance B.O.C. Cases Plc has four members sitting on the board which is less than the prescribed code of a minimum of five. Thus, this result's positive effect reminds the companies with a few board members that there is a need to restructure their board for the betterment of shareholders' wealth of sampled manufacturing companies—this prescribed the existing literature on this phenomenon. For example, the studies of Dobbin & Jung (2008) and Sayumwe and Amroune (2017) found a positive effect of board size on the market price per share. However, this result is contrary to Ferrer & Banderlipe (2012) result found an insignificant effect of board size on the market price per share. Board size does not impact the market price per share of listed manufacturing companies in Nigeria. The third null hypothesis was estimated using regression analysis. The magnitude of the impact of board size on the market price per share indicates a direct pathway coefficient and t-value of 0.695 and 3.50 respectively, with a significant value of 0.000 meaning that board size has a significant positive impact on the market price per share. Subsequently, the relationship is statistically significant; thus, we reject the null hypothesis that board size does not impact shareholders' wealth and concludes that there is a significant positive impact of board size on shareholders' wealth of listed manufacturing companies in Nigeria. A significant positive impact of board size on the market price per share indicates that the board needs to be more effective in productive and ensure that high-quality member is appointed to the board and not just the board's size should matter after all.

This study’s findings have practical, theoretical and regulatory implications. This implication signifies the study's contribution to knowledge which is expected to benefit the management, regulators, policymakers, shareholders, and researchers. One of the important policy implications is that, the variables used suggest that there is a need to uphold the application of corporate governance mechanism by the management. This will, however, provide an effective and efficient dividend decision of the board of listed manufacturing companies in Nigeria, especially manufacturing companies with fewer or higher board members, also companies with none or very few female board members.

The positive effect of board gender diversity and board size on market price of share of listed manufacturing companies in Nigeria as shown by the empirical evidence may have an acceptable explanation. More so, another guide to policymakers in respect of decision regarding the size of the board members, emphasis should be on the quality, effectiveness, and efficiency of the members not the numbers of the board of directors of manufacturing companies. As such the policymakers should consider the need of all sectors in respect of the size of the board rather than assume that one size fits all situations. Also, the entire idea of advocating for a reasonable number of female directors on the board is associated with a firm's tendency to positively affect quality of financial decision capable of improving market price of share which places them as a better monitor against the men of listed manufacturing companies in Nigeria.

5.0 CONCLUSION AND RECOMMENDATION

There is a significant positive impact of board gender diversity on the market price per share meaning that a high number of women directors on the board increase the market price per share. This explains the diligence and risk-averse role of a woman in making a decision that optimizes the market price per share.

There is a significant positive impact of board size on the market price per share, meaning that an increase in the board's size increases the market price per share. As such, the number of directors sitting on the board does matter in decision making and not just the boards 'efficiency and effectiveness in quality decision making. Too few members on the board can slow down decision-making, thereby reducing effectiveness and efficiency in quality decision making. However, a reasonable high number of directors can improve the decision process by contributing their collective competence and reasonable ideas flow from many board members.

It is, therefore, recommended that for the effective and efficient discharge of the responsibilities of the Board of directors of listed manufacturing firms in Nigeria, there should be an appropriate balance of skills and diversity (including experience and gender) without compromising competence, independence and integrity of the board and not just its size. Emphases should be on the quality of members on the board, as this will go a long way in creating enabling atmospheric conditions for dividend decision that enhances the wealth of the shareholders.

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QUEST FOR SUSTAINABLE GROWTH, DOES FOREIGN DIRECT INVESTMENT STILL MATTERS? EVIDENCE IN SOME SELECTED AFRICA COUNTRIES.

By

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ABSTRACT

The debate on the role of Foreign Direct Investment in promoting rapid growth and development of the developing economies remain inconclusive. This paper examined whether FDI still matters in Africa, with the proper utilization of panel data estimation technique on the annual country data that were sourced from world Governance and Development Indicators. Using random and fixed effect model, the results reveals that some important variables such as coefficient of trade openness, rule of law, political stability, capital formation and population positively determined economic growth in Africa, accounting for about 2, 1, 65, 170, and 396.7 percent increase in economic growth. While, FDI and inflation were found to have negative impact on economic growth accounting for 21.4 and 2 percent fall in economic growth over the study period. The study then recommends amongst others formulation and implementation of policies that encourage domestic investment in the continents.

Keywords: Economic Growth, Foreign Direct Investment, Rule of Law, Africa, Panel Data.
JELCODE: O40, F21, K19, E52, E62.

1.0 INTRODUCTION

Foreign direct investment (FDI) is argued to be a growth enhancing measure that play a pivotal role in growth and deployment of not only the investing economies but also the host economies through creation of massive employment, reduce poverty and inequality, favourable balance of payment and trade, exchange rate appreciation and enhance economic growth and development (UNCTAD, 2018). Atique, Ahmad and Azhar (2004) also argued that FDI has the propensity to trigger rapid investment in an open economy beyond its capacity to save. Given the low level of savings in developing economies including Africa, FDI can complement the savings gap needed for rapid investment, create employment, and reduce poverty, and inequality and economic growth in general.

The global net inflow of FDI was $859 billion out of which developing economies received 72 percent $616 billion in 2020, the total FDI inflow in Africa stood at $46 billion, Asia $476 billion and $151 billion in Latin American countries in the same year (UNCTAD, 2020). Out of the $46 billion inflow to Africa, Egypt is the largest recipient of FDI in the continents attracting $7.4 billion, followed by Ethiopia, Nigeria, Ghana and Morocco with $3.6 billion, $3.5 billion, $3.3 billion and $2.7 billion respectively in 2020. The top ten investors in Africa include, USA $5.7 billion, United Kingdom $5.5 billion, France $4.9 billion, China $4.0 billion, South Africa $2.4 billion, Italy $2.3 billion, Singapore 1.7 billion, India $1.4 billion, Hong Kong $1.3billion, and Switzerland $1.3billion (UNCTAD, 2020).

Within the African sub-region, North Africa continue to lead with the total inflow of $13 billion, $11.3 billion to West Africa, $7.6billion to East Africa, $5.7 billion to Central Africa and $3.8 billion to Southern African countries (UNCTAD, 2020). Oil and gas sector, communication, electronics, automobile, manufacturing and agriculture are the major recipient of FDI in the continent.

This massive inflow of FDI has benefited almost all African countries, via employment generation, increase income, reduction in poverty and inequality, technology transfer, skills and man power development, export and economic growth and development (Agrawal,2013).

It has been argued that the host countries capacity to attract FDI depends on level of the GDP per capita, a country endowed with human capital can benefit from technology based FDI. In addition, infrastructural development, security, government policies, and trade Openness has also been highlighted as a critical factor that significantly attract foreign investors to the host countries and hence, the reason why countries put in place liberal policies that un-restrict in and outflow of goods (Agrawal, 2013).

Despite been regarded the major source of development fund, the impact of FDI on economic growth in developing economies has become a debatable topic in recent decades. Some studies such as Atiue, Ahmad and Azhar (2004) argued that FDI impact on economic growth via human capital development, capital formation and internal trade. Similarly, De Mello (1997) reported that it encourages the adoption of new technology through technology transfer in the production process. While Alfaro, Chanda, Kalemlioozcan and Sayek (2004) reported that, the impact of FDI on economic growth depends on the development of the financial market. On the other some studies reported hand, that it has become an avenue of luting public treasury and causing massive capital flight in the continents in the form of profit repatriate from the host country (Thomas, 2014, Masigia, 2018 Ndiaye & Xu, 2018).

It is against the above background that this paper seeks to examine whether FDI still matters in economic growth in Africa.

The rest of the paper are decomposed into section two literature review, section three, methodology, section four result and analysis and section five presents the summary, conclusion and policy recommendations.

2.0 CONCEPTUAL ISSUES

There are various definitions of FDI, for instance, Griffin & Pustery (2007) view FDI as the ownership or control of 10 percent or more of an enterprises voting securities or the equivalent interest in unincorporated businesses, this definition did take into consideration where the investment take place. Farrel (2008) also define FDI as a package of capital, technology, management and entrepreneurship that allows a firm to operate and provide goods and services in a foreign market. This definition is broader than the Griffing & Pustery definition because it highlights the fact that they can operate beyond their home country but only consider the foreign market neglecting the domestic ones. FDI according to International monetary Fund (2014) is the investment that involves a long-term relationship reflecting a lasting interest of a resident entity in one economy (direct investor) in an entry based in an economy other than that of the investor (Foreign countries).

Economic growth refers to the increase in a countries production or income per capita. It is one of the major indices considered by almost all countries in the world in measure progress of a country, level of wellbeing of the masses. In economics, many variables are said to be effective in economic growth, for instance, technology, physical capital, human capital and so on. Meanwhile, foreign direct investment facilitates the movement of physical capital from capital surplus countries to capital deficit countries especially developing countries lacking the much-needed capital for investment. FDI may influence economic growth in two ways, directly, through increase production, employment generation, value added and increase export, and indirectly via technology, knowledge and know-how, positive externalities, technology spillover, human capital formation, and efficiency transfer from one country to another (Chakrabarti, 2001 and Mehdi, 2012).

3.0 THEORETICAL FRAMEWORK

Studies have identified various channels through which foreign direct investment contributes to economic growth. To the neoclassical growth theory, FDI inflows increase the stock of capital in host countries thereby promoting rapid and sustainable rates of growth than would be possible than relying on domestic savings. Endogenous growth theory postulates that technological advancement induce economic growth by creating externalities that compensate for diminishing returns to capital (Romer, 1990; Mankiw, Romer & Weil, 1992). FDI can therefore promote economic growth by allowing host countries access to advanced technologies not available domestically. It has also been argued that FDI leads to increased competition in the domestic market, which can cause greater efficiency of domestic firms; improved managerial practices may be transmitted to domestic firms to a more modern high capacity productive once. FDI help in training of domestic labor, strengthening of human capital development that generate positive externalities and promote economic growth. It also has the potential to increase access to export markets thereby increasing favourable balance of payment and trade especially in developing countries having weak industrial base.

4.0 EMPIRICAL REVIEW

Mehdi (2012) investigated the impact of foreign direct investment on economic growth in Southern Asia, using fixed and random effect model reported that, foreign direct investment, human capital, economic infrastructure and capital formation significantly impact on economic growth, the study also report that inflation, population and technology gap were found to have negative impact on economic growth. In a separate study, Petr & Beata (2016) investigated the impact of FDI on economic growth in Central and Eastern Europe, using random and fixed effects model, report that both foreign direct and domestic investment significantly affect economic growth. In addition, Argiro (2003) investigated the impact of foreign direct investment on European Union, using pooled regression; report that FDI, trade openness, and human capital significantly determined economic growth. Agrawal (2013) in a similar study also investigated the impact of foreign direct investment on the BRICS (Brazil, Russia, India, China and South Africa) economies, using panel error correction model (PECM), report that there is evidence of long run equilibrium running from FDI to economic growth. Mohammed & Mahmoud (2013) investigated the impact of foreign direct investment on economic growth, using available literature; report that quite a significant number of studies shows that foreign direct investment has positive impact on economic growth with few studies showing that FDI impact negatively on economic growth and others shows inconclusive result. The study also report that human capital, financial market development and trade openness are complementary factors between domestic and foreign direct investment. Okumoko & Karimo (2015) investigated the impact of foreign direct investment on economic growth, using structural vector autoregressive model (SVAR), report that FDI contemporaneously affect economic growth. Neils & Robert (2017) investigated the impact of FDI on economic growth in developing countries using pooled regression; found that developed financial market and FDI significantly affect economic growth of 37 countries of Latin America and Asia. Akpan & Gamaliel (2017) investigated the impact of foreign direct investment on economic growth in Africa, using vector autoregressive model, report that FDI has slight positive impact on economic growth.

Music (2018) investigated the impact of foreign direct investment on economic growth in Bosnia and Herzegovina using multiple regression, reported that foreign direct investment accelerates the pace of economic growth through increase in national productivity, exchange rate stability, favourable balance of payment and trade, and creation of employment opportunities in the host countries.

Sabernia, Sabernia & Shamkhi (2018), reported that financial market plays a crucial role in attracting foreign direct investment into the host country. The study futher reported that there is significant positive relationship between foreign direct investment, welfare and economic growth. While using vector error correction model, Masigia (2018), investigated the impact of foreign direct investment on economic growth reported that foreign direct investment, real exchange rate and economic growth are positively related in the short run and long run while in the long run foreign direct investment has negative relationship with government expenditure.

Thomas (2014) investigated the impact of foreign direct investment on economic growth in both developed and developing countries, using generalized method of moment (GMM), report that foreign direct investment affect productivity negatively in developing countries. While it has positive impact on economic growth of developed countries, it was also reported that it has a positive impact on the developing countries in the short run through technology transfer while it was reported in developed countries that it impacts positively on economic growth in the short run through knowledge spillover. Similarly, Ndiaye & Xu (2018), investigated the nexus between foreign direct investment and economic growth in West African Monetary Union using static panel data model, reported that foreign direct investment, capital stock, inflation and labour force have negative effect on economic growth while gross fixed capital formation, government expenditure and trade openness were found to have positive impact on economic growth.

Ogbokor (2018) investigated the nexus between foreign direct investment and economic progress using dynamic model, reported that the foreign direct investment and real exchange rate significantly predict economic growth while real interest rate, trade openness does not predict economic growth.

5.0 DATA AND METHODOLOGY

Give the scope and objective of this study, Panel data was employed because it increases the efficiency of estimators, and reduced the problems of multi-collinearity, autocorrelation, endogeneity in addition to increase in the degree of freedom in the estimations as well as help in controlling the problem caused by country and time specific effects. The study employs annual country data for a period of 1990 to 2018, which were obtained from World development indicators (WDI) 2019 and Worldwide Governance indicators (WGI) 2019 to achieve the objective of the study.

The model is specified as follows:

$$Y_{it} = \alpha Y_i + \tilde{O} Z_{it} + \pi_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where:

Y_{it} is the dependent variable (GDP) in country *i*, and Z_{it} is the vector of country specific regressors (FDI, Inflation, Trade Openness, Population, rule of law, and political stability), α measures the relative effect of foreign direct investment indices on economic growth. μ_{it} is the unobserved country specific effects. The π_{it} is the usual white noise error term.

Because of the difference in policy, and other environmental factor in those economies, random effects model were employed. In the random effect method, the constant is treated as random, that is, it allows different constant for each individual unit to be random. The presence or otherwise of individual effect is checked using LM-test. Where the null hypothesis state that all the constants are same, and hence, the model:

$$F = \{ (R^2_{FE-} R^2_{CC}) /N-1\} / \{(1-R^2_{FE}) / NT - N - K)\} \ldots\ldots\ldots\ldots\ldots\ldots (2)$$

If the calculated F value is greater than F critical value, we reject the null hypothesis. In the fixed effect model, the cross sectional effect is captured by the dummy Di which represent the countries. The fixed effect model is started as:

$$Y_{it} = \alpha Y_i + \tilde{O} + \sum Di + \pi_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3)$$

An alternative method is the random effect model that assumes that the constant for each country is random not fixed. The fixed effect assumed that each country differs in its intercept term whereas random effect model assumed that each country differs in error term. The random model can be stated as follows:

$$Y_{it} = \alpha Y_i + \H{O}Z_{it} + v_i + \pi_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (4)$$

The choice between fixed effect and random effect model was made through Hausman test (1978). Which was based on the idea that under the null hypothesis of no correlation, both Ordinary Least Squares (OLS) and Generalized Lease Squares (GLS) are consistent and OLS is inefficient, while alternative hypothesis is that OLS is consistent but GLS is not. The Hausman test model is started as follows:

$$H = (\alpha^{FE} - \alpha^{RE})[(var(\alpha^{FE}) - var(\alpha^{RE})]^{-1} (\alpha^{FE} - \alpha^{RE}) \to X^2(\Omega) \ldots\ldots\ldots (5)$$

If the value of H statistic, we reject the null hypothesis that random effect model is consistent and accept the fixed effect model.

Table 4.1: Pooled OLS, Random Effects and Fixed Effects Models

Variables	*PooledModel*	*Random Effects*	*Fixed Effects*
Fdi	1.197	-0.192	-0.214
	(2.12)*	(1.80)***	(2.16)*
Inflation	0.062	-0.002	-0.002
	(0.83)	(0.13)	(0.14)
Tradopen	-0.533	-0.004	0.020
	(6.11)**	(0.09)	(0.53)
Rulelaw	0.987	0.035	0.001
	(5.09)**	(0.45)	(0.02)
Polistab	-0.013	0.053	0.065
	(0.08)	(1.12)	(1.48)
Capforma	0.137	0.188	0.170
	(0.41)	(1.95)***	(1.88)***
Pop	23.045	3.926	3.967
	(4.07)**	(1.85)***	(1.97)***
_cons	-31.661	2.753	3.127
	(1.57)	(0.34)	(0.56)
R^2	0.38		0.12
N	156	156	156
Breush-Pagan LM test		944.73*	
Hausman test			8.31

Source: Authors calculation using Stata 14

Note *,, & *** indicate 1%,5% &10% level of significance**, Standard F-test to choose between Pooled OLS and Fixed Effects Models, Hausman Test to choose between Random and Fixed Effects Models and the T-ratio in parenthesis

From Table 4.1, by way of analysis, the pooled OLS and random effect model test was conducted after which Breush-Pagan LM-test was conduct to ascertain whether there is individual specific effect among the countries under study. The LM-test rejected the null hypothesis of no individual specific effect and accepted the alternate hypothesis (hence, the rejection of pooled OLS). This has necessitated fixed effect model test having established the present of individual specific effect. However, the choice between the random and fixed effect model was made using Hausman test, where the results favours the fixed effect model, in which our interpretation was based on. From the table, the coefficient of FDI did not conform to the *appriori* expectation though significant at 10 percent; this implies that as foreign direct inflow increase in Africa, economic growth reduces by 0.21

point. This is in tandem with the findings of Ndiaye & Xu (2018) who reported that FDI has negative impact on West African Monetary Union Member nations.

The coefficient inflation that is a measure of economic stability conform to *appriori* expectation although statically insignificant at any conventional level. This is also connected with the low level of productivity and the deteriorated foreign exchange that has seriously affected the value of currencies of must African countries, although there is no theoretical postulation that back this assertion. This finding also conform to results of Ndiaye & Xu (2018) who reported a negative impact of inflation on economic growth in West African Monetary Unions menbvers.

The coefficient of trade openness which measures the openness of the economy though conform to *appriori* expectation but statistically in significant at any level, this is simply connected to the fall in the oil price at the international market couple with the low level of productivity in Africa. In addition, openness of the African borders has serious negative implication on the African economies in general as looters takes the advantage to move African resources out of the continents for their personal gain. This conform to the findings of Argiro (2003).

The coefficient of rule of law, which is one of the major factors considered by foreign investors conform to *appriori* expectation though statistically insignificant at any level. This is because of the high rate of corruption that has marred the law enforcement agencies although several security reforms have been introduce to cope the menace and ensure a strong security capable of boosting the confidence of both domestic and foreign investors in the region.

The coefficient of political stability conform to the *appriori* expectation even though is not statistically significant, the simple explanation is the fact that most African countries are seriously having the challenges of instability in form of insecurity, which are politically incline but effort are been made to restore stability in the continent so as to attract foreign direct investment.

The coefficient of capital formation as a measure of investment is positive and significant at one percent, these shows that investment play a vital role in Africa especially domestic investment. since most of the entrepreneurs are indigenous and the possibility of capital flight is very low and the possibility of re-investment of profit earned is high, the impact can easily trickle dawn to rapid economic growth and development.

Population as a measure of market size has a positive and significant impact on economic growth in Africa. This is simply because of the large size of African population that makes it a potential market for investors.

6.0 CONCLUSION AND POLICY RECOMMENDATIONS

The study examines whether FDI still matters in economic growth in Africa African Countries over a period of 1990 to 2018. The important variables adjudge to be crucial determinants of economic growth in Africa were uncovered in a panel data, where static panel data models such as Pooled OLS, Fixed effects and Random effects where applied respectively. Firstly, trade openness, rule of law, political stability, capital formation and population were found to have positive impact on economic growth while foreign direct investment and inflation were found to have negative impact on economic growth. The study therefore concludes that trade openness, political stability, rule of law and population have positive impact on economic growth while foreign direct investment and inflation have negative impact on economic growth in Africa over the study period. Hence the conclusion that foreign direct investment does not matter in Africa.

The major policy implication of this findings is that, the need for a serious financial sector reforms that can be capable of mobilizing savings domestically addition to the provision of subsidies of all kind to the investors. A policy that encourage reinvestment of profit especially by the domestic investors should be encourage, this could be achieve through giving tax incentives on profit to be reinvested and heavy tax on the profits not meant for reinvestment and financial assistance to the domestic investors should be introduce in the continent to induce them complement the foreign investors.

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THE IMPACT OF ENTREPRENEURSHIP EDUCATION AND PERSONAL INITIATIVE ON SELF-EMPLOYMENT INTENTION AMONG FINAL YEAR STUDENTS OF PLATEAU STATE UNIVERSITY, BOKKOS

By

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ABSTRACT

This research sought to establish the impact of entrepreneurship education and the development of personal initiative in higher institutions of learning to self-employment intention of graduate, using Plateau State University, Bokkos, as the study setting. Field data were collected through a questionnaire survey from seven Departments consisting of 532 respondents. A hierarchical regression analysis was performed to established the relationships among the studied variables. The results showed that self-employment intention is associated with entrepreneurship education; self-employment intention is associated with personal initiative among students of Plateau State University Bokkos. The novelty of this study lies in the fact that it provides empirical evidence for explaining the antecedent on the perspective of self-employment intention, contribution to plan behaviour and personal initiative theories, and validates the hypothesis that entrepreneurship education spurs personal initiative for individuals or students to become entrepreneurs.

Keywords: Entrepreneurship education, personal initiative, and self-employment intention

1.0 INTRODUCTION

The rate of graduate unemployment in Nigeria has persistently been on the increase despite the enormous endowment of the country with human and natural resources. However, graduate unemployment is not peculiar to Nigeria or developing nations; it is indeed a long-standing global phenomenon hence it has been a common trend in many countries to find graduates of universities not able to secure decent work several years after graduation (Twumasi, 2013).

In tackling the global crisis of graduate unemployment, policymakers and stakeholders in developed countries such as England, United States of America (USA), and Germany, advocated a refocus of educational systems towards acquisition of vocational and technical skills to enhance a smooth transition into jobs for school leavers, particularly graduates of universities (Education, 1995; Oeben & Klumpp, 2021). This owes to the fact that education is important to the development of any society, particularly because the goals of wealth creation, poverty reduction and value re-orientation can only be attained and sustained through an efficient educational system which impacts relevant skills, knowledge, capacities, attitudes and values into individuals (Agi & Yellowe, 2013). Entrepreneurship education in the universities is designed to catch the attention of students' personal initiative towards being entrepreneurs after graduation which can aid them to earn a decent living. It could be said that entrepreneurship education plays a vital role in improving students' attitude, personal value, technical abilities, and self-starting skills (Aljohani, 2015). In self-employment intention, it has made the students to asses themselves on what they can do for themselves to earn a living and be their own bosses rather than helping someone to achieve his or her business goal.

In Nigeria, the state of the economy has made Nigerians, especially, the graduate and the youth at large to start identifying ideas and opportunities that will result to economic and financial gain in the near future. This is as a result of the high rate of unemployment in Nigeria. Thus, the need to integrate entrepreneurship skills in higher education curriculum becomes very important for national development.

The emergence of entrepreneurs is considered favourably as a key policy strategy in many developed nations, and entrepreneurship is given the centre stage particularly on issues of graduate unemployment and economic development. This owes to the fact that it contributes to national wealth by creating employment opportunities, opening new markets, driving industrialization, as well as increasing productivity leading to equitable distribution of income and higher standard of living for the populace (Jahanshahi et al., 2011). In light of the above, several entrepreneurship development programs such as, National Directorate of Employment (NDE), National Poverty Eradication Program (NAPEP) and more recently, Youth With Innovation (YOUWIN) and many other programs have been initiated by the Nigerian government with the aim of training, encouraging, supporting and equipping the youth with entrepreneurship skills over the years.

Many of these initiatives are said to have failed due to poor design and implementation, lack of monitoring and evaluation, and lack of value orientation among others (Magnus & Vaaseh, n.d.; Nwankwo & Ifejiofor, 2014; Obamwonyi & Aibieyi, 2014). Therefore, these programs could not appreciably reduce the rising rate of unemployment, particularly, youth and graduate unemployment. Specifically, National Directorate of Employment, (NDE) was created in 1986 saddled with the responsibility of designing programs to tackle mass unemployment in Nigeria through vocational skills training, employment counselling, job linkages as well as entrepreneurial training and enterprise creation. Regrettably, the major failure of the NDE was the inability of the program to provide post training resources for job creation as a consequence of lack of commitment by government at various levels leading to low survival rate of business established.

United Nations Educational, Scientific and Cultural Organization (UNESCO, 2008) stated that, entrepreneurship education is made up of all kinds of experiences that gives students the personal initiative, ability and vision of how to access and transform opportunities of different kinds and activities of self-employment intentions among students, specifically undergraduates to use their knowledge, creativity, and initiative to start up a business that will earn them a living rather than relying on government for decent employment. Entrepreneurship education in universities is aimed at inculcating self-employment skills and attitudes in students to motivate entrepreneurship as career by undergraduates (Middleton, 2010). Despite the introduction of entrepreneurship education as a compulsory course in Nigerian universities, the aspiration for white collar jobs and graduate unemployment has persistently been on the increase. This leads to unemployment among the graduates. Oyedeji and Salau (2010) stated that, despite increased emphases on vocational education for acquisition of occupational skills and competencies, the unemployment rate has continued to soar high in Nigeria especially among the graduates. Could it be as a result of lack of university support on entrepreneurship? People who lack knowledge of entrepreneurship education or requisite support from the institution in which they graduate from tend to be more attracted to white collar jobs in companies rather than having the ideas of their own business. A large percentage of graduates, search for jobs rather than think of starting a business or creating jobs for themselves (Ogundele, 2012).

The nature entrepreneurship courses in Nigeria universities are more theoretical and lacking in the practical aspects. To a great extent, this is due to inadequate equipment availability. The practical side suffers a great deal and it affects the technical support that is available for innovation. Students are just taught the semantics involved in entrepreneurship and left to wonder after school. This form part of the reason why they prefer to depend on white collar jobs after school rather than developing the intention of starting their own business (Ogundele, 2012). Some of the challenges may include poor knowledge-based economy, lack of relevant materials and inadequate capital as well as lack of proper understanding of the appropriate characteristics needed for effective entrepreneurship (Mostafa, Yunusa & Pelemo, 2010).

Therefore, based on the personal initiative among student's self-employment intentions in universities, this research explored the extent to which exposure to entrepreneurship education will affect student's personal initiative and expression of self-employment intention among students in Nigeria universities.

2.0 THEORETICAL FOUNDATIONS

2.1 Shapero's Model of Entrepreneurial Intention

Shapero and Sokol (1982) developed the Shapero`s Self-employment Intentions Event Model. Intention formation is a function of interactions among contextual factors which impacts individuals perceived feasibility. It also means, the attractiveness for a person to start up his own business and perceived feasibility, implies the degree to which people see that they are able to start their own business actuating an affinity to act in the face of opportunities. The model assumes that, inertia in human behaviours is changed by a negative or positive external event, the trigger events that alter an individual's circumstance or future plans. For example, decision of future work, perceived desirability, perceived propensity and perceived feasibility.

2.2 The Theory of Planned Behaviour

Ajzen and Fishbein (1980) propounded the theory of planned behaviours from the Theory of Reasoned Action (TRA). Perceived behavioural control was employed to predict human behaviours that is not completely under voluntary control. However, not all intentions translate into actual behaviours which informed the premise for the introduction of perceived behaviours control. The concept of perceived behavioural control assets that control beliefs give rise to either perceived ease or difficulty in the performance of behaviours. This implies that, intention is a direct determinant or antecedent of behaviours performance while perceived behavioural control attitude and subjective norm are regarded as the onto cadent of intention. The Theory of Planned Behaviours (TPB) (Ajzen, 1988) has developed as a stand out amongst the most predominant and well known conceptual frame work for the investigation of human activity and specifically the individual's intention to take part in different activities. TPB has a major place with intention model and has been consistently connected to the field of entrepreneurship, given validated research out comes. In essence, intention is best anticipated by attitude towards the behaviours, subject norms and perceived behaviours, subjects' norms and perceived behaviours control hence with regards to entrepreneurship education, it then suggests that, participation in a program can influence an individual's attitude, perceived behavioural control and subjective norm in the development of student`s intention to create new business. Zhang et, al (2015) found that controlled behaviours and social norm are positively associated with entrepreneurship intention. They conclude that controlled behaviour is the main drive of entrepreneurial intention among university students because it has higher magnitude or efforts.

2.3 The Theory of Personal Initiative

Frese and Fay's (2001) theory assumes that human beings with certain personal traits are influenced by their environment and the behaviours they possess. This is also related to the concept of developing initiative which is based on the fundamental idea that human beings are not only influenced by their environment but also influence themselves (Frese, Hass, Fredrich, 2014). It is seen as behaviours syndrome that results in an individual's taking an active and self-starting behaviours to workout goals/tasks. These individuals are persistent in overcoming inability/set-back`s in the process of starting self-employment intentions ventures. Its notes that people need to adjust to any social and environmental change that may occur (Frese &Fay 2001; Glaub, Frese, Fischer & Hopper, 2015) showing initiative involving acting openly on ideas that come up and have been neglected by others within the community.

In studying personal initiatives of student's self-employment intentions into enterprise creation, this study utilizes personal initiative which is a behavioural syndrome that results in goal attainment (establishing business). Here, individuals use their proactive, overcoming ability and self-starting behaviours (Frese et al,1990) to create social businesses. This suggests that taking initiative particularly with regards to starting a venture, they are sporting and acting on opportunities by keeping one`s mind open to new ideas that other people may not have noticed. Therefore, when social entrepreneurs increase their initiatives, it may result in active pursuance of self-employment intentions activities. This shows that personal initiative shapes the way people perceive social needs in the society, decide on the best way to solve reoccurring problems and emerging opportunities, but immediately starts social venture that solves peoples' needs within the community. This links well with frees (2015) and Parker, Bindl, and Strauss, (2010) who documented that initiative drives self-employment intentions behaviours.

Entrepreneurs with personal initiative may create business. These studies look at the power of personal initiative in enhancing the behaviours of entrepreneurs in the study population. Base on organization to solve social problems. In summary, this study will contribute to personal initiatives among student's self-employment intentions into business creations.

H_1: *Entrepreneurship education has impact on self-employment intentions.*

Entrepreneurship Education and Self-employment Intention among Students

Self-employment intention individuals who receive basic entrepreneurship education are more likely to engage in entrepreneurship. Entrepreneurship education is an important method of encouraging entrepreneurship because, it triggers feeling of independence and self-confidence, enables the recognition of alternative career options, broadens individuals' horizons by enabling them to perceive and take more opportunities. However, what changes the innovative start-up intention of students in educational program is not what they learn about entrepreneurship itself but intention of students in educational programs. Universities most create self-employment intention supportive environments that encourage entrepreneur's intention. Caloghirou, Protogerouand and Deligianni, (2013). Focused on the role of education in the promotion of entrepreneur activity among students and young university graduates. This study examined the link between relative educational programs design to stimulate knowledge- intensive entrepreneurship with emphasis on education. In a related research, Bilić, Prka, and Vidović, (2011) assessed the influence of education on entrepreneurship intention.

Entrepreneurship education is a process of instilling, growing, and forming student's self-employment intentions competence through improving knowledge obtained from life and their experience and practical engagement in lectures. Knowledge learned, skills trained and developed during a semester of taking the course is expected to boost students' motivation and attitude from inside towards becoming an entrepreneur (Raposo & Dopaco, 2011). Entrepreneurship education is able to improve students' self-employment intentions developed during taking the course and provide a positive impact on students' self-employment intentions (Khalili et al, 2014; Farhangmehr et al, 2016; Jakubiak and Basardien, 2016). Self-employment intentions is considered as a starting point for students before they venture out establishing new businesses and taking role as new starters. As the need of an economy, there is a demand to increase the number of entrepreneurs in the society not only because of their contribution to providing jobs, but because of their positive impact on regional gross domestic product. Then, the task is how student's entrepreneur intention will be extensively developed and how to make self-employment intentions a valuable perspective to be included in the process of teaching and learning, and also level of self-employment intentions as one of learning outcome achievements indicators to measure the propensity among students to take part as new young entrepreneurs after graduating can be achieved. Entrepreneurship education has substantial role for developing student's self-employment intentions. Students who undergo the study of entrepreneurship education receive knowledge that can make them to see opportunities so as to be self-employed to earn a living. Although direct self-employment intention has great benefits, the main effort of providing entrepreneurship education with all aspects of students' intention including knowledge, skills and practical capability as end learning outcomes is a valuable means to shaping up the right students' self-employment intentions to start running new business ventures.

H_2: *Personal initiative has impact on self-employment intentions.*

Personal Initiative and Self-employment Intention among Students

Following suggestions by Linan, (2014), studies on entrepreneur intentions should explore further the influence of personal level variables on self-employment intention. Personal initiative is positively a construct that is significantly associated with entrepreneurship activity (Frese, Hass, & Friedrich, 2016). However, the link between personal initiative and self-employment initiative is scarcely explored, especially on the context of emergent economies. More specifically, only a handful of studies have explored the impact of an individual's personal initiative on self-employment intentions (Johnmark, Munene, and Balunywa, 2016). Personal initiative has a number of dimensions which include; innovation, resourcefulness, creativity, dedication, vision, resilience and optimism among others, it is through times of Upheaval that entrepreneurs often take initiative by supporting opportunities in the environment and using their creativity to bring about innovation. Today, scholars (Dakung et al, 2016; Frese 2015) have argued that entrepreneur intention is a function of self-employment personal initiative. Since entrepreneur personal initiative is associated with self-employment intentions, it predicts that power can be enhanced even in the area of solving problems. Meaning that, personal initiative is key to becoming a successful entrepreneur. This study provides support for the assertion of the personal initiative theory's prescription that individuals with self-starting and proactive behaviours will attend certain goals. This is also related to developing initiative and individual's career plans which can be built through mastery experience. People with personal initiative skills obtain better result, perform better task and improve innovation and entrepreneurship skills.

3.0 RESEARCH METHODOLOGY

3.1 Research Design, Population and Sample

This study employed a survey design. The survey used a cross-sectional approach where data was collected at a point in time from the respondents. The departments were purposively sampled because they were taught entrepreneurship education and are business management related. A total of 525 questionnaires were shared and 472 were fit for analysis. Constituting 89.9% of the entire questionnaires distributed. The study instrument (questionnaire) was designed on a 5-point Likert scale (1= strongly disagree, 2 =disagree, 3 = Undecided, 4 = agree, 5 = strongly agree), which evaluated the relevance and suitability of the measurement items.

3.2 Data Analysis

It describes specific characteristics of the study variables and generates data that allows for relationships or associations between two variables to be identified (Sekaran, 2005; Babbie & Mouton, 2006; Welman, Kruger & Mitchell, 2005). The Statistical Package for Social Sciences (SPSS) version 2.6 was used for data screening and preliminary data analysis, while hierarchical regression was used to test the stated study hypotheses.

The demographic characteristics of the respondents are presented in Table 1.

Table 1: Background information on the respondents

		Frequency	Percentage %
Age Group	18-25	306	64.8
	26-35	8	3.5
	36-45	139	29.4
	46 & above	19	4.0
	Total	472	100
Gender	Male	264	55.9
	Female	208	44.1
	Total	472	100
Marital Status	Single	393	83.2
	Married	14.6	14.6
	Widowed	6	.6
	Divorced	14	.14
	Total	472	100
Numbers of Employees	1-2 Employees	41.5	41.5
	3-4 Employees	5.1	5.1
	5-6 Employees	35.8	35.8
	7-8 Employees	12.7	12.7
	9-10 Employees	4.9	4.9
	Total	472	100
Business Ownership	Sole proprietorship	311	65.9
	Partnership	161	34.1
	Total	472	100
Religion	Christianity	424	89.9
	Islam	28	5.9
	Others	20	4.3
	Total	472	100

Source: Primary Data

The sample characteristics revealed that 306(64.8%) fell within the age bracket of 18-25 years, indicating that this age category is more in with personal initiative and entrepreneurial education for Self-employment Intention among students in Plateau State University Bokkos. Also, as regards to the gender, the males are more in number constituting 264(55.9%) than females 208(44.1%). This suggests that, the ones with the highest percentage are males endowed with personal initiative and entrepreneurial education for self-employment intention among the students.

Similarly, under the marital status, 393(83.2%) were singles suggesting that among the students with self-employment intention, the singles dominate other categories. This explains that, this same category has more personal initiative and entrepreneurial education for business activities. Additionally, as regards business ownership, 311(65,9%) are those with self-employment intention to than those with 158(33.5%) who are for partnership for self-employment intention. More still, as concerning the number of employees, 41.5(41.5%) indicated that they intent to employ 1-2 employees when they kick start their business compare to others numbers of employ desired by other respondents.

Finally, in terms of religion, Christianity is more with 424(89.8%) meaning that more with the self-employment intention are Christians compared to Islam and other religion.

Table 2: Total Response Rate

Item	No. of copies of questionnaire
Distributed	525
Received	493
Discarded	21
Usable	472
Total response rate	89.90% No. of copies of questionnaire

Source: Field Survey, 2020

The Table above shows that out of the 525 copies of questionnaire issued, 493 were retrieved from the respondents. However, 21 were discarded because they were not properly filled by the respondents and 472 were used for this analysis.

3.3 Results Zero Order Correlation Analysis

A zero-order correlation analysis was performed to establish the associations among the studied variable indicators and education self-employment intention. The results are presented in Table 4.

Table 3: Zero Order Correlation Results

Study Variables	Mean	Std	1	2	3	4	5	6	7
Resilience (1)	4.69	.99	1						
Proactiveness (2)	5.01	.89	.599**	1					
Self-Starting Behaviour (3)	4.84	.89	.557**	.748**	1				
Pedagogy (4)	4.69	.94	.441**	.447**	.435**	1			
Course Content (5)	4.92	.92	.465**	.315**	.539**	.658**	1		
Personal Initiative (6)	4.80	.80	.839**	.892**	.876**	.508**	.587**	1	
Entre-education (7)	4.81	.85	.497**	.537**	.534**	.913**	.908**	.601**	
Self-employment Intention)	3.83	1.30	.391**	.362**	.393**	.372**	.337**	.440**	.390**

*Significant at 10%; *Significant at 5%; **Significant at 1%*
***. Correlation is significant at the 0.01 level (2-tailed).*

Results of correlation in Table 3 reveal that resilience significantly correlate with self-employment intention ($r=0.391$, $p\leq0.01$). Self-starting behaviour positively correlates with self-employment intention (r=0.393, p≤.01). More so, Personal initiative significantly and positively correlates with self-employment intention (r=0.440, p≤.01). Entrepreneurial education is also significantly and positively associated with self-employment (r=0.390, p≤.01).

3.4 Regression Analyses

A hierarchical regression analysis was conducted to establish whether there was a relationship between the predictor variables and the criterion variable in this study.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.380a	.230	.222	1.14702	.230	27.882	5	466	.000	
2	.480	.257	.321	2.13594	.313	32.863	7	483	.000	1.552

a. Predictors: (Constant), ENTREEDUCT, LINT(Business Ownership), LINT(Age), LINT(Gender), PERINITIATIVE

b. Dependent Variable: SELFINTENTION

Table 4 shows the percentage of prediction of independent variable on the dependent variable. It could be seen that personal initiative and entrepreneurial education predict 48% of self-employment intention among Plateau State University Students. The remaining 62% takes care of other factors that could explain the same study. The model also established a positive significant relationship among our study variables (p<.05).

Table 5: Hierarchical Regression Testing Hypotheses

Details	**Model 1**	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**VIF**
Constant	3.939	4.106	3.4904	.150	-.358	
Age		.037	.039	.019	. -020	1.000
Gender			.039	. -031	. -027	1.004
Biz Ownership			.088	.108	.104	1.004
Personal Intention				.444***	.328	1.005
Ent. Education					.191***	
R^2	.037	.057	.105	.455		
ΔR^2	.001	.003	.011	.207		
ΔF	.646	.77	1.729	30.457		
Durbin Watson						1.298

***P <. 001; n =472

The above hierarchical regression test indicates that the two hypotheses are positive and significant. This means that there is a relationship between the variables (personal initiative and entrepreneurship education) and self-employment intention among final year Students of Plateau State University, Bokkos. in the context of this study.

Table 6: Results of Hypothesis Testing

Hypotheses	Statement	Path	Remark
H_1	*Personal initiative is positively related to self-employment Intention among Plateau State University Students*	*PI<--- SEI*	*Accepted*
H_2	*Entrepreneurship Education are positively related to self-employment Intention among Plateau State University Students*	EED<--SEI	*Accepted*

4.0 DISCUSSION

Based on results of the test of hypothesis (H_1), it was found that personal initiative is positively related to self-employment intention. This means that most of these students do take the initiative immediately even when others do not, by always setting their own business goal and pursue them to earn their living. From the results, it clearly shows that these same set of respondents have the ability to stand and overcome any difficulty that may arise in the cause of pursuing their set objective.

The finding is in consistent with the works of Frese, Hass, and Friedrich, (2016) however, they established the relationship between personal initiative and self-employment intention is scaly explore, especially on the context of emergent economic more specifically only a handful of studies have explored the impact of an individual's personal initiative on self-employment intentions more so, Johnmark, Munene, and Balunywa (2016) documented that personal initiative has a number of dimensions which include; innovation, resourcefulness, creativity, dedication, vision, resilience and optimism among individuals, it is through times of upheaval that entrepreneurs often take initiative by supporting opportunities in the environment and using their creativity to bring about innovation for a living.

The overall result authenticates that personal initiative can explain self-employment intention in this context. This study is in line with personal initiative theory which presumes that people with self-starting behaviours, proactiveness and resilience can venture and succeed in business.

5.0 CONCLUSION AND IMPLICATIONS

This study has shown that the contents of the entrepreneurship education and personal initiative of students enhances the development and creative business ideas by stimulating critical thinking in students which motivate them to see opportunities. However, there is still a challenge on what should be defined as practical activities in entrepreneurship education and personal initiative, as most practical activities tend towards the acquisition of been self-employed. There is also clear evidence to validate that experiential pedagogical approach adopted in the university, motivate identification of business opportunities by experientially creating a shared vision of the process of entrepreneurship. Nevertheless, there are indications that the class sessions are monotonous, and may not stimulate students 'intention and focus towards self-employment intentions. This study provides valid evidence to show that adoption of effective teaching methods in entrepreneurship facilitates business start-ups, by stimulating students 'personal initiative through action-oriented teaching practices.

However, there are indications that inadequate funding may impede business start-up potentials of university students in PLASU. This study concludes that the experience, skill and knowledge gained through entrepreneurship education in the university motivate students to write business plans. Nevertheless, due to lack of facilities or equipment students are been thought theoretical aspect but the practical aspect is being lack can lead to student not to have the bases so as the graduate and be self- employed. Another inference when a student is being educated well with the provision of the practical aspect it will enhance his/her personal initiative to engage in what they are best at which may impede their abilities to develop business initiatives, which they will create job for themselves so as to earn a living and provide jobs for our growing population.

5.1 Theoretical Implications

The theoretical implication can be drawn from two perspectives: first, whether or not the findings support the tenets of the existing theory. Second, whether or not the findings have filled the theoretical questions and gaps. As such, the following implications are derived from the findings and discussions of this study. This study makes a significant contribution to the field of knowledge by providing contribution towards a methodological position; where it contended and provided evidence for explaining how entrepreneurship education and personal initiative enhance self-employment intention. The findings provide empirical evidence showing that entrepreneurship education and personal initiative have an impact on student's self-employment intention in Plateau State University Bokkos. Theoretically, self-employment intention can now be explained in terms of these factors.

The integration of plan behaviours, personal initiative and self-employment intention theories urge students to make survival decisions, which have been supported by this study. The findings showed that self-employment intention is associated with entrepreneurship education; self-employment intention is associated with personal initiative among students of Plateau State University Bokkos. Ajzen and Fishbein (1980) theory of planned behaviours was derived from the Theory of Reasoned Action (TRA). The theory of planned behaviours enlightens on how the state of mind of an individual determined the attitude he or she is going to display on an occurrence. Here the occurrence is entrepreneurship. The theory also enlightened on the link of subjective norm in the choice of an individual or a student to become an entrepreneur and the link of perceived behavioural control of students or an individual on the pursuance of entrepreneurship as another path of career.

Frese and Fay (2001) theory assumes that a human being with certain personal traits is influenced by their environment and the behaviours they possess. It is seen as behaviours syndrome that results in an individual's taking an active and self-starting behaviours to work goals/tasks. These individuals are persistent in overcoming ability/set back`s in the process of starting self-employment intentions ventures. It notes that, people need to adjust to any social and environmental changes that may occur. This is also related to developing initiative, it is based on the fundamental idea that human beings are not only influenced by their environment but also influence themselves in order to earn a living by being self-employed.

Shapero and Sokol (1982) developed the Shapero's self-employment intentions event model (see). with regards to see, intention formation is a function of interactions among contextual factors which impacts individuals perceived feasibility which also means the attractiveness for a person to start up his own business and perceived feasibility which implies the degree to which people see that they are able to start their own business actuating an affinity to act in the face of opportunities. The model assumes that initiative in human behaviours is changed by a negative or positive external event, the trigger events that alter an individual's circumstance or future plans for instance, decision of future work, perceived desirability, perceived propensity and perceived feasibility so as to see opportunities by being self-employed.

The gap identified in the self-employment intention theory that ignores the role or entrepreneurship education and personal initiative. In view of the fact that students that undergo the study of entrepreneurship, tend to have more ideas in order to take a bold step to engage themselves into business ventures by using their personal initiative to choose what they are best at, in order to earn a living at the end so as to be self-employed.

This then provides empirical validation of the plan behaviours and personal initiative theories that students must understand so as to be able to see opportunities by engaging themself, being self-employed by taking a bold intention to start up something to earn a living by not relying on white collar jobs.

Using these theories, the central propositions conceptualized in this study are entrepreneurship education and personal imitative. In essence, students who are being educated on the study of entrepreneurship get to take personal initiative to become entrepreneurs.

Lastly, the study contributes to the development of literature relating to self-employment among students of Plateau State University, Bokkos. Therefore, the study extends the existing literature on self-employment intention for policy makers, university management, students, practitioners and researchers. Additionally, this study makes a significant contribution to the field of knowledge where it contended and provided evidence for explaining the antecedents of perspective on self-employment intention. Through this, the study has improved the understanding of factors that explained how students of Plateau State university Bokkos create enterprises.

5.2 Methodological Implications

This study provides an accurate methodological process attempting to clearly define each of the underlying constructs, where reliability and validity tests were conducted to purify the measurement scales using confirmatory factor analyses. The results confirmed the correspondence rules between both empirical and theoretical concepts. Therefore, combining these methodologies with the purified measurement items. This study provides a useful direction for future empirical research into self-employment intention. Finally, the study adopted both quantitative and qualitative approaches using a survey research method. A sequential approach was employed in data collection (first quantitative and then qualitative to supplement the quantitative data that had been collected earlier). On the whole, this design provided insights on the current or real time affairs in self-employment intention and overcomes the limitations inherent in employing one research approach.

5.3 Policy and Managerial Implications

This university should enlighten the students in Plateau State Universities, Bokkos to educate the students on entrepreneurship education so that the student will see its relevance to use their personal initiative to become self-employed. It will help the students to know to what extent their personal qualities and characteristics could influence their desire to start a business. It will equally assist the students to develop more interest on being entrepreneurs and have the beliefs that they can be successful entrepreneurs in the nearest future. The study of entrepreneurship education widens students understanding that can help them acquire the various skills, ideas creativity that can be helpful for them to be self-employed. Developing personal initiative makes many individuals to start up a business venture, see opportunity and engage themselves on something worth living.

5.4 Practical implications

The findings of this study have a number of practical implications of entrepreneurship education and personal initiative among student's self-employment intention. The findings of this study are important for students to engage in entrepreneurship to establish businesses, create jobs and contribute meaningfully to the economy. This study also discovered that it is not all about the entrepreneurship education and students taking personal initiative but rather the student’s ability to acquire and utilize both internal and external knowledge so as to be self-employed. In fact, applying this will enable the student to see opportunities for business ventures.

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ROLE OF ENTREPRENEURIAL EDUCATION IN PREDICTING STUDENTS' ENTREPRENEURIAL INTENTION IN NIGERIAN UNIVERSITIES

By

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ABSTRACT

This study aims to examine entrepreneurial role model as one of the factors that influence entrepreneurial intention. The study is underpinned by the Theory of Planned Behaviour (TPB) and Social Learning Theory (SLT). Using cross-sectional survey research design with multi-stage sampling technique, data were collected from 290 final year undergraduates of two universities in Bauchi State and analysed using IBM SPSS Statistics 25 and Partial Least Structural Equation Modelling (PLS-SEM) technique. Despite the weak explanatory power of the study model as evidence by 33.5% coefficient of variation, the study yields some interesting findings. The hypotheses testing results showed that entrepreneurial attitude, perceived behavioural control and entrepreneurial role model have a positive and significant influence on students' intention for self-employment. However, entrepreneurship education and subjective norm do not have a statistical influence on their intention. Perceived behavioural control of the students has the greatest influence on their entrepreneurial intention. The study concluded that entrepreneurial role model had a great role as an antecedent of students' intention for self-employment. In the end, the study offered theoretical, managerial, methodological implications and directions for future research.

Keywords: Akaike information criteria (AIC), entrepreneurial intention, entrepreneurial role model, PLSpredict

1.0 INTRODUCTION

Entrepreneurship is seen as a solution to unemployment and a contributor to economic activities, as a result, a lot of attention is given to its development by researchers and policymakers. Youth unemployment and its attendant consequences in Africa has been a source of concern to the socio-economic development of these countries. Statistics show that unemployment rates differ across Africa. North Africa and South Africa recorded youth unemployment rates of between 30.7% (Tunisia) in 2005 and 54.2% (Reunion) in 2012. Nigeria is said to have a population of 167 million people as of 2012 (NBS, 2016). Half of the said population then were said to be youth, unfortunately as the population grows so also the unemployment rate does. The unemployment rate in Nigeria stands at 7.5% in 2012, whereas 16.6% were said to be underemployed (Ogbuagu & Benjamin, 2017). Youth unemployment rates are higher among educated than the less educated or uneducated in Africa (Baah-Boatang, 2016), similar observations were made in Indonesia (Choudhry, Marelli, & Signorelli, 2012). More alarming is the fact that the labour market in Nigeria can absolve only 33.3% of the total graduates every year (NBS, 2017).

As a result of the high rate of unemployment witnessed by these African countries, a lot of social unrests that negatively affect the socio-economic wellbeing of these countries are recorded. Some of this youth restiveness is mostly out of agitations for lack of jobs and certainty in life, and they include yahoo boys, terrorism, kidnapping for ransom, xenophobic attacks and vandals. Nigeria is said to have been negatively and substantially affected economically by the activities of this youth restiveness. Engaging in meaningful economic activities can overturn these ugly trends, this calls for a change in the behaviour of most of these youth to shun sharp practices and embrace lawful businesses. The returns on most of the legitimate businesses may be smaller but steady and promisingly enriching. But the desire, support and confidence to look inward and employ oneself is something the youth should do to.

Intention is the most important immediate determinant of behaviour, it is the precursor to actions, entrepreneurship included. Therefore, for these targeted youth to embrace entrepreneurship, they need to have a favourable thought about it, the support and confidence needed to undertake such ventures. Starting a new business requires that one perceives opportunity in the form of unfulfilled need, assembles resources to take advantage of the perceived opportunity, decides the market niche to satisfy and assuming the inherent risk, properly exploits that opportunity. Intention which is an individual's precise tendency to perform an action or a series of actions is rooted from conscious thinking that directs behaviour, and it is said to be the reasoning state immediately before executing a behaviour (Ajzen, 1991). Additionally, Kim and Hunter (1993) posit that attitudes predict intentions and intentions predict behaviour. Entrepreneurial intention (EI), therefore, is that state of mind that stimulate one's attention and willingness to be self-employed, rather than being employed by others.

Several factors influenced EI. Attitude of an individual toward a particular thing greatly affects his intention on that phenomenon. Attitude refers to an individual's evaluation of an event or behaviour. Where an individual's appraisal of entrepreneurship is favourable, he or she is most likely to form a strong intention on venturing into a new business. The desirability or otherwise can be due to one's need for autonomy, attitude toward risk, optimism, innovativeness and need for achievement, and ability to control resources among other factors (Izedonmi & Okafor, 2010; Autio, Keely, Klofsten, Parker, & Hay, 2001). Entrepreneurial attitude (EA) implies the positive or negative valuation of an individual to become an entrepreneur.

Subjective norm (SN) is another important factor influencing intention. SN entails the amount of influence those people that matter much to an individual have on his decision to act in a particular manner. Studies have shown that what people that matters to an individual in life think about venturing into a business has a significant impact on his intention to either form a business or not. Perceived behavioural control (PBC) significantly influences the intention to start a business. It refers to the individual's personal belief on his or her competence and it is a belief that he can do something of his choice. PBC can be influenced by the presence of role models, partners, obstacles, financial and social support, education, confidence in one's ability to perform entrepreneurial tasks, or perceived availability of resources needed to create a business (Ozaralli & Revinburgh, 2016).

The entrepreneurial role model (ERM) concept explains the process of learning by inspiration, motivation and example and it has been applied to entrepreneurship research to explain why individuals whose parents are entrepreneurs become entrepreneurs (Liñán, Urbano, & Guerrero, 2011). The children of entrepreneurial parents have more than a role model, they also have information that is unavailable to children whose parents did not start or purchase a firm (Chlosta, Patzelt, Klein, & Dormann, 2012). Debarliev, Janeska, Bozhinovska and Ilieva (2015) also confirms that the presence of the ERM was associated with increased education and training aspirations, task self-efficacy, and expectancy for an entrepreneurial career.

Bearing in mind the importance of entrepreneurial ventures for the economy, several efforts have been made to help in understanding the entrepreneurs, the processes and factors that motivate the creation of entrepreneurial ventures (Debarliev *et al.*, 2015). Weerakoon and Gunatissa (2014) stated that higher institutions have a significant role in initiating entrepreneurship in the 21st century. It is also our impression that the career preferences of university students can be influenced, and that university students tend to fall toward fashionable career options. An investigation into factors that enhances EI, especially among university students is imperative, to re-enforce those factors and reduce unemployment.

Previous entrepreneurship studies have advanced our knowledge of how EI was influenced by variables such as EA, SN, self-efficacy, EE, entrepreneurial passion, team cooperation, entrepreneurial motivation and time (e.g. Doan & Phan, 2020; Liu, Lin, Zhao, & Zhao, 2019). However, the empirical understanding of how ERM relates to EI is still lacking in the existing literature (Abbasianchavari & Moritz, 2020). Based on that, Li and Wu (2019) recommend that personal role model as an antecedent of EI should be investigated.

Consequently, this study seeks to fill this gap by examining factors influencing the EI of university undergraduate viz-a-viz EA, SN, PBC, EE and ERM.

2.0 LITERATURE REVIEW

2.1 Theoretical/Conceptual Review

The TPB underpins this study. TPB originates from the Theory of Reasoned Action (TRA) developed by Ajzen and Fishbein in 1980 (Ajzen, 1991). It is regarded as the most influential and popular framework for the prediction of human behaviour (Ajzen & Madden, 1996). The TPB suggests that behaviour is the function of intentions whose individual attitudes, SN and perceived control predict intentions.

The TPB has the assumption that: (a) behaviour is based on the concept of intention (b) people are more likely to do something if they planned or aim to do it than if they don't (c) intention is influenced by attitude, SN and PBC. The TPB has been used to predict and explain a range of human behaviours, such as voting decisions, the problem of drunkenness, and losing weight to leisure intentions and taking physical exercise (Ajzen, 1991). In general, the empirical tests suggest that the greater the degree to which the behaviour can be controlled, the greater is the influence of intent on eventual behaviour (Gelderen *et al*., 2008).

In this article, Social Learning Theory (SLT) served as the supportive theory that justifies the inclusion of ERM. SLT (Bandura, 1986) suggests that individuals learn by observing the actions of their others and transferring the cues thereby internalizing those codes. These internal codes form part of the offspring's mental model and determine their decision policies. SLT has demonstrated sound predictive capacity across a variety of life situations, including career selection (Chlosta *et al*., 2012; Peng, Lu, & Kang, 2012). The theory has the following main assumptions that: (a) people as social being learn by observing the behaviour of others and the outcome associated with that behaviour (b) reworded behaviours are repetitive (c) cognitive processes such as attention, motivation, the expectation of reward or punishment play an important role in learning

In recognition of the relative support for SLT on entrepreneurship research and its underlying principle that individuals learn behaviour from role models such as renowned individuals, previous colleagues, or relatives via observation, inspiration and imitation, it is predicted that this theory would provide support for the decision of graduates to form their businesses.

2.1.1 *Entrepreneurial intention (EI)*

The central construct of the theory of planned behaviour (TPB) is the individual's intention to perform a certain behaviour. This intention is traditionally derivative to be influenced by individual's attitudes, SN, and PBC.

2.1.2 *Entrepreneurial attitude (EA)*

The attitude people hold towards the behaviour is the result of their evaluations of the outcomes associated with the behaviour and the strength of the associations with these evaluations. Studies indicate that salient beliefs concerning autonomy, authority, economic opportunity and self-realization, independence, self-actualization and financial success influence the attitude towards entrepreneurship (Autio *et al*., 2001).

2.1.3 *Subjective norms (SN)*

SN refer to perceived social pressure to perform or not perform the behaviour (Ajzen, 1991). SN derive from readily accessible normative beliefs regarding the expectations of significant others (Ajzen, 2002). Important referents may include a person's parents, spouse, close friends, co-workers and even experts in the behaviour of interest. According to Ajzen (2002), whether social referents themselves engage or do not engage in a particular behaviour influences perception regarding whether that behaviour is approved or disapproved.

2.1.4 *Perceived behavioural control (PBC)*

PBC refers to individuals' assessments of the degree to which they are capable of performing a given behaviour (Ajzen, 2002). PBC owes its roots to the concept of self-efficacy (Ajzen, 1991). PBC is determined by control beliefs concerning the availability of factors that can enable or hinder the performance of the behaviour. These factors could be internal or external and include among others the availability of resources and opportunities, experience with the behaviour, second-hand information about the behaviour, observing the experiences of acquaintances.

2.1.5 *Entrepreneurial Education (EE)*

EE is the type of education design to develop and improve entrepreneurial inspiration, awareness, knowledge and vocational skills that are essential for successfully take off and managing an entrepreneurial firm (Ozaralli & Rivenburgh, 2016). Izedonmi and Okafor (2010) were of the view that the Nigerian government should make entrepreneurship education a compulsory course throughout the Nigerian schools. To them, this will help to influence the youth's attitude towards entrepreneurship.

2.1.6 *Entrepreneurial Role Model (ERM)*

ERM is the influence of entrepreneurs of different types and characteristics. This includes renown individuals, previous colleagues, or relatives (Abbasianchavari & Moritz, 2020). Among the many potential role models that influence an individual's social learning, parental role model is particularly relevant, since children are especially exposed to their parents' behaviours (Chlosta *et al.*, 2012). Chlosta *et al.* (2012) also define entrepreneurial families as those with a heritage of entrepreneurship and business ownership. This includes at least one self-employed parent owning and managing a business within an entrepreneurial family. Looking at the social dynamics of entrepreneurship, individual's family is one of the informal institutions that impact on the individual's EI. The individuals are influenced by the even more immediate social environment characterized by closer links to family or friends and relatives (Ozaralli & Rivenburgh, 2016).

2.2 Empirical Review

2.2.1 *Entrepreneurial attitude and entrepreneurial intention*

Gelderen *et al*. (2008) conducted an empirical investigation on the EI of business students. The authors employed the TPB, in which intentions are regarded as a result of EA, PBC, and SN. The study uses a sample of 1225 undergraduate students of business administration at four different universities. Before the main study, qualitative research conducted at two different universities on a sample of 373 students was held to operationalize the components of TPB. The results show that the two most important variables to explain EI are entrepreneurial alertness (it measures PBC) and importance attached to financial security (it measures EA). The study recommended further studies to use a sample of students other than that of business.

2.2.2 *Subjective norms and entrepreneurial intention*

Peng *et al.* (2012) conducted a study on EI and its influencing factors; based on a survey of 2010 senior students from nine Universities in Xian, China. The result shows that student's perceived SN has a positive effect on the EA and entrepreneurial efficacy and EIs. The study uses SEM to verify the relationship between the EI of university students and their influencing factors as against descriptive statistics; variance analysis, regression analysis, cluster analysis, and path analysis, which are used to discuss the linear relationship between independent variables and dependent variables and are hard to present the relationship between variables as a whole. The study found an insignificant relationship between parental role model and intention. Equally, Malebana (2014) examine the EI on the sample of 329 graduating students in Limpopo province, South Africa. It was a survey study and SPSS was used to analyse the data. The study outcome shows that among others SN is a positive predictor of EI.

2.2.3 *Perceived behavioural control and entrepreneurial intention*

Debarliev *et al.* (2015) conduct research to examine the effects of the three motivational factors/intention antecedents proposed in the TPB: EA, SN and PBC, including a control group of variables on the EI in a specific cultural setting in the Republic of Macedonia. A number of 440 respondents from, university students, formed the sample size. Hypotheses were tested from the data collected by using hierarchical regression. The three independent variables: EA, SN and PBC were found to have a positive impact on EI. However, results only partially support the influence on the control variables. Besides, Weerakoon and Gunatissa (2014) conducted a study to identify the antecedents of the EI using a sample of 209 students in Sri Lanka. Data was analysed using Binary Logistic Regression and the result confirmed that the higher the perceived feasibility the higher the chances of EI among the students.

2.2.4 *Entrepreneurial Education and Entrepreneurial Intention*

Although several studies on EE and EI were carried out (Debarliev *et al.*, 2015; Klapper & Jarniou, 2006). Li and Wu (2019) investigate the influence of team cooperation on the relationship between EE and EI on 221 undergraduates in China. The study found that of the EE was positively related to EI. Similarly, in the study of Doan and Phan (2020) that examine the empirical link between EE, entrepreneurial self-efficacy, entrepreneurial passion, time, team cooperation and EI among 668 Vietnamese students. Data analysis with PLS-SEM technique shows that EE had a positive and significant influence on EI

2.2.5 *Entrepreneurial role model and entrepreneurial intention*

Chlosta *et al*. (2012) use social learning theory to examine the influence of parental role models in entrepreneurial families. The study considered paternal and maternal role models and examines their effects on the children's intention for self-employment using data of 461 alumni in the eight German based varsities. The study revealed that parental role model on EI is positively moderated by the student's openness.

Based on the foregoing empirical studies, we hypothesized the following relationships:

H_1: Entrepreneurial attitude has a positive and significant influence on entrepreneurial intention.

H_2: Subjective norm has a positive and significant influence on entrepreneurial intention.

H_3: Perceived behavioural control has a positive and significant influence on entrepreneurial intention.

H_4: Entrepreneurship education has a positive and significant influence on entrepreneurial intention.

H_5: Entrepreneurial role model has a significant influence on entrepreneurial intention.

3.0 METHODOLOGY

3.1 Research Design

The study adopted a quantitative approach and a cross-sectional design. This is because it allows gathering information about a large number of individuals or objects by studying a representative sample at one point in time using a questionnaire. The data was gathered using a structured questionnaire once within the period of November-December, 2017.

3.2 Population of the Study

The total population constitute 3, 669 final year students of Abubakar Tafawa Balewa University Bauchi (ATBU) and that of the Bauchi State University (BSUG) as obtained from MIS DICT ATBU Bauchi and Registry Unit BASUG (August, 2017) respectively. The total number of final year students from the six faculties in ATBU is 3,006 which can be broken down as: faculty of science, 486 students; faculty of Agriculture and agricultural technology 106; environmental technology, 842; engineering and engineering technology, 552; management sciences, 360 and; technology education, 663 students. Medical college in ATBU Bauchi which made the 7th faculty is yet to have its final year students. On the other hand, BASUG has five faculties, two of which, the faculty of law and faculty of basic science, are yet to have students in the final year, as at November, 2017. The total number of final year students from the three faculties in BASUG is 663 which can be broken down as: Faculty of science 144 students; faculty of social and management sciences with 297 students and faculty of arts and education, 222 students.

3.3 Sample and Sampling Technique

This study used Krejcie and Morgan (1970) table to draw a sample of 350 using multi-stage random sampling (MSRS) technique. The reason for selecting MSRS is to ensure fair representativeness of the sample relative to the population and guarantees that minority constituents of the population. According to Creswell (2012), sample characteristics are better approximations of the population characteristics and reduce sampling error compared with the case of simple random sampling.

3.4 Analytical Strategy

In this study, partial least square structural equation modeling (PLS-SEM) using SmartPLS 3 (Ringle, Wende, & Becker, 2015) was employed. The bases for choosing this technique over CB-SEM is on the study's aim of predicting a key target construct i.e. EI (Hair, Ringle, & Sarstedt, 2011).

4.0 RESULTS, INTERPRETATION AND DISCUSSION

4.1 Data Screening and Preliminary Analysis

The data for this study were collected within November 2017 and December 2017. A total of 350 surveys, self-reported questionnaires were distributed among the final year students of the two universities in Bauchi State. Out of the 350 questionnaires issued, 323 were returned, which yielded a response rate of 92%. Sekaran (2011) considered a 30% response rate sufficient for surveys.

Initial data screening which is key to any multivariate analysis to ensure all possible non-violation of the assumptions regarding the application of multivariate techniques of data are identified (Hair, Babin, & Anderson, 2010). Ahead of the data screening, 323 were coded and entered into SPSS. Besides, all negatively worded items (PBC2, PBC5, and EI3) in the questionnaires were reversed scored. After data coding and entry, error in entries was checked.

4.2 Missing Value Analysis and Outlier Test

Nine cases with missing above 10% were automatically deleted. Other cases that have missing values of less than 5% were maintained and replaced by their mean value through series mean method in SPSS. Tabachnick and Fidell (2007) suggested that mean substitution is the easiest way of replacing missing data that is 5% or less. Missing values on five items (EA6, EA7, SN1 and SN3) with less than 5% were replaced by their mean value.

The univariate and multivariate outliers were detected to minimize errors of generalizability of results (Tabachnick & Fidell, 2007). 12 cases with standardized values (z-score) above the threshold of ± 3.29, classified as univariate outliers, were deleted. Besides, 12 multivariate outliers were also detected using Mahalanobis distance (D^2). The cases have chi-square value above ($\chi^2 = 66.62, p < 0.001$) for 35 items. Thus, after removing the multivariate outliers, the final dataset in this study was 290.

4.3 Characteristics of Respondents

Table 1 depicts the demographic profile of the respondents in the sample. The demographic characteristics examined in this study include gender, age, and faculties of study of the respondents. The table shows that male respondents have higher participation of 201 (69%) over their female counterparts with 89 (31%).

Table 1: Characteristics of Respondent

Demography		**Frequency**	**Percentage**
Gender	Male	201	69.3
	Female	89	30.7
Age	18-25 years	134	46.2
	26-35 years	131	45.2
	36-45 years	22	7.6
	46-55 years	2	0.7
	56 years & Above	1	0.3
Faculty	Science	49	16.9
	Engineering	57	19.7
	Agriculture	20	6.9
	Environmental	41	14.1
	Management & Social Sciences	70	24.1
	Art & Education	53	18.3

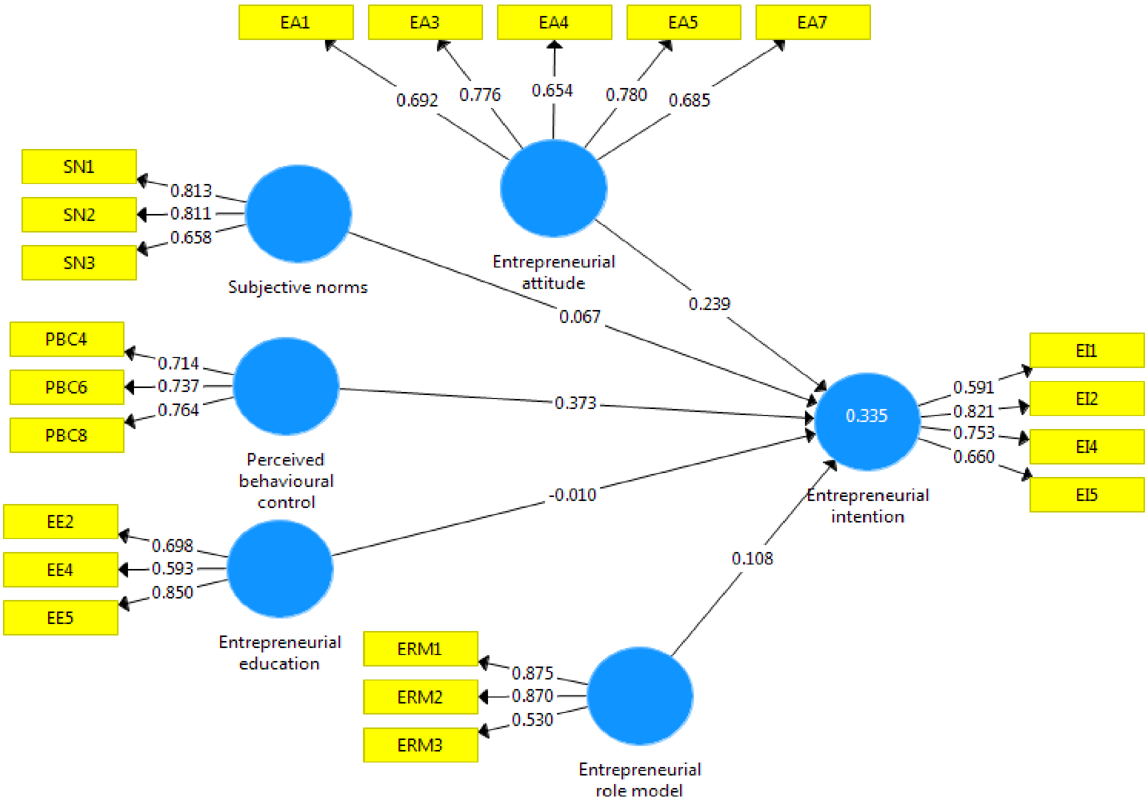
In terms of age bracket, 134 students (46.1%) were between ages 18-25 years. 131 students (41.1%) fall between ages 26-35 years. Ages bracket 36-45 and 46-55 have 22(7.7%) and 2(0.7%) students respectively. And lastly, 1 student (0.3%) of the sample falls between age ranges 56 and above.

In terms of faculty distribution, 49 students (16.9%) were from science, 57 students (19.7%) were from engineering, 20 students (6.9%) were from agriculture, 41 students (14.1%) were from environmental, 70 students (24.1%) were from management and social sciences while 53 students (18.3%) were from art and education. This implies that the sample had relative faculty representation.

4.4 Assessment of Measurement (outer) Model

The measurement model assesses the relationship between a latent construct and its observed indicators. Indicators with outer loadings between 0.40 and 0.70 were removed from the scale as deleting these indicators led to an increase in the AVE and CR above the threshold value. The retained indicators were shown in Figure 1.

Figure 1: *Final Algorithm Result*



4.4.1 *Indicator reliability*

As presented in Table 2, the indicator reliability of our model was achieved as all the values for their outer loading were above the accepted threshold of 0.4.

Table 2: Internal Consistency Reliability and Convergent Validity

Construct	Code	FL	CR	AVE
Entrepreneurial intention	EI1	0.591	0.802	0.506
	EI2	0.821		
	EI4	0.753		
	EI5	0.660		
Entrepreneurial attitude	EA1	0.692	0.842	0.517
	EA3	0.776		
	EA4	0.654		
	EA5	0.780		
	EA7	0.685		
Subjective norms	SN1	0.813	0.807	0.584
	SN2	0.811		
	SN3	0.658		
Perceived behavioural control	PBC4	0.714	0.783	0.546
	PBC6	0.737		
	PBC8	0.764		
Entrepreneurial education	EE2	0.698	0.761	0.521
	EE4	0.593		
	EE5	0.850		
Entrepreneurial role model	ERM1	0.875	0.812	0.601
	ERM2	0.870		
	ERM3	0.530		

FL= factor loadings, CR= composite reliability, AVE = average variance extracted

4.4.2 *Internal consistency reliability*

Internal consistency reliability refers to the extent to which all items on a particular scale are measuring the same concept. In Table 2, it can be seen that all latent variables have composite reliability above the recommended threshold of 0.70 (Hair, Hult, Ringle, & Sarstedt, 2017).

4.4.3 *Convergent validity*

Convergent validity seeks to ensure that a construct is one-dimensional, which is to say that there is a reasonable degree of agreement among the indicators measuring the same construct. Table 2 exhibited that AVE was above the accepted value of 0.5 for all constructs, indicating adequate convergent validity (Hair *et al.*, 2017).

4.4.4 *Discriminant validity*

Discriminant validity refers to the extent to which a particular latent construct differentiates itself from other latent constructs. For example, the extent to which EI differs from an EA is what discriminant validity describes. This study's discriminant validity was ascertained as evidenced by HTMT values in Table 3, which were lower than 0.85 threshold for dissimilar constructs (Frank & Sarstedt, 2019).

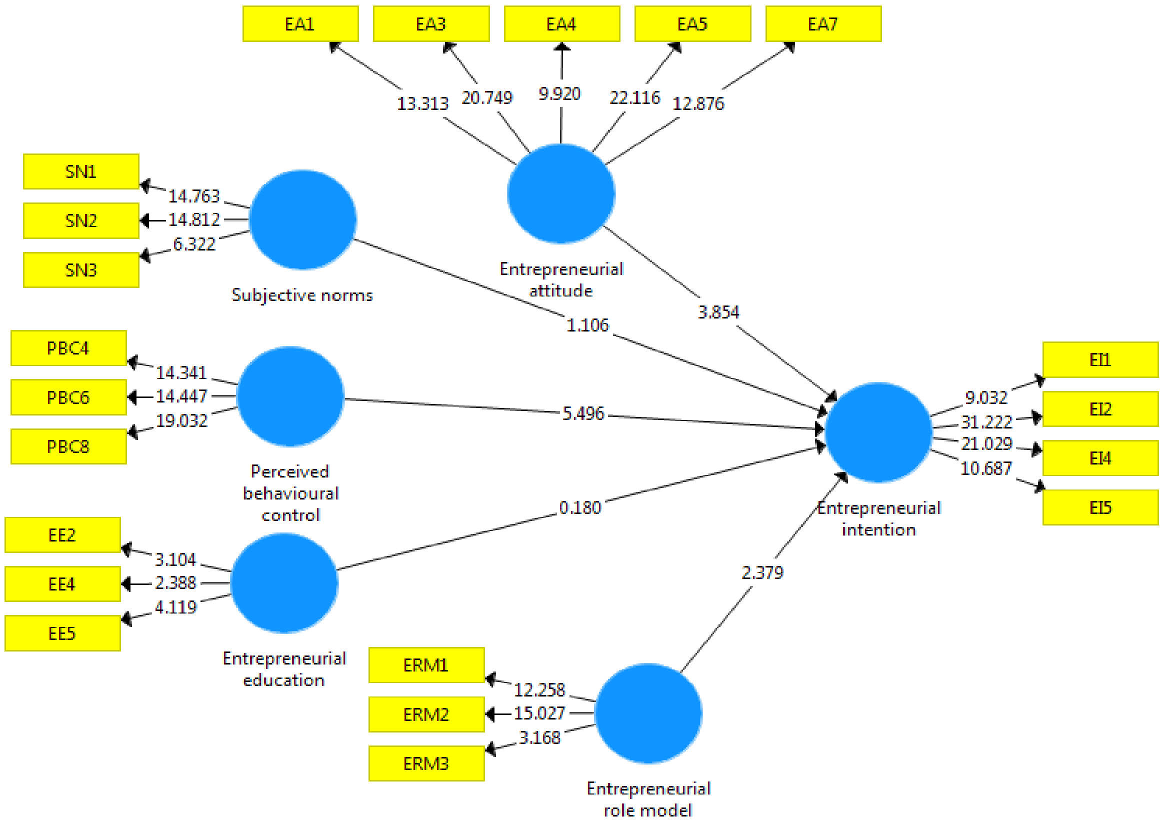
Table 3: Heterotraitmonotrait (HTMT) correlations

Construct	1	2	3	4	5	6
1. Entrepreneurial attitude						
2. Entrepreneurial education	0.127					
3. Entrepreneurial intention	0.553	0.233				
4. Entrepreneurial role model	0.099	0.441	0.313			
5. Perceived behavioural control	0.652	0.411	0.830	0.339		
6. Subjective norms	0.341	0.479	0.386	0.277	0.588	

4.5 Assessment of Structural (Inner) Model

Having ascertained the requirement for the measurement (outer) model, the next logical step is to assess the structural (inner) model. The analysis of the variance inflation factor (VIF) in Table 4, with figures less than 3, has shown the absence of multicollinearity.

Figure 2: Bootstrapped Result



4.5.1 *In-sample predictive capability*

Based on this study, the results in Table 4 shows the R^2 value of 0.335 on EI. This shows that 33.5% of the proportion of variation in EI can be explained by our five predictor variables collectively. Hair *et al*. (2011) recommends small R-squared value to be above 0.25 but less than 0.5.

Effect size f^2 indicates the relative effect of a particular exogenous latent variable on endogenous latent variable using changes in the *R*-squared value. The results in Table 4 show small effects on EA (0.064) and PBC (0.143) respectively (Cohen, 1988).

Table 1: Multicollinearity, coefficient of determination, effect size and predictive relevance

Effect size	**VIF**	R^2	f^2	Q^2
Entrepreneurial intention		0.335		0.155
Entrepreneurial attitude	1.265		0.068	
Subjective norms	1.215		0.006	
Perceived behavioural control	1.457		0.143	
Entrepreneurial education	1.165		0.000	
Entrepreneurial role model	1.112		0.016	

Stone-Geisser's test of predictive relevance Q^2 is used to ascertain the accuracy of a reflective measurement model predicting the data points of our indicators endogenous construct through blindfolding procedure (Hair *et al*., 2017). As shown in Table 4, the cross-validated redundancy was greater than zero (Q^2 = 0.155). This implies that there is enough evidence of predictive relevance of the model.

4.5.2 *Out-of-sample predictive capability*

In line with the Shmueli *et al.* (2019) propositions, we run PLSpredict algorithm developed by Shmueli, Ray, Velasquez Estrada and Chatla (2016) with 10-folds cross-validation and ten repetitions. As shown in Table 5, the model has medium out-of-sample predictive power as indicator's $Q^2_{predict}$ values were above zero and majority of indicator's predictive error were lower than the naive Linear Model (LM) benchmark.

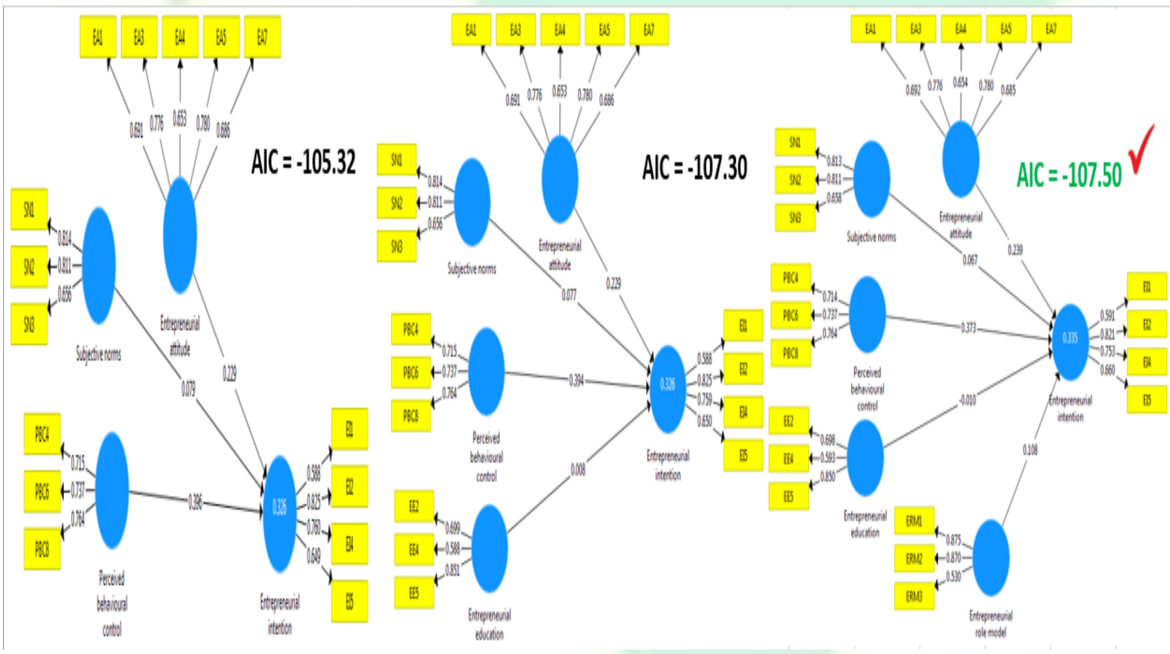
Table 5: PLSpredict Analysis

		RMSE	
	$Q^2_{predict}$	PLS	LM
EI1	0.069	*0.908*	*0.939*
EI2	0.219	*0.855*	*0.860*
EI4	0.166	0.739	0.727
EI5	0.122	*0.844*	*0.877*

4.5.3 *Model section criteria*

As shown in Figure 3, we compare our proposed model with five predictors against the two older versions of antecedents of EI with Akaike Information Criteria (AIC) as explained in Danks, Sharma and Sarstedt (2020). As such, our proposed model outperformed the earlier models with the least AIC of -107.50.

Figure 3: Model Selection Based on AIC



4.5.4 Hypotheses testingStructural path coefficients stand for the hypothesized relationships among the model constructs. In obtaining the *t*-statistics for our beta values, we used Hair *et al.* (2017)'s recommendation for using a standard bootstrapping procedure with 5,000 subsamples.

Table 6: Result of Path Analysis

Hypothesis	Relationship	Beta	Standard Error	t value	p value	Confidence interval		Decision
H_1	Entrepreneurial attitude -> Intention	0.239	0.062	3.85	0.000	0.149	0.355	Supported
H_2	Subjective norms -> Intention	0.067	0.061	1.11	0.134	-0.027	0.174	Not supported
H_3	Perceived behavioural control -> Intention	0.373	0.068	5.50	0.000	0.248	0.475	Supported
H_4	Entrepreneurial education -> Intention	-0.010	0.057	0.18	0.429	-0.081	0.103	Not supported
H_5	Entrepreneurial role model -> Intention	0.108	0.045	2.38	0.009	0.039	0.186	Supported

The result in Figure 2 and Table 6 shows that EA, PBC and ERM with beta values of $\beta = 0.239, \beta = 0.373$ and $\beta = 0.108$ respectively have a statistically positive and significant influence on the EI at 5% level one-tail $(t > 1.65,\ p < 0.05)$. This suggests that when EI increase by one unit, EA, PBC and ERM will rise by 23.9%, 37.3% and 10.8% respectively. While SN and EE with beta values of $\beta = 0.067$ and $\beta = -0.01$ respectively showed insignificant influence.

5.0 DISCUSSION

This study found empirical support for some relationship of the existing TPB. First, EA of undergraduate of the ATBU and BASUG have a direct influence on their EI. It equally shows that the students under study have a favourable attitude toward starting their businesses. Also, empirical backing was found in the literature on the positive effect of EA on EI in various settings (Debarliev *et al.*, 2015; Ozaralli & Rivenburgh, 2016; Peng *et al.*, 2012; Weerakoon & Gunatissa, 2014). On the contrary, our study found that EI of ATBU and BASUG undergraduate is not shaped by SN, which is not in line with TPB and other empirical studies with positive and significant findings (Peng *et al.*, 2012; Debarliev *et al.*, 2015; El-Gohari, Selim, & Eid, 2016). However, the study of Autio *et al.* (2001) that examined US students had a similar outcome with our study. This can be justifiable because Nigerian youth are now becoming more of individualistic mindset where key decisions largely dependents on individual personal conviction not minding what the family and friends care about as against collectivism. Second, our study was able to empirically establish a strong direct link between PBC and EI of ATBU and BASUG undergraduate as espoused in TPB. This finding concurs with that of Weerakoon and Gunatissa (2014) Gelderen *et al*. (2008) and Debarliev *et al*. (2015). Again, EE was found to have no statistical effect on EI. Two factors could be responsible. First, the student perception of EE might be for grade gratification without the deeper thought of implementing the learning outcome in their real life. Second, the current entrepreneurship syllabus was less inspirational to trigger the intention of self-employment. Nevertheless, our result showed that the newly added construct, i.e. ERM was a predictor of EI.

5.1 Conclusion

The major objective of this study is to examine the effect of ERM on undergraduates' intention for self-employment. Based on the outcome of the study, it was concluded that ERM plays a vital role in shaping the EI of undergraduate studying in Nigerian universities.

5.2 Research Implications

The study has some important implications. Theoretically, the study was able to justify the robustness of TPB as it applied in the Nigerian context and yielded similar results with other studies elsewhere. Also, it enriches entrepreneurship literature by introducing ERM as the antecedent of EI. Practically, the study highlighted means of addressing the incidence of the high rate of unemployment and white-collarism deeply rooted in the minds of youths especially in the developing countries where the labour market is already saturated. This involve planned effort to boost EA, PBC and ERM which will in turn trigger the intention for self-employment among graduating study. Methodologically, the predictions in the study were substantiated with advanced out-of-sample prediction and the best model selection criteria in SmartPLS 3.

5.3 Limitations and Recommendations for Future Research

The study has provided support for its three hypothesized relationships with some limitations. Firstly, the present study adopts a cross-sectional design which does not allow causal inferences to be made from the population. Therefore, a longitudinal design in future needs to be considered to measure the theoretical constructs at different points in time to confirm the findings of the present study. A longitudinal study may reveal why despite these factors under study supports EI, yet graduates in Nigeria are found to be trooping to invitations for job vacancies, even to the extent of losing their lives in the struggle to secure paid jobs.

Secondly, the present study focused mainly on final year students from only two universities located in Bauchi state, north-eastern Nigeria. Consequently, future studies should include more samples from various universities in other geographical parts of Nigeria. Universities students should be studied and compared with students from other institutes of higher education such as polytechnics, monotechnics and colleges.

Thirdly, the research model was able to explain only 33.5% (R^2=0.335) of the total variance in EI, which means other predictors could significantly explain the remaining 67.4%. Therefore, future research is needed to consider other possible factors such as regulatory requirements and support, political and economic climates in Nigeria that could influence students to form the intention to be their bosses rather than be employed.

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SOCIAL MARKETING AND DEMOGRAPHIC INFLUENCE IN TRANSMISSION OF HUMAN IMMUNO VIRUS: A STUDY OF ANTI-RETROVIRAL THERAPY CLINIC IN MAIDUGURI METROPOLIS

By

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ABSTRACT

Changes in the size and structure of human society influence the behavior of the inhabitant of the society. This is made possible by the use of social marketing approach to harness the changes in HIV patients' behavior at ART Clinic in Maiduguri Metropolis. Simple percentage was used to determine the demographic/socio-economic characteristics model while Likert scale was used to evaluate the extent of demographic influence on HIV patients. The result by Pearson X^2 shows that the demographic model used is statistically significant, courtesy of social marketing reaching out to the audience target. Despite the positive result, it is recommended that the ART Clinic should be strengthened and reinvigorated for continuous knowledge and updating of the society because prevention is better than cure.

Keywords: Demographic Influence, HIV Transmission, Social Marketing, ART Clinic

1.0 INTRODUCTION

Changes in the size and structure of human composition is modeled and projected by stratifying the human composition by age, gender and all embodiment of education spectrum. The multidimensional demographic method is applied to educational attainment which brings out the social class and employment status as a third dimension in studying demographic influence. This is real because according to Litz & KC (2013), in virtually all societies, better educated adults are more knowledgeable, have lower mortality rates and their off springs have better life accommodation. As a result of these pervasive differentials the projection of demographic distributions has significant influence on almost every aspect of progress in human development (Litz & KC, 2013) including human immune virus (HIV) transmission.

1.1 Objective of the study

The study is aimed at evaluating the influence of demographic characteristics that influence transmission of HIV in Anti-Retroviral Therapy (ART) Clinic, University of Maiduguri Teaching Hospital (UMTH), Maiduguri Metropolis. The specific objectives are to:

i) assess the demographic characteristics of HIV patients in ART Clinic in Maiduguri Metropolis, and.

ii) ascertain the channels and rate of transmission of HIV patients in ART Clinic.

Demographic model of socio-economic characteristics using social marketing process is applied in this study.

1.2 Research Questions

The study is guided by the following research questions:

i) What are the demographic characteristics that influence transmission of HIV patients in ART Clinic in Maiduguri Metropolis?

ii) What are the channels and rate of transmission of HIV patients in ART Clinic in Maiduguri Metropolis?

1.3 Research Hypotheses

The study addressed the following hypotheses:

i) **H_{01}**: There is no significant relationship between social marketing demographic characteristics and influence of transmission of HIV patients.

ii) **H_{02}**: There is no significant relationship between social marketing channels and rate of transmission of HIV patients in ART Clinic in Maiduguri Metropolis.

2.0 LITERATURE REVIEW

2.1 Social Marketing Concept

The concept of social marketing is anchored on many models or concept with little formal consensus on which type of models and for what type of social problems it tends to solve. It is a situational theory or model which requires specific situational solution (Lefebvre, 2000). For example, defining social marketing, Kotler & Roberto (1989); Lefebvre& Flora, (1988), and Noveli, (1990) included the notion of exchange theory in recognition of its marketing root while Andreasen, (1995) and Manoff, (1985) omitted any mention of exchange theory in their definition of social marketing or its key elements as contained in Lefebvre, (2000). In contrast, Lefebvre & and Rochlin (1997) and Novelli (1990) recognize the value of the exchange concept in describing social marketing, as both believe that the idea that many other theoretical models may be applied in the actual development of social marketing programs.

According to Novelli (1990) as contained in Lefebvre (2000), marketing is theory based and it is predicated in the theories of consumer behavior which draws in turn upon the social and behavioral sciences. The social marketing approach to this model is one that has a focus on the theoretical model that impacted on the selection of target audience, research questionnaire administered, strategies selected, measurement, out come and appraisal. In a research carried out by Glanz, Lewis & Rimer (1997) as contained in Lefebvre (2000), a bench review of the most commonly used theories and models in 497 health education/health promotion articles over a two-year period resulted that health belief model, social cognitive theory, theory of reasoned action, community organization, stages of change and social marketing were the most frequent cited ones among the 67 per cent of cases where theories or models were mentioned at all. To meet these predicators and given the caveats expressed in this study, the social marketing model used in this study is Health Belief Model (HBM).

2.2 Health Belief Model

Health Belief Model is widely used theory among public health practitioners and its major tenets are used in many social marketing projects. The HBM is designed to unveil why people did not participate to prevent, detect or control diseases. The core components of this model are (Lefebvre, 2000):

1) Perceived susceptibility – the subjective perception of risk of developing a particular health benefits received - behavior.
2) Perceived severity – feelings about the seriousness of the consequences of developing a specific health problem.
3) Perceived benefits received – beliefs about the effectiveness of various actions that might reduce susceptibility and severity (threat).
4) Perceived barriers – potential negative aspects of taking specific actions.
5) Cues to action – bodily or environmental events that trigger action.

The health Belief Model is built on the construct of social marketing demographic influence on the target audience of ART patients (Figure 1).

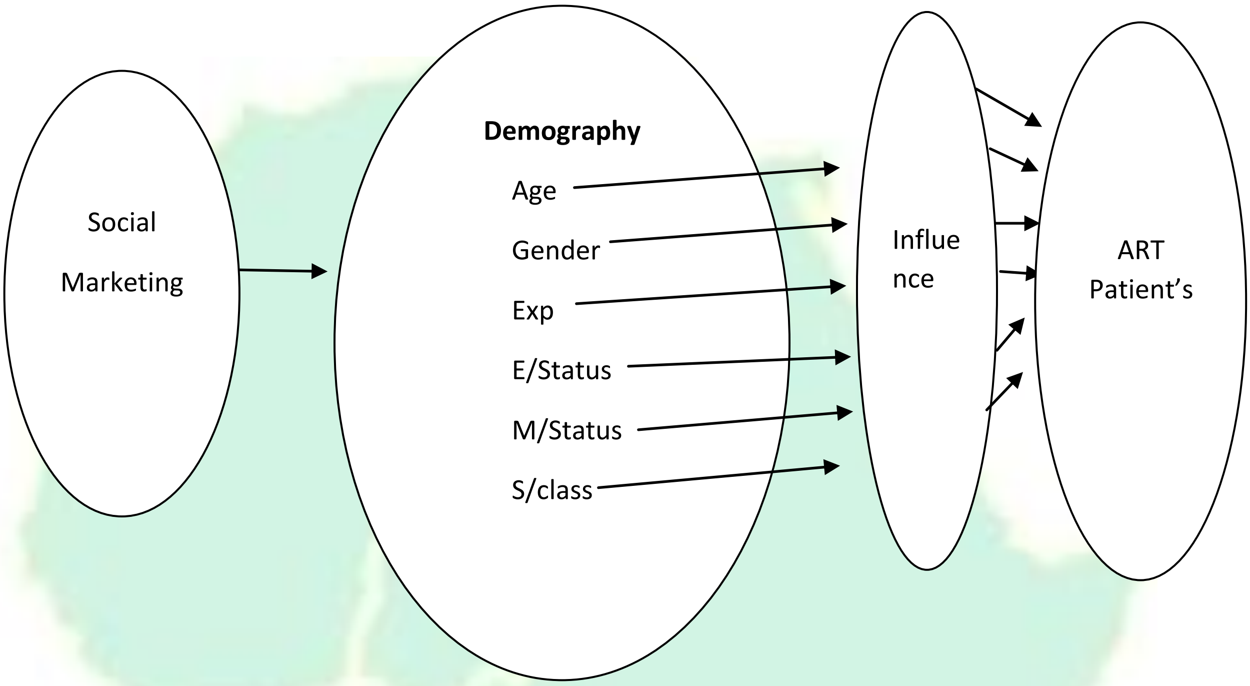

Figure 1: Health Belief Model

The demographic factors considered in this study are gender, married status, employment status, social class, age and experience. All these have degree of influence on the patients' well-being, positively or negatively.

In the recent time according to Strecher & Rosenstock (1997), health benefit model is appended to include the notion of self-efficacy as another predictor of health behaviors. This is more complex as life style changes are expected to be maintained over time. In this study of Social Marketing and Demographic Influence in Transmission of HIV, it is built on behavioural change and outcome of the study depends on the life style changes of the target audience.

2.3 Social Marketing Demographic characteristics of HIV/AIDS Respondents

The knowledge of demographic characteristics of HIV/AIDS patients is a prima facie case for understanding how best to tackle the plight of the patients through the social marketing efforts. While the concept of social marketing has its root in family planning, much of the attention has been to the use of social marketing to respond to the HIV/AIDS epidemic. Rather than dictating the way information is conveyed from the top-down, social marketing approach listens down-up to the needs and desires of the target audience. This focus on the target audience involves in-depth research and constant re-evaluation together from the corner stone of the social marketing process (Asiegbu, Powei, &Iruka, 2012).

It has been pointed out also that a wide variety of demographic, social, psychological and structural variables may also impact on individual perception and indirectly, their health-related behaviors. Some of more important ones include: gender, married status, employment status, social class, age, experience, educational attainment and prior knowledge (Lefebvre, 2000).

2.4 Demographic Influence

Demography is defined as the mathematics of people; which specifies all of its models strictly in terms of human beings according to different relevant characteristics. Hence, human development can best be studied with models that have human beings instead of the use of monetary or other units at the core of their analysis. This approach offers the most appropriate process in study of human development across the world (Litz & KC, 2013) including HIV transmission using social marketing demography as a behavioral science.

As a behavioral science, social marketing gives guidelines to the marketing research on how HIV patients behave in response to their situational environment and what are the factors which influence /their decision-making process in general and reflections on patient attitude in particular (Nair & Nair, 1998).

2.5 HIV Transmission

To come to term with HIV, it is better to understand what HIV is. Hence, it is important to distinguish between HIV and AIDS. HIV stands for Human Immunodeficiency Virus. Human: infecting human beings. Immunodeficiency: decrease or weakness in the body's ability to fight off infections and illnesses. Virus: A pathogen which has the ability to replicate only inside a living cell. Whereas AIDS stands for "Acquired Immune Deficiency Syndrome": to come into possession of something new. Immune Deficiency: decrease or weakness in the body's ability to fight off infections and illnesses and Syndrome: a group of signs and symptoms that occur together and characterize a particular abnormality. AIDS is the final stage of the disease caused by infection with the virus.

HIV infection leads toa weakened immune system. This makes a person with HIV vulnerable to infections. AIDS results when HIV infection progresses to an advanced stage, damaging the immune system to a point at which the body cannot longer fight illness. HIV is transmitted through (Module 1, 2005):

i) Unprotected sexual contact with an infected partner
ii) Exposure of broken skin or wound to infected blood or body fluids
iii) Transfusion with HIV-infected blood
iv) Injection with contaminated objects
v) Mother-to-child during pregnancy, birth or breast feeding.

In an organized study such as ART clinics, it is found that the patients are properly communicated with and knowledgeable as a result of communication dispensation (Arogundade & Faloore, 2012; Enang, 2014, and Ojikutu, Adeleke, Yusufu & Ajibola, 2010). In the study by Uwalaka & Matsuo (2002), Arogundade & Faloore (2012), aversed that one of the major means of spreading HIV/AIDS follows the decline in its transmission through blood products while Enang (2014) states that social marketing relates to knowledge in behavior with value of 'r' as positive in the statistical analysis of his study. He indicates that the more the social marketing was made, healthier the lives of the youths. Further, "in sub-Sahara Africa, an almost universal awareness of AIDS lethality and HIV transmission mechanism co-exists together with reluctance in adopting consequent measures …" The import of this statement by Ojikutu and others clearly indicates in his study that almost every respondent has heard about HIV/AIDSand yet only 43.69 per cent of those who had multiple sex partners agreed that they are engaging in risky sexual behavior.

3.0 METHODOLOGY

3.1 Study Area

The study area of this research is Maiduguri Metropolis which houses University of Maiduguri Teaching Hospital(UMTH) in Borno State. It has Bama, Konduga,Mongonu and Kukawa as major towns. The ART Clinic of this hospital is a referral centre for HIV/AIDS patients in the state including the border towns of Cameroon and Niger.

3.2 Research Design

For administration of questionnaire, mall intercept theory (Ndubuisi, Hambagda & Msheliza, 2006) was used with a single queue multiple-window of three consulting rooms and a research assistant was stationed at each of the consulting exit door posts. Data were collected for a period of three months; two days a week for four weeks. One tenth of 4000 registered out patients were administered with structured questionnaires. At the end of the twelfth week, there were a total number of 432 respondents covered. At collation, it was discovered that there were 49 overflows. Hence, the total number covered was 383 out patients.

4.0 ANALYSIS, RESULTS AND DISCUSSION

Table 1: Demographic Characteristics of Respondents

Characteristics	Frequency	Percent	Valid percent	Cumulative percent
GENDER				
Female	199	52.0	52.0	52.0
Male	184	48.0	48.0	100.0
Total	383	100.0	100.0	
MARRIED STATUS				
Single	135	35.2	35.2	35.2
Married	181	47.3	47.3	82.5
Divorced	10	2.6	2.6	85.1
Widowed	57	14.9	14.9	100.0
Total	383	100	100	
EMPLOYMENT STATUS				
Non formal education	156	40.7	40.7	40.7
Primary education	104	27.2	27.2	67.9
Secondary education	71	18.5	18.5	86.4
Tertiary education	52	13.6	13.6	100
Total	383	100	100	
SOCIAL CLASS				
Unemployed	113	29.5	29.5	29.5
Highly skilled profession	47	12.3	12.3	41.8
Clerical officer	55	14.4	14.4	56.1
Manual labourers/artisans	168	43.9	43.9	100
Total	383	100	100	
AGE				
11 – 20	109	28.5	28.5	28.5
21 – 30	171	44.6	44.6	73.1
31 – 40	78	20.4	20.4	93.5
41 – 50	25	6.5	6.5	100
Total	383	100	100	
EXPERIENCE				
1 – 5	123	32.1	32.1	32.1
6 – 10	245	64.0	64.0	96.1
11 – 15	15	3.9	3.9	100
Total	383	100	100	

Source: Field Survey, 2016.

The frequencies of the demographic characteristics have been carefully analyzed. Though the percentages were obtained, they were subjected to further analysis which came up with valid percentages that confirmed the frequencies and the percentages obtained earlier. In the same vein, the cumulative percentages are the reflections of/valid percentages of 100 in each case.

The **gender** frequency of the respondents is made up of 199 females and 184 males. This represents 52 percent and 48 percent respectively. In the case of marital status, the singles are 135 (32.5%); married 181 (47.3); divorced 10 (2.6%); and widow 57 (14.9%). From the Table, married are most affected from the four strata of single, married, divorced and widowed. For the married couple, the reason may be cheating on each other, insincerity and dishonesty.

Employment status informs the ability of the patients to be able to have good food, meet the needs of the family and be able and have complements of their needs. The frequency has it that employed are 270 (70.5%) and the unemployed are 113 (29.5%). In the case of **education,** non-formal education is 156 (40.7%); primary education 104 (27.2%); secondary education 71 (18.5%); and tertiary education 52 (13.6%). This is very informative to the extent of knowledge, information and awareness regarding 'dos' and 'don't' of ART patients

Social class has the frequency distribution of highly skilled profession 47 (12.3%); clerical officers 55(14.4%); manual laborers/artisans 168 (43.9%) and unemployed 113 (29.5%). The more enlightened class, the less the incidence of HIV/AIDs. From the Table, highly skilled profession is 47(12.3%) and this is followed by clerical officers 55 (14.4%). The most vulnerable are manual/labourers/artisans 168 (43.9%) and unemployed 113 (29.5%) who are at the lowest strata of the socio-economic class.

Age is another factor. The high risk of HIV/AIDS is among the age brackets of 11 – 20 with 109 (28.5%) and 21 – 30 with 171 (44.6%) while the low risk brackets of 31 – 40 with 78 (20.4%) and 41 – 50 with 25 (6.5%). As it has always been, the young are prone to risk while the old are afraid of taking risks as reflected in the Table1.

Experience is in terms of carrying capacity; that those having the disease upto 5years is 123 (32.1%); 10years is 245 (64.0%) and upto 15years is (3.9%). This is to say that in this study the minimum is 1 – 5years and the maximum is 11 – 15years carrying capacity. For descriptive statistics, experience of 383 respondent patients has a minimum of 1.00 while the maximum is 15 with a mean of 6.31 and a standard deviation of 2.25. In the same circumstance, age has a minimum of 12.00 and a maximum of 66.00 with a mean of 27.60 and a standard deviation of 9.84

4.1 HIV Transmission

Social marketing is an outreach program that is engaged in changing individuals and group behaviors for the benefit of the society at large. As Table 2 shows, the patients are well informed about the channels of transmission of HIV. The responses to all the statements are above 3.0; the grand mean being (4.3) showing positive understanding of the transmission of the deadly disease.

Table 2: HIV Transmission

QUESTION	STATEMENT	TR	Mean score(X)	Ranking
1.	HIV can be transmitted from infected partner to uninfected partner through heterosexual intercourse.	1647	4.30	4th
2.	HIV can be transmitted from infected partner to uninfected partner through homosexuality	1650	4.31	3rd
3.	HIV can be transmitted from infected partner to uninfected partner through blood and blood product e.g. sharing of unsterile needle, harmful traditional practices and blood transfusion	1652	4.31	3rd
4.	HIV infection can be transmitted from mother to child during pregnancy, delivering or breast feeding	1621	4.23	5th
5.	Sexual transmitted infections increases the risk of contracting (2) HIV infection	1648	4.29 (8)	4th
6.	Multiple sexual partners increases the risk of contracting HIV infection	1658	4.33	2nd
7.	Use of male/female condom during sexual act decreases the risk of contracting HIV infection	1606	4.19	6th
8.	Abstinence before marriage protect from contracting HIV infection	1667	4.35	1st
9.	Facilities between partners or couples protect from contracting HIV infection	1667	4.35	1st
Total mean			38.67	
Grand mean			4.30	

Source: Field Survey, 2016

Note: TR = Total response

X = Mean

For example, HIV can be transmitted from infected partner to uninfected partner through heterosexual intercourse, 4.3; HIV infection can be transmitted from mother-to-child during pregnancy, delivery or breast feeding, 4.23; abstinence before marriage protects one from contracting HIV infection, 4.35 and multiple sexual partners increase the risk of contracting HIV infection, 4.33.

In a study of ART clinic unit, it is found that social marketing relates to knowledge in behavior with value of ‘r’ as positive in the statistical analysis. Yet the findings by Enang (2014) are supported by Ntozi, Mulindwa, Ahimbisibore, Ayiga, & Odwee, 2003) who stated that HIV/AIDS epidemic has changed the sexual behavior of high risk groups for the better. This is also in agreement with Stephen (1998) findings that in response to HIV/AIDS epidemic, social marketing programs have made condoms accessible, affordable and acceptable to income population and high risk groups which has significantly contributed to the reduction of the incidence of HIV/AIDS. The study went further to recommend that social marketing should be strengthened as a working strategy if HIV/AIDS must be prevented or curtailed. The two hypotheses are collapsed to have Table 3, Social Marketing Demographic Factors and the Level of Transmission of HIV among AIDS patients.

Table 3: Social Marketing Demographic Factors and the Level of Transmission of HIV among AIDS patients

Parameter	Estimate	Std. Error	Z score
Age	-0.009	0.003	-3.000***
Gender	-0.162	0.120	-1.357^{ns}
Marital Status	0.257	0.136	1.890***
Experience on AIDS	0.087	0.030	2.898***
Employment Status	0.346	0.133	2.607***
Education	0.047	0.013	3.615***
Intercept	-1.528	0.384	-3.977***
Pearson	Chi-square	Df	Sig.
Goodness-of-Fit Test	607.822	367	0.0000***

Source: Field Survey, 2016

Table 3 shows that age was significant at 1% and negative factors (variable) influencing the level of acceptance of ART among AIDS patients. This means that as age of the respondents increased the level of acceptance of ART program decreased and vice versa. Decreased level of acceptance of ART facilities could be due to the fact that older respondents or patients will become more conservative and less likely to adopt new HIV/AIDS curative and preventive programs which could be linked to failing physical energy of respondents. The results are in support of findings of Arogundade & Faloore, 2012; Enang, 2014; Ojikutu, Adeleke, Yusuf & Ajibola, 2010 that are influenced by social marketing demographic characteristics.

Marital Status was significant at 5% and positively related to level of acceptance of ART facilities. This means that as the marital status of the respondents increased, the level of acceptance of ART facilities also increased. Marital Status could mean higher level of health consciousness and responsibility towards spouse and children. Hence, the higher the health consciousness and responsibility towards spouse and unborn children, the more the level of adoption of ART activities.

Experience on AIDS was significant at 1% and positively related to the level of adoption and this means that as years of experience on AIDS increased, the higher the level of adoption of ART facilities. Years of experience of AIDS could mean years of practical knowledge/encounter with AIDS. The more the knowledge acquired on AIDS, the more the level of adoption of ART facilities.

Employment Status was significant at 1% and positively related to the level of adoption of ART facilities. This means that as employment status increased, the level of acceptance of ART program increased. Increased employment status i.e. the number of employed respondents, the more the respondents (patients) conveniently take their resources especially financial to treat themselves. The more respondents access financial resources in their health treatment, the more the level of adoption of ART facilities.

Level of education was significant at 1% and positively related to level of adoption of ART facilities. This means that as the level of education increased, the level of adoption of ART facilities also increased. Level of education acquired by respondents could mean higher level of exposure and managerial and non-managerial skill acquisition. The higher the level of exposure and skill acquisition, the higher the level of adoption of ART facilities.

The Pearson chi-square value of 607.822 shows that the model is statistically significant at one per cent. In other words, that the relationship between the independent variables and the level of influence of ART facilities is highly significant, courtesy of social marketing in reaching out to target audience. The findings are also in support of the study by Arimoto, Hori, lto, Kubos & Tsukada (2012), Garbati, Abba, Kabrand & Yusuph (2011) and AIDSMARK (2007), in which they found that social marketing has helped to improve the acceptance of ART facilities by the target audiences**.**

4.2 Implications of the Study

The social marketing demographic characteristics in the study of ART clinic in Maiduguri Metropolis has shown that people infected and affected by the epidemic, HIV is not only a medical experience but a social and emotional experience that affects the patients' lives, their future and the well-being of their off-springs. ART prolongs lives and enables the affected to live normal life and collectively contributes to the common wealth of the nation. As shown in the study, the strengths, weaknesses and challenges of the ART clinics will enable policy makers to chat a way forward for higher achievements of clinics.

5.0 CONCLUSION AND RECOMMENDATIONS

The effect of ART Clinic in Maiduguri Metropolis is largely felt in the care, information dissemination and counseling of HIV patients. The prevalence of infection has drastically reduced in the sub-region of the North East of Nigeria. The impact of ART Clinic is clearly felt in intervention and transmission of HIV, courtesy of social marketing. To strengthen the ART Clinic, the following recommendations are proffered:

5.1 **Strengthening the ART Clinic:** Knowledge gained from this study provides important information that can serve to guide the design of further ART Clinic activities in the region. For example, mobile ART Clinics, counseling workshops can be established to attend to the populace quarterly in the villages on market days.

5.2 **Evidence-based Evaluation:** It is necessary to evaluate the current information approach using available evidence. The use of personnel of people living with HIV/AIDS is a welcome exercise in this regard.

5.3 **Transmission and Prevention:** Although there is less prevalence of HIV, it is recommended that social marketing in care and counseling should be reinvigorate because it is better to prevent than to treat or manage an ailment.

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THE ROLE OF ENTREPRENEURS' CULTURAL AND SOCIAL INTELLIGENCE ON THE PERFORMANCE OF MICRO SMALL AND MEDIUM ENTERPRISES (MSMES) IN PLATEAU STATE

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ABSTRACT

This study was aimed to uncover the extent to which individuals' cultural and social intelligence enhances MSMEs performance. Cross-sectional survey design was adopted for the study using simple random sampling technique. A sample size of 400 business owners was determined using the Yamane formula. Multiple regression was used for data analyses in SPSS. The findings of the research reveal that Cultural and Social intelligence significantly influence MSMEs performance positively. The mediation effect was complementary partially mediated. Understanding the value of Cultural and Social Intelligence in enhancing business performance has brought to fore the need for MSMEs owners to strive to acquire and develop cultural and social intelligence in order to navigate customer relationship management and grow their business. This finding has offered explanation to the differences in the performance of some of the businesses that have managed to flourish in the harsh Nigerian business landscape.

Keywords: Cultural Intelligence, Social Intelligence, MSMEs Performance, Nigeria

1.0 INTRODUCTION

Globally, the role of Micro, Small and Medium Enterprise (MSME's) as vehicle for economic development, poverty alleviation and employment generation is well recognized (Raave, Srinivasa, Waheed, & Shazi, 2019). In Nigeria, MSMEs accounts for 96% of businesses, 84% of employment and 48% of total GDP in the last five years (National Bureau of Statistics, NBS, 2019). Despite the significant contributions of MSMEs to the Nigerian economy, poor performance of this sector has persisted. According to Akpi, Vem, and Eshue (2020), SMEs' performance in Nigeria is hideously lower compared to the successes recorded in developed economies. For example, MSMEs in Nigeria contributes less than 5percent to national GDP annually compared to 40percent in Asia and 50percent in United States and Europe (Eniola, 2014; PwC MSMEs survey report, 2020). Similarly, research has shown that 80percent of MSMEs fold-up within the first five years of their establishment (Agwu & Emeti, 2014). These are evidence of poor performance of the MSMEs.

Several factors have been identified that contributes to the poor performance of MSMEs in Nigeria (Agwu & Emeti, 2014; Pwc MSMEs report, 2020). A large body of entrepreneurial literature focused more on factors that are external to the entrepreneurs (Jayeola, Ihinmaoyan, & Kazeem, 2018). A few of the researches that focus on internal factors are associated with entrepreneur's orientation, lack of managerial capabilities of the entrepreneurs and poor customer relationship management (Rankhumise, & Letsoale, 2019; Ankrah & Mensah, 2015; Alabar & Mtswenem, 2017); hence the need to investigate other internal factors to the entrepreneur that may be fundamental to business success and performance.

In the last decade, a plethora of researches have examined the antecedents of business performance (Rutherford, & Oswald, 2000; Karabag & Berggren, 2014; Jimenez, Cegarra-Navarra, Perin, Sampaio, & Lenglet, 2014). However, the antecedent role of social and cultural intelligence on business performance is lacking in literature in the Nigerian context since hence the need to understand the peculiar effect of cultural intelligence of MSMEs owners on the performance of businesses in Nigeria. Social Intelligence is the interpersonal skill and ability to understand and interact well with others in different social situations while Cultural Intelligence is individuals' capability to successfully adapt to new cultural setting and interact with people from diverse cultural background.

Previous studies have established the association of Cultural Intelligence and Social Intelligence with outcomes such as decision-making, teachers' effectiveness, employee performance, customer involvement, satisfaction and loyalty (Ng & Earley, 2006; Lima, West, Winston, & Wood, 2016; Farshad, 2016; Nikoopour & Esfandiari, 2017; Akpi, et.al, 2020). Lima et al., (2016) affirmed that when interacting in culturally diverse setting, entrepreneurs with a high level of Cultural Intelligence stand better chances of success compared to those with low Cultural Intelligence. Similarly, Social Intelligence like other social phenomena is bound in the norms and values of a culture (Wang & Ollendick, 2001). Livermore (2011) asserted that low Cultural Intelligence is a primary reason many businesses continue to lose millions of dollars when expanding into culturally diverse markets. It is therefore predicted that entrepreneurs that possess social and cultural intelligence are more likely to survive, thrive and grow their businesses to maturity. This study seeks to establish the relationship between entrepreneurs' Cultural Intelligence and MSMEs' performance through the intervening role of Social Intelligence to explain why some entrepreneurs are more successful than others.

2.0 LITERATURE REVIEW

This section critically evaluates and gives an in-depth account of relevant literature and synthesis existing information in order to justify stated objectives, create a point of departure and situate the study within the work already done in order to highlight knowledge gaps that require this study to address.

2.1 Theoretical Foundation

2.1.1 Theory of Dynamic Capability

The theory of Dynamic capability originated in the work of Teece, Pisano and Shuen (1997) who argued that firms need to renew competencies in line with changing competitive conditions; i.e. "the firm's ability to integrate, build, and reconfigure internal and external competencies to address changing environments" that explained variations in inter-firm performance. Organizational capabilities are firm-specific resources and processes to accomplish strategic goals by utilizing the available know-how and non-firm-specific resources (Teece, et.al., 1997). Dynamic capability plays an important role in an organization as it underscores the accumulation of capabilities embedded in a firm and it is directly associated with its financial performance (Zhou, Zhou, Feng & Jiang, 2017, Oliver, 2014). It is argued that developing dynamic capabilities can lead to a better performance (Chien & Tsai, 2012). Oliver (2014) argued that although many organizations have access to similar resources, it is their ability to manage the resources to perform some task or activity better than competitive rivals and extend the resource potential that differentiates one organization's capability and performance over another.

As such, firm capabilities can be considered as a minimum threshold of resources that are required to satisfy market requirements. Peng, Zhang, Yen, and Yang (2019) noted that even minor difference in capabilities of firms produces differences in their performance. In line with this evidence, we argue that all MSMEs operate in a competitive environment thus the extent to one business organization performs better than another is predicated on the developing and utilizing social and cultural intelligence as capabilities. Thus, we predict that possessing cultural and social intelligence will significantly influence the performance of MSME owner and their businesses. To this end, the theory of dynamic capability is useful in explaining the link between cultural and social intelligence of managers as the cause of variations in MSMEs performance in Plateau State.

2.1.2 Performance of MSMEs in Nigeria

MSMEs performance can be seen as how the firm provides value to its stakeholders such as owners, customers, society and even government (Ibrahim & Mohd, 2015). Moullin (2003) cited in Ankrah & Mensah, (2015) defines organization's performance as how well the organization is managed and the value the organization delivers for customers and other stakeholders. In other words, it is an index that measures the degree to which an organization has achieved its goals. Firms attain their objective if they succeed in satisfying their stakeholders' needs more than their rivals.

A study has shown that approximately 96% of Nigerian businesses are MSMEs compared to 53% in the US and 65% in Europe but the performance of MSMEs in Nigeria is grossly lower compared to Asia, US, Europe and other nations at same levels of development with Nigeria (Banji, 2020). These economies have shown consistent commitment to the development of MSMEs by implementing access to finance and financial incentives, basic and technological infrastructure, adequate legal and regulatory framework, and a commitment to building domestic expertise and knowledge which is lacking in Nigeria (Banji, 2020). This research predicts that developing entrepreneurs' cultural and social has the potential to impact the performance of MSMEs in Nigeria.

2.1.3 *Cultural Intelligence*

Cultural intelligence is an individual capability to function effectively in a culturally diverse environment with the aim of competing as well as developing a sustainable strategy in cross-cultural interaction (Ott & Michailova, 2016). Cultural Intelligence is essential especially for business owners and employees who deal with people from different cultures because customer's perceptions, beliefs, attitudes, and values can substantially influence their involvement with an organization and its products. In other words, it is a person's awareness of their own culture and ability to adapt to the nuance of other cultures. Earley and Ang (2003), conceptualize cultural intelligence as a multidimensional construct comprised of cognitive, meta-cognitive, motivational, and behavioral dimensions.

Cognitive Cultural intelligence refers to the knowledge of the norms and practices in various cultures acquired from personal experiences and education. It includes knowledge of legal and economic systems, the vocabulary and grammar rules, the cultural values and religious belief, the marriage systems and customs, the art and crafts, and the rules for expressing nonverbal behaviors in other cultures (Tu, Zhang, & Chiu, 2019).

Meta-cognitive Cultural Intelligence is the mental processes that are used by individuals to acquire and comprehend cultural knowledge that leads to deep and better information processing, i.e. planning, monitoring, and revising mental models of cultural norms.

Motivational Cultural intelligence is the ability to direct attention and energy to learn about different cultures and function properly in cross-cultural situations. In the context of this study, MSMEs owners operating in new cultural setting are expected to learn the art of aligning their identity with the host community in order to attract their loyalty.

Behavioral Cultural Intelligence is the ability to act verbally and non-verbally in a proper way when interacting with individuals from different cultures (Ang & Van Dyne, 2008). The blend of all these four elements produces a powerful and systematic framework for understanding why individuals vary in their effectiveness in coping with novel cultural settings.

2.1.4 Social Intelligence

Social intelligence is described as the ability to be aware, understand and act on emotional information about others that lead to effective performance (Emmerling & Boyatzis, 2012). It emphasizes three main elements which are: capacity of social awareness towards society; social knowledge and individual's capacity for social adjustments (Khan, 2019). Social intelligence is becoming a global requirement and a critical element of success for organization. A socially intelligent organization is able to have a deeper understanding of what motivates their customers and how better to utilize the diversity

in the multicultural business environment. In this study, the conceptualization of the Tromso's model of social intelligence by Silvera, Martinussen & Dahl (2001) is adapted. The scale measures three areas of social intelligence; social information processing, social skills, and Social awareness.
Social Information Processing: is the ability to understand and predict other peoples' behaviors and feelings. Processing social information reflects a person's ability in regulating distressing emotions like anxiety or nervousness and managing such situations.

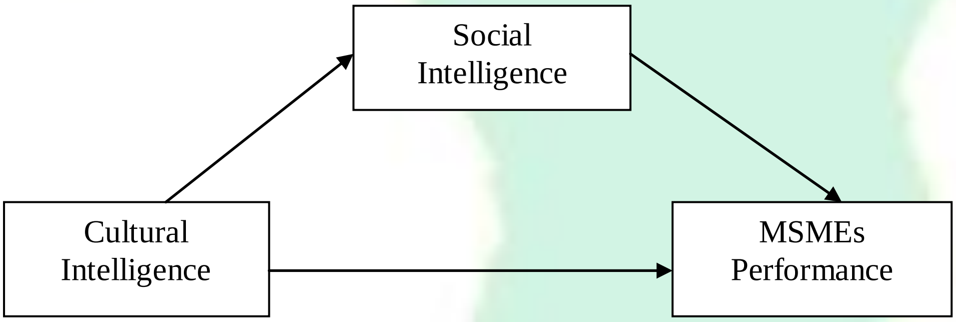
Social Skills: Stresses the behavioral ability to enter new social situations and social adaptation (Delic, Novak, Kovacic, & Avsec, 2011). Goleman (2007) holds that the individuals who intend to build relationships with others effectively need to have the ability to distinguish, separate, and control their feelings. Only through having superior social skills, the individuals know where and when to show emotional state (Ebrahimpoor, Zahedb, Elyasic, 2013).

Social Awareness: Involve an individual becoming aware of others' feelings, tastes, and needs, identifying paradoxical situations, and makes use of this source of information to establish a good relationship with them. Goleman believes that understanding others' feeling while making decision and ethical judgments is of high value.

This study examined the intervening role of social intelligence in predicting MSMEs performance in Nigeria.

2.2 <u>Conceptual Framework and Hypotheses Development</u>

This study proposes a viewpoint of MSMEs' performance through the predictive lens of the theory of dynamic capability. In addition, we proposed a mechanism through Social Intelligence to explain why the direct relationship of Cultural Intelligence and MSMEs performance should hold-sway as depicted in Figure 1.



<u>Figure 1</u>: Conceptual Framework

2.2.1 *<u>The Antecedent Role of Cultural Intelligence on MSME performance</u>*

High Cultural Intelligence is the most vital capability that adds competitive advantage to business due to its potentials to improve communication, cooperation, teamwork, performance, innovation, engagement and profitability (Tu, Zhang & Chiu, 2019). Kadam, Rao, Kareem, Abdul, & Jabeen (2019) results showed that Cultural intelligence of the SME owners has a positive effect on firm performance through the mediating role of entrepreneurial orientation. Also, Cultural intelligence of the SME owners was found to have a direct effect on firm performance. In another study by Charoensukmongkol (2015), results revealed a positive association between the Cultural Intelligence of entrepreneurs and the quality of the relationships that small and medium enterprises (SMEs) had with foreign customers, foreign suppliers and foreign competitors. The quality of the relationships was also associated positively with export performance thus asserting its importance as a valuable competency that SMEs owners need to cultivate when operating in a multicultural environment.

There is evidence that individuals with high Cultural Intelligence are better able to accomplish goals in a respectful and effective way no matter what cultural context (Livermore, 2011). This suggests that cultural intelligence is vital for the efficiency, quality of service and in creating beneficial interpersonal connections between business and clients. However, studies demonstrating the unique effect of cultural intelligence of MSMEs owners on MSMEs performance in Nigeria is still lacking in literature; The need examine this relationship is buttressed by Ang and Dyne (2015) who assert that knowing how others form impression is largely contingent upon acknowledging that individuals in different cultures have different experiences of self and others. Consistent with this, we hypothesize that; **H_1**: *There is significant positive relationship between cultural intelligence and performance of SMEs in Nigeria.*

2.2.2 The Antecedent Role of Cultural Intelligence on Social Intelligence

The association between Cultural Intelligence and emotional intelligence and other outcome variables is well established (Mohammadbagher, &Hamid, 2011). Bucker, Furrer, Poutsma and Buyensn(2014) found that Cultural Intelligence help in reducing anxiety and influence both communication effectiveness and job satisfaction. The positive association between Cultural Intelligence and adaptive selling behavior (Charoensukmongkol, 2019), interaction involvement (Puyod & Charoensukmongkol, 2019), job performance (Rezaiee, Rezaiee, & Rajabi, 2012), intercultural communication sensitivity (Dong, Koper, & Collaço, 2008), customer loyalty (Akpi, et al., 2020) is well established. The study by Hamid, & Mojtaba, (2016) is one of the few studies that indicated that the correlations between cultural intelligence, spiritual intelligence, and social intelligence with job satisfaction of the employees were significant. In another study by Esfandiari and Nikoopour (2017) reveal that Cultural intelligence has correlation with Social Intelligence, Trait Emotional Intelligence, and Spiritual Intelligence with a correlation coefficient of 0.240, 0.201, and 0.462 respectively. Reviews of the extant literature clearly indicate that the association between cultural intelligence and social intelligence is neglected. These few studies were not conducted in Nigeria where the culture is different. Thus, it is necessary to establish the link between cultural and social intelligence in Nigeria. We there hypothesis that; H_2: There is a significant relationship between Cultural Intelligence and Social Intelligence.

2.2.3 The Mediating Role of Social Intelligence between Cultural intelligence and SMEs performance

As established earlier, Social Intelligence is the capacity to effectively negotiate complex social relationships and environment. The relationship between social intelligence with other variables is well established in literature. Shekarey, Ladani, Rostami, and Jamshidi (2013) conducted a study to investigate the relationship between the social intelligence and aggression among the high school boy students in Kashan, Iran. The results revealed that there was a significant relationship between the social intelligence and aggression especially verbal and physical aggression, violence, and hostility. Nouri, Pourghaz, and Jenaabad (2015) found a significant and direct relationship between administrators' social intelligence and their knowledge absorption capability. They argued that administrators with higher social intelligence can help and accelerate educational organizations to achieve their educational goals. Similarly, Social Intelligence has been found to be important for performance of selling and marketing activities and has influence over individual achievement (Boyatzis, Good, & Massa, 2012; Hartog, van Praag, & van der Sluis, 2010). Hossein, & Naser (2018) found that all the four dimensions of social intelligence, i.e. social skills, social awareness, data processing and social desirability have significant effects on innovative performance.

However, research on individual capabilities for individual effectiveness is sparse and unsystematic; leaving an important gap in our understanding of why some owners of MSMEs are more successful than others in culturally diverse situations (Ang et al., 2007). Wawra (2009) argued that social intelligence is an indispensable capability for being successful in intercultural communications. The positive relationship between social intelligence innovative performance, selling performance and individual achievement suggests that MSME owners high in social intelligence have the potentials to satisfy their customers and consequently sustain performance and growth of their businesses. In another study, Social intelligence has a positive influence on sustainable performance.

This finding warrants an explanation using Social intelligence in intercultural settings which MSMEs operate. Thus, we leveraged on theory of dynamic capabilities (Teece, et.al, 1997) to push further our argument in this study. We argue that having cultural intelligence is not sufficient to understand the cultural diversity of the customers; therefore, entrepreneurs that possess high level of social intelligence will integrate successfully in social and cultural diverse environment which today's businesses operates to help owners navigate customer relationship management and grow their business. In line with these arguments we hypothesis that; **H$_3$**: *There is a positive relationship between Social Intelligence and Performance of MSMEs in Nigeria.* **H$_4$:** *Social Intelligence significantly mediates the relationship between Cultural Intelligence and MSMEs' Performance.*

3.0 METHODS

3.1 Population, Sample and Sampling Techniques

The population in this study comprises owners of MSMEs in Plateau State. According to report by SMEDAN/NBS (2017), Plateau State has 786,404 MSMEs. Thus, a sample of 400 owners of MSMEs was determined using Yamane (1967) formula. Cross sectional survey method was employed for data collection and respondents were selected using simple random sampling techniques in Jos-Bukuru Metropolis. The choice of the unit of observation was because of the high concentration of MSMEs and the ease to access the owners. A non-contrive setting was adopted in data collection to ensure negligible interference with the work of the business owners. Data used in this study was obtained through a self-response questionnaire administered to the selected MSMEs owners.

3.2 Measures and Analysis

All the constructs in this study were measured using existing scales. Cultural Intelligence was measured using four dimensional scale by Early and Ang (2003) with 20 items with following Cronbach alfa values; Meta-cognitive (α=0.76) Motivational (α=0.76; Behavioral (α=0.83) Cognitive (α=0.84). Tromso Social Intelligence Scale developed by Silvera, Martinussen, & Dahl (2001) was used to measure social intelligence. This questionnaire is composed of 21 items with three dimensions; Social Information Processing (α =0.86; Social Skills (α=0.84; Social Awareness (α=0.87). The outcome variable MSMEs Performance was measured using the balanced scorecard approach by Kaplan & Norton, (1992). The scale measured financial and non-financial indicators of business performance such as Growth in sales, market share and profit, Return on Assets (ROA), Return on Equity (ROE), Return on Sales (ROS) and Return on Cash flow (ROCF), customer and employees' satisfaction, and Employees' turnover. Cultural and Social Intelligence were assessed on a 5-point Likert-typed ranging from 1 (strongly disagree) to 5 (strongly agree) while MSME performance was measured on a 5-point likert type scale ranging from 1(Very Low) to 5(Very High). All the scales were adapted and have achieved acceptable threshold of 0.7 Cronbach alpha values (Nunnaly, 1978). Since all the constructs were continuous or metric variables, multiple regressions were used for data analyses in SPSS.

Though multidimensional scales were used to measure the variables in this study, the scales were summated since the analysis were at the construct level. The Classical test theory was the underlying rationale behind the summated rating scale (Spector, 1992).

4.0 RESULTS

4.1 Respondents Data

Data used for analysis was based on 250 respondents out of the 400 questionnaires administered. This is because some of the questionnaires were not returned and some returned questionnaires were not fully completed thus excluded from the data used for analysis. The result indicates that 72.4% of business owners that participated in the survey were male while 27% were female indicating gender gap in entrepreneurial participation. Majority of the respondents were within the age brackets of 20-29 and 30-39 respectively. This suggests that majority of MSMEs in Nigeria are owned by the youth. The highest educational qualification of most business owners that participated in the survey were SSCE (40.8%) and degree holders (30.8%). Majority of the businesses surveyed were micro businesses (65.6%) while small businesses constitute 25.6% and medium scale businesses having

8.8% confirming the dominance of micro businesses in Nigeria. The duration of operation among the surveyed businesses ranged between 1-5years (44.8%) followed by those that operated for less than 1year (25%) with few of them operated above 10years (17.2%). This result confirms the findings that reveal that 80percent of MSMEs fold-up within the first five years of their establishment (Agwu & Emeti, 2014). Majority of the business owners rated their business performance as average (52.4%) and 23.6% rated their business performance as good, 18.4% rated their performance as not good. This statistic suggest that more business failures are eminent. The average performance of MSMEs in the last one year may be associated with the impact of COVID-19 which has affected businesses globally but the value of entrepreneurs' CQ and SI to improving business performance cannot be ignored.

4.2 Correlation Coefficient Determination

Bivariate Pearson correlation analysis was conducted to examine the correlation between the predictor variables (CQ and SI) and MSME performance. The result indicates a significant relationship between the constructs under study. Variance Inflation Factors (VIF) was examined for issues of collinearity. VIF values above 5 are indicative of probable collinearity issues among the predictor constructs. Thus VIF values close to 3 and lower are acceptable (Hair, Hult, Ringle and Sarstedt, 2014). The result show that VIFvalues were less than the threshold of ≤3.0 and the tolerance values > 0.10. The variances explained between the independent variables to the dependent variable substantially differ suggesting no case of multi-collinearity. See table 1.

Table 1: Correlation Determination

Variables	1	2	3	VIF	Tolerance
1) MSME Performance	**1**				
2) Cultural Intelligence	.674**	**1**		2.420	0.413
3) Social Intelligence	.625**	.766**	**1**	2.420	0.464

4.3 Model Evaluation

Model was assessed using the R-squared value (R^2) and ANOVA. The R^2 values of 0.2 or higher are substantial, values of 0.13 are moderate and values of 0.02 are considered weak (Hair, Risher, Sarstedt, & Ringle, 2019). Based on statistical metrics, the R-Square value of 0.483 indicates that CQ and SI substantially predict MSME performance substantially. This indicates 48.3% of the total variance in MSMEs performance was substantially explained by Cultural and Social Intelligence. Similarly, the estimated standard error for the model is 4.44% indicates a high precision with which the regression coefficient is measured. See table 2.

Table 2: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.695[a]	.483	.479	4.436

The examination of the ANOVA in table 4 further confirm that all the independent variables significantly predict the dependent variable (df = 4536.94 (2), F=115.30, P = 0.000 < 0.05) indicates that the regression model is a good fit with data. See table 3.

Table 3: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	4536.94	2	2268.47	115.30	.000[b]
Residual	4859.46	247	19.67		
Total	9396.40	249			

a. Dependent Variable: MSME Performance

b. Predictors: (Constant), Cultural Intelligence, Social Intelligence

4.4 Hypotheses Testing

The hypotheses developed were to determine the direct relationship between Cultural, Social Intelligence and MSMEs performance. Also, the intervening role of Social Intelligence was also hypothesized. A relationship is considered significant at a P-value less than 0.05 (95% confidence level) and the t-values > 1.65 for a one tailed test (Hair, Ringle, & Sarstedt, 2014). See table 4 for results of the hypotheses tests for the direct relationships.

Table 4: Results Hypotheses Tests

Hypotheses	Direct Relationships	Std Beta	Std Error	T-Stat	P-Value	Decision
H_1	CQ -> MSMEs Performance	0.674	0.027	14.375	0.000	Supported
H_2	CQ -> Social Intelligence	0.766	0.040	18.766	0.000	Supported
H_3	SI -> MSMEs Performance	0.625	0.028	12.596	0.000	Supported

Note: CQ = Cultural Intelligence, SI = Social Intelligence

The result of hypnoses one reveals a significant positive relationship between Cultural Intelligence and MSMEs performance with a beta value (β = 0.674) which is less the threshold 0.05 significance level and the t-value of 14.375 greater than the 1.65 or higher cut-off mark for a one-tailed test therefore hypothesis one was supported. This implies that for every increase in entrepreneurs' cultural intelligence will result to 67.4% increase in business performance. The relationship between Cultural and Social Intelligence in hypothesis two reveal a significant positive relationship. The beta value was (β = 0.0.766 and t-value = 18.766) implying that for every increase in entrepreneurs' Cultural Intelligence will increases Social Intelligence by 76.6%. The hypothesis evaluating the relationship between Social Intelligence and MSMEs performance in hypothesis three was positively significant. The beta value was (β=0.625 and the t-value = 12.596) signifying that the hypothesis was supported. This implies that an increase in entrepreneurs' SI will account for 62.5% increase in MSMEs performance in Nigeria.

Hypothesis four was formulated to examine the mediating role of social intelligence between Cultural Intelligence and MSMEs performance. To test for mediation, Baron and Kenny (1986) procedures were followed using the PROCESS Macro in SPSS. According to Baron and Kenny, mediation is said to occur when; 1) the independent variable (IV) significantly affect the mediator (*path a*), 2) the IV significantly affect the dependent variable (*path c*), and 3) the effect of the IV in the DV shrinks upon the addition of the mediator to the model.

The result of the PROCESS Macro run in SPSS indicates that all the paths were positively significant indication that social intelligence is mediated between Cultural Intelligence and MSMEs performance. To further confirm the mediating effect and significance, Sobel test was conducted by inserting the values of the unstandardized path coefficients (Beta values) of paths “a” and “b” (CQ->SI->MSMEs Performance) along with the associated standard errors (Preacher & Hayes, 2004).

The result of the Sobel’s test reveals a significant indirect effect of Cultural Intelligence on MSMEs performance with the t-value at 5.974, P-value 0.000<0.05 indicating that mediation has occurred. The examination of the PROCESS result in SPSS further reveal that 500 bootstrapping at 95% confidence interval has the LLCI = 0.332, ULCI = 0.541 with an indirect effect size of (β =0.432) indicating that the indirect effect of Cultural Intelligence through Social Intelligence account for 43.2% variance to MSME performance. Since the observed P-value from the Sobel test was 0.000 less than 0.05 and the lower and upper limits of confidence intervals for the indirect effect did not include a zero in between the intervals further confirm a mediation effect (Hair et.al, 2014). This result indicates that Social Intelligence has a complimentary partial mediation effect on MSMEs performance since the direct and indirect relationships are positive and significant (Cepeda, Nitzl & Roldán, 2018). See Table 5.

Table 5: Mediating Role of Social Intelligence

Hypothesis	**Indirect Relationship**	**Std Beta**	**Std. Error**	**T-Stat.**	**LLCI**	**ULCI**	**P-value**	**Decision**
4	CQ->SI->MSME Perf.	0.432	0.025	10.578	0.332	0.541	0.000	Supported

4.5 Discussion

The research was conducted to examine the direct effect of Cultural Intelligence on MSMEs performance in Nigeria when the intervening variable social intelligence is introduced.

The results of the hypotheses one test reveal a positive and significant direct relationship between Cultural Intelligence and MSMEs performance. This finding is consistent with the viewpoint by Lima et al., (2016) that entrepreneurs with high level of Cultural Intelligence stand better chances of success compared to those with low Cultural Intelligence. The substantial predicting power of Cultural Intelligence is not surprising because Nigeria and Plateau State in particular is multicultural in nature therefore possessing high Cultural Intelligence holds a great potential for success in business interactions. Thus, MSMEs owner and employees must refocus efforts towards developing their cultural intelligence and that of employees to promote quality of service delivery and in creating beneficial interpersonal connections between business and clients.

The finding in hypothesis two reveal a significant and positive relationship between Cultural and social intelligence. The finding in this study is related to the study by Hamid and Mojtaba, (2016) that indicated significant correlations between cultural intelligence, spiritual intelligence, and social intelligence with job satisfaction of the employees. Esfandiari and Nikoopour (2017) also found that Cultural intelligence has correlation with Social Intelligence, Trait Emotional Intelligence, and Spiritual Intelligence. The lack of evidence supporting this relationship has in Nigerian setting validated the value of this finding that demonstrated the strong link between Cultural and Social Intelligence.

The direct relationship between social intelligence and MSMEs performance in hypothesis three was positive and significant. The finding is related with the research by Hossein, and Naser (2018) and

Ebrahimpoor, et.al, (2013) that found a significant and positive relationship between all the four dimensions of social intelligence and innovative performance. Only through having superior social skills, the individuals know where and when to show emotional state (Ebrahimpoor, et.al, 2013). The research by Boyatzis et.al, (2012) stressed the importance of Social Intelligence to the performance of sales; marketing activities and individual achievement further lend credence to this finding. Leveraging on the theory of dynamic capabilities in line with the findings, we conclude that though individuals' Cultural Intelligence accounts for business success, possessing social intelligence is imperative to thrive in multicultural business interactions.

The mediation test result in hypothesis four shows that, social intelligence has a complementary mediating effect and offers explanation to the underlying mechanism through which the indirect effect of entrepreneurs' Cultural Intelligence influences MSMEs performance. The finding is consistent with the viewpoint by Habib et.al. (2013) that an organization's ability to perform in cross-cultural and inter-cultural environment requires the entrepreneur to be socially intelligent. The presence of a substantial mediation effect also indicates that possessing high social intelligence holds the potential to perform more effectively in a diverse cultural setting. It is pertinent to note that behavior construed as socially intelligent may have different manifestation and aims in different cultures. In a culture, where shared values, customs and habits are common denominators of social behavior, such values provide templates of activities in interpersonal situations that promote social cohesion, harmony, predictability and safety (Habib et.al, 2013). The above discussion shows that the core of social intelligence is determined by the culture and norms, values, social setup, social roles, and responsibilities.

A number of practical, theoretical and policy implications can be drawn from this study;

Practical Implication: The results suggested that Cultural Intelligence is a key capability entrepreneur must develop to conduct business more successfully. The findings also gave insight to SMEs owner on the need to recruit employees high in Cultural and Social Intelligence to meet the ever changing demands of customers for business success. In addition, entrepreneurs will be better informed on other personal requirements for more effective new venture creation and sustainability.

Theoretical Implication: The establishment of the link between Cultural, Social Intelligence and MSMEs performance as well as the utilization of the theory of dynamic capability to underpin this study are additions to entrepreneurial literature. The mechanism Social Intelligence used in this study offered explanation to why some individuals have a higher success in their businesses irrespective of the harsh business environment in Nigeria. The inclusion of micro businesses that constitutes over 90% of businesses in Nigeria was a departure from the norm with previous researches that only covers small and medium enterprises.

Policy Implication: The findings of this study will enable business owners and educational institutions to develop and implement policies and capacity building programmed that support individual's cultural and social intelligence to influence entrepreneurial outcomes. Because SMEs are considered a key driver of a country's economic development, Cultural Intelligence training could be an important choice on which the government should focus.

4.6 Limitations and Direction to Future Research

The study provides useful insights but some challenges were encountered. Firstly, the study was conducted among SMEs operating in Jos-Bukuru Metropolis in Plateau State Nigeria. Though it is a cosmopolitan city with a high concentration of MSMEs, extending the research to other parts of Plateau States with significant MSMEs concentration would have being a better representation of the population in Plateau State. Future studies should consider surveying MSMEs located outside the area covered in this study. Secondly, our study operationalised Cultural and Social Intelligence at the construct level which was unable to isolate the dimensions of Cultural and Social Intelligence that have more potential to influence MSMEs performance. Future research should consider exploring the constructs at the dimensional level for better insights.

5.0 CONCLUSION AND RECOMMENDATIONS

The thrust of the research was to establish other factors that are internal to the entrepreneur that when harnessed can impact positively on business performance. We found that cultural and social intelligence holds the potential to increase the performance of MSMEs in Nigeria. In addition, entrepreneur's social intelligence is of great value to successfully boast business performance in a cultural diverse environment which today's businesses operate. These findings offered explanation to the differences in the performance of some of the businesses that have managed to thrive in the Nigerian business landscape. In line with these revelations, we leverage on the theory of multiple intelligence to bring to light some theoretical as well as practical contributions from the outcome in this study. The findings of this research are a departure from the emphasis on the external factors affecting MSMEs performance in Nigeria. Deliberate efforts must be made by policy makers and business owners to develop and implement policies and capacity building programmed to enhance and support effective entrepreneurial outcomes. These programmed and policies should target interpersonal skills, empathy and effective communication skills, conflict, diversity management and change management.

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THE ROLE OF ORGANISATIONAL CULTURE IN EMPLOYEE TURNOVER INTENTION: A SURVEY OF EMPLOYEES OF PUBLIC AND PRIVATE ORGANISATIONS IN JOS

By

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ABSTRACT

Against the contention that employee turnover intention represents the most consistent predictor of turnover, which has serious direct and indirect costs with negative impact on the bottom-line, this study examined the problem in both public and private sector settings in a survey of 150 employees. Structured questionnaires guided by the organisational culture assessment instrument of Cameron & Quinn and the 3-item inventory turnover invention scale of Cammani, Jenkins and Klesh, were completed by 119 employees, and analysed using Pearson Correlation Coefficient, Analysis of Variance and Kruskal –Wallis test, in testing hypotheses on the relationship between turnover intention and the specified organisational culture characteristics, as well as the difference in turnover intentions between public and private sector employees. The results indicate a significant relationship between the variables of organisational leadership, management of employees and criteria of success, which varies significantly between employees in the public and private sectors, while the relationship with dominant characteristics, strategic emphasis and organisational glue were found not to be significant. Based on these, recommendations were made to managements of organisations to emphasise practices via leadership and management styles with cognizance of what employees consider their success outcomes that trigger job satisfaction with the attendant commitment, hence less disposition to leave.

Keywords: Competing values framework**,** Job satisfaction, Organisational culture, Turnover intention.

1.0 INTRODUCTION

Organisational goals attainment and sustainability for its survival and growth depend not just on the technical competence of its personnel, but particularly the psycho-social disposition – the feeling, thinking, attitude and behaviour – that underpin the desired performance. These psycho-social characteristics are among the bases of formation of an organisation's human capital, considered not just critical to success, but one of the most important sources of competitive advantage (Ireland, Hitt & Sirmon, 2003). Besides, the perception of the organisation by its personnel may determine whether they will continue to work or perform as expected for it or not. Two related phenomena are pertinent here: organisational culture (OC) and turnover intentions (TI), as contended that an appropriate OC provides an environment for employees to develop positive behaviour and attitude, including towards job outcomes that promote low TI (Meng & Berger, 2019). The empirical and theoretical reviews (sections 2.2 and 2.3) lend considerable support to this association between OC and TI, arising largely from the nature of OC, which Mullins (2010, p.739) defined as "the collection of traditions, values, beliefs, policies and attitudes that constitute a pervasive 'context for everything we do and think in an organisation".

Such pervasive context could be encouraging or otherwise to employees' decision or intention to remain or leave, hence impacting on the organisation's employee or staff turnover and intention.

Defined as the ratio of the number of employees replaced to that of the average number of people who remain employed in the organisation (Price & Mueller, 1981, cited in Owhondah, Onuoha & Akhigbe, 2016), turnover, logically preceded by TI, is costly in several respects including work-flow disruptions, recruitment, selection and training costs, with effects on productivity and quality of the products or services (Essien, Adekunle & Oke-Bello, 2013; Medina, 2012), aside other effects, including on the society at large (Owolabi, 2012). This scenario of cost and negative effects with ultimate impact on profitability or effectiveness generally, applies also to turnover intention (TI), i.e. employees' desire to leave, due to absenteeism on account of job-hunting, late-coming, general poor attitude to work, among others (Owhonda et al., 2016).

Previous studies, some of which are as presented in the empirical review, including Eisenberger, Hutington, Hutchison, and Sowa (1986), Macintosh and Doherty (2010), Manetje and Martins (2009), and Tumwesigye (2010), have produced different outcomes of its (turnover intention's) link, direct or indirect via mediation, with OC. These and those in the Nigerian setting, including Mbah and Ikemefuna (2012), Owolabi (2012), Owhonda et al. (2016), and Umar and Ringim (2015), studied TI from such perspectives as job satisfaction (JS), promotion, commitment, job stress, organisational politics and justice, job insecurity, and environment, with significant relationships established. The theoretical bases of some of these studies included path analysis (Macintosh & Doherty, 2010), organisational support (Eisenberger et al. 1986), and social/psychological exchange (Owhondah et al., 2016; Umar & Ringim, 2015).

Evidently, their theoretical perspectives with accompanying methodologies and other notable features, including the focus in terms of broad sectors, leave room for additional or enhanced insights into the all-important, complex nature of OC, considered to be the differentiating factor between successful and other organisations (Cameron, 2004). Specifically, none of these studies adopted the Competing Values Framework (CVF) which has a unique culture measurement tool, the Organisational Culture Assessment Instrument (OCAI), developed by Cameron & Quinn (1999), obviously with broader OC dimensions than any of the foregoing. This is a gap this study sought to contribute to bridging, hence its appropriateness, moreso that it adopted a comparative perspective as opposed to most of the foregoing which focused virtually wholly on one sector – private. Evidence abounds of public servants not only changing jobs, but expressing intentions for change to both public and, especially, private sector organisations considered to offer higher employment-based incomes and other rewards (Onwuemene & Oni, 2017; Rogger, 2017). Again, the variables and outcomes of most previous studies were specific phenomena, such as JS and commitment, relating with TI, without identifying the broad OC dimensions triggering them, an approach this study attempted to remedy.

1.1 Research Problem/Questions

Organisational goal attainment and sustainability are invariably dependent on the desired performance of the workforce, particularly its continued availability and in the right frame of mind – satisfied and committed modes. The threat to organisations in this regard is not just employee turnover but especially intentions thereto. Employees with intentions to leave may be officially, but not practically fully available, as they may either be occasionally absent job-hunting or when not doing so would not be in the right frame of mind or the desired attitude for expected performance. Since they may be job-hunting either physically or on the internet or thinking in that direction along the line of events consistent with the Mobley Model of a series of events and actions culminating into actual turnover (Mobley, 1977, cited in Owhondah et al., 2013), they would already be dissatisfied with their current organisation and thus low on commitment to it, hence low productivity in both quality and quantity terms. The total cost of these is obvious, reflected in paid wages for days absent, loss in business, problem-solving process and focus shifted from official to personal schedules, aside disruption in work-flow, high stress and low morale of other staff, with attendant impact on overall productivity (Essien et al., 2013; Medina, 2012; Owhondah et al., 2013).

Obviously, the incidence of TI is not unrelated with some of organisations' policies and strategies, being the integral products of their cultures (Allaire & Firsirotu, 1984). The specifics of the culture is what seems to be the missing link. Organisations' dominant defining features, style of managing employees, organisational leadership natures could have the likelihood of causing the dissatisfaction that triggers the desire to leave. Similarly, the issues considered of strategic emphases to the organisation, as well as defining its success criteria, could be at variance with those of the employees', and what the organisation may consider the values that bind components together and thus must be imbibed.

Accordingly, the research questions thus were (a) what is the relationship between employee TI and each of the OC dimensions of dominant characteristics, organisational leadership, management of employees, organisational glue, strategic emphases, and criteria of success? (b) Is there any difference in the turnover intentions of employees in private and public sector organisations?

1.2 Study Objectives

The aim of the study was to investigate the role that OC plays in the turnover intention of employees in organisations, with specific objectives of determining the nature of relationship between its dimensions of dominant characteristics, organisational leadership, management of employees, organisational glue, strategic emphases and criteria of success and the turnover intention of employees. This was aside investigating the difference in TI of private and public sector organisations' employees.

1.3 Research Hypotheses

The following hypotheses were formulated, in the null versions, guided by the relevant literature, to be tested to achieve the objectives:

H_1: Dominant characteristics has no significant relationship with turnover intention.

H_2: Organisational leadership has no significant relationship with turnover intention.

H_3: Management of employees has no significant relationship with turnover intention.

H_4: There is no significant relationship between organisational glue and turnover intention.

H_5: There is no significant relationship between strategic emphases and turnover intention.

H_6: Criteria of success has no significant relationship with turnover intention.

H_7: There is no significant difference in turnover intention of private and public sector employees.

2.0 LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 *Organisational Culture*

Allaire and Firsirotu (1984) posit that there is no generally accepted definition of OC, but nonetheless define it as the embodiment of "the organisation's expressive and affective dimensions in a system of shared and meaningful symbols manifested in myths, ideology and values and in a multiple cultural artifacts…" (p.213). Considered integral elements of this conceptualization are the formal structures, strategies, policies and management processes along with all other aspects that make the functioning of the organisation a reality.

According to Manetje and Martins (2009), it is a system of shared meaning held by members, distinguishing the organisation from others. Generally, OC is considered to be the shared values, beliefs and assumptions existing within an organisation that help to guide and coordinate behaviour (Macintosh & Doherty, 2010), hence acting as a system of social control and influence on employees' attitudes and behaviour. Perhaps a more comprehensive conceptualisation is that provided by Schein (1985), cited in Stoner, Freeman and Gilbert (2003, p.155), as:

> *A pattern of shared basic assumptions that a group invents, learns as it solves its problems of external adaptation and internal integration that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems.*

Ojo (2010) comments on this definition to the effect that it basically entails implications of groups facing the twin challenges of integration of members into an effective whole and adapting to the external environment for survival purposes, learning and sharing collectively the processes of finding solutions to these challenges over time, thereby constituting its culture. This conceptualization has three basic elements with dual impact on each other (Stoner et al., 2003, p. 155): *artefacts* which represent the things that one sees, hears and feels upon encountering a new culture, or the visible aspects of culture; *espoused values,* which are the reasons for action or what is believed to be good, right, desirable; and *basic assumptions,* representing unspoken beliefs that society or group members take for granted, but concern the right way of doing things.

Cameron and Quinn (1999) aside also generally conceiving of OC as taken-for-granted values, underlying assumptions, expectations and collective memories rife in an organization, consider it to be more specific reflection of the organization in its values, dominant leadership styles, language and symbols, procedures and routines, and what it defines as success that distinguishes it from others (Alharbi & Abedelrahim, 2018). Included here are some of the dimensions they used in measuring practices that define the dominant culture of an organization as depicted in the CVF, elaborated in subsequent sections. Incidentally, its (CVF) components have been identified as characteristics of OC, to include innovativeness and risk-taking, aggressiveness and competitiveness in goals' pursuit and outcome orientation (Robbins & Judge, 2018, cited in Edeh, Ugwu, Ikpor, Nwali, & Udeze, 2019).

These conceptualisations contain elements that characterize OC, which we conceive of as a system of shared, learned, transmissible, dynamic values, beliefs and norms among organisational members that underlie its processes and strategies, in the context of, and reference with the culture of the wider society in which the organisation exists and operates, that influence the actions and expectations of members.

2.1.2 Turnover Intention

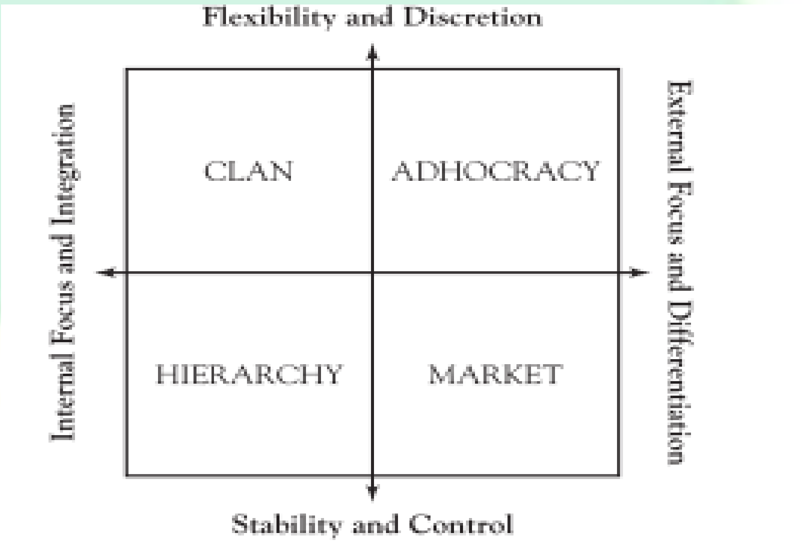
Unlike most management concepts, turnover intention is more easily conceptualised, in view of the few differences in the common elements of the various definitions encountered. Virtually all scholars are emphatic on its voluntary nature, underlined by the willingness of employees to leave an organisation in the future, some assigning a specific period (Medina, 2012) with others not being specific (Mobley, 1977). Others bring out more clearly the voluntary nature with their definitions of "conscious and deliberate willingness" to leave an organisation for another in the future (Idiegbeyan-ose, Okpeke & Nwokeoma, 2018). TI invariably borders on not just employees' conscious and deliberate willingness to voluntarily leave current organisations for others in the future on account of not being satisfied with the current ones, but also making efforts to actualise the considerations and dispositions to that effect.

TI is of great concern to organisational management in view of the costs, highlighted in section 1.3, its nature as an indicator of employees' psychological attachment to an organisation (Umar & Ringim, 2015), and its being the best predictor of actual turnover (Firth, Mello, Moore & Loquet, 2004). Concern over intention, with the attendant preference for focus thereon, rather than actual turnover, is underlined by unreliable statistics or the problem of environmental factors being responsible for the latter, hence possible impairment of management insight into the effectiveness of its strategies (Medina, 2012; Price & Mueller, 1981).

2.2 Theoretical Review

The study is anchored on the **Competing Values Framework (CVF)** of Cameron and Quinn (1999), considered to be one of the 50 most important, influential and extensively used models in OC research and business history (Igor & Skitmore, 2006; Yu & Wu, 2009). Developed initially by Quinn and Rorhbaugh (1983) for analysing organisational effectiveness generally, the CVF has been enhanced and validated severally over time. Its popularity has been occasioned by its having been found (Cameron & Quinn, 1999, 2006) to be an effective framework for profiling and changing organisations' dominant cultures. It is basically a two-dimensional model with the key factors underlying organisational effectiveness in opposite positions to each other – flexibility (discretion, dynamism) versus control (stability, order) and internal (integration, unity) versus external (differentiation, rivalry) focus, as appear in figure 1.

Figure 1: Competing Values Framework



Source: Cameron and Quinn (1999).

When organisational practices are analysed using the two dimensions, four cultures are discernible, which Cameron and Quinn (1999) labelled Clan, Hierarchy, Market and Adhocracy, each depicting a dominant set of indicators, with the distinct features they highlighted, pitching clan (collaborate) against market (compete) and adhocracy (create) against hierarchy (control) (figure 1). The clan culture depicts friendly, family-like relationships focused on employee teamwork and participation with goals of high commitment and morale, consequent upon mentorship and parent-like support leadership, while hierarchy culture characterises highly formalised structural relationships committed to smooth, efficient and stable operations and output with appropriate controls. Market typifies rationality steeped in competitive target-achievement through demanding leadership for high productivity and market dominance, while adhocracy epitomises dynamic entrepreneurial operations and mechanisms targeted at innovative products and markets.

These dominant cultures formed the theoretical basis for the OCAI for the measurement of organisational practices to fit into any of the categories. The OCAI has six culture dimensions which Cameron and Quinn (1999) labelled dominant characteristics, management of employees, organisational leadership, organisational glue, strategic emphases, and criteria of success. Each dimension has four alternatives or elements each fitting into or describing a fundamental feature of one of the broad culture categories, both currently and the future (preferred state). This is the use to which most studies, including Alharbi and Abedelrahim (2018) and Lizbertinova, Lorincova, & Caha (2016) that have adapted or adopted it put it – identifying the prevailing culture of the organisation and the preferred variant. Some have validated it for different purposes – to determine the relationship with or effect on specific constructs, including JS and commitment (Abiola-Falemu, 2013), and effectiveness and efficiency (Edeh et al., 2019).

In this study, the OCAI is used for explaining the relationship of OC with TI. Though no study known to us has applied this framework to TI, we contend that since several of its dimensions have been successfully tested for significant relationship with or effect on related organisational variables, notably JS and commitment (Abiola-Falemu, 2013), detailed in the empirical review, it can adequately explain the relationship of OC with TI. Further, this relationship is obvious from each element of the major dimensions. For instance, for the organisational leadership dimension, the degree to which leadership mentors and nurtures employees, encourages or stifles the entrepreneurial spirit of innovation and creativity, uncompromisingly drives targets-achievement, with negative sanctions for short-falls, and is committed to strict adherence to operating procedures irrespective of prevailing environmental dynamics, logically is a potential strong basis for employees to think of either staying with or leaving the organisation.

Even in terms of the broad categories on the CVF, the relationship with TI is obvious. For many employees, a clan culture with emphasis on high morale, commitment, cohesion, teamwork and participation, with leaders as mentors, supporters and facilitators is a high potential for low TI, compared to a logically high TI associated with a market culture that emphasises competitive winning at all times and cost by employees driven hard under intense pressure and threats, for targets-achievement. Similarly, an obvious high TI is associated with employees who value the freedom to unleash their innovation and creativity but are in an organisation that values highly formalised processes under strict controls and evaluation mechanisms.

2.3 Empirical Review

Empirical evidence abounds on the relationship between OC and TI, both in the global and Nigerian contexts based on different measurement methods and instruments, but virtually non-existent in the theoretical context of the CVF, except the study of Abiola-Falemu (2013) on related variables. Abiola-Falemu (2013) found all dimensions of the OCAI relating significantly with virtually all proxies of JS investigated, namely work interest, pay package, job security, opportunities for personal development, and employee welfare and retirement package. Others were availability of tools, trust and reliability, equal treatment and justice, and good working conditions. While dominant characteristics was found to be significantly related with all JS proxies except opportunities for personal development, availability of tools and equity and justice, organisational leadership and management of employees were both significantly related to all JS proxies except availability of tools. Similarly, while equity and justice were the exceptions in organisational glue and strategic emphases, opportunities for personal development was the exception for criteria of success. Studied along with JS was commitment, proxied by leadership, management style, cooperation and communication, relationships, common values and vision, motivation, training and development, employee welfare concerns, job position, length of service, age and tenure, and marital status. These were all found to have significant relationship with all the OCAI dimensions, hence underscoring the inextricable link of OC with employee commitment.

As stated in the theoretical review, JS and commitment are among the key variables empirically found to be significantly related to TI, either directly or in a mediated status through different methodologies and theoretical foundations. Firth et al. (2004), Mackintosh and Doherty (2010) and Manetje and Martins (2009) found that the intentions to quit were highly influenced by JS, lack of commitment to the organisation and their various dimensions. Specific aspects of JS and commitment were also reported as pay, nature of work and supervision (Mbah & Ikemefuna, 2012), and promotion or with pay growth, supervision style (Owhondah et al., 2016). Employees feel satisfied/committed or otherwise with organisational policies, strategies or practices, which are all rooted in OC.

In other contexts, Owolabi (2012) found such significant relationship of TI with organisational justice in terms of fairness in distribution of rewards and other outcomes including supervisors' style of leadership in the banking industry. Similarly, Idiegbeyan-ose et al. (2018), established significant relationships between perceived organisational politics and injustice, job stress and work environment and TI among library staff of private universities in South-West Nigeria.

Organisational support was found to be significantly related to TI. This is evident from the early validated postulations such as Eissenberger et al.'s (1986), to more recent studies (Gbadamosi, Ndagi & Oni, 2007), and Umar and Ringim's (2015) conclusions bordering on employee's perception of breach of the psychological contracts by their employers on personal welfare and several related.

3.0 METHODOLOGY

3.1 Research Design

The correlational design was adopted for the study as the aim was to determine and explain the relationship between OC and TI. To achieve this, the survey perspective with cross-sectional approach was employed, since the study covered branch staff of three banks and three public sector organisations, with the data collected over a period of time. The choice of two distinct sectors was to establish that employees in all organisations hold TI, besides ascertaining whether significant differences exist in the phenomenon in the sectors. The quantitative approach was employed in the collection and analysis of data towards reaching objective conclusions, to underscore the underlying positivist and realist philosophies of the study.

3.2 Sample and Sampling Technique

In view of the number of organisations involved and other constraints with impracticability of engaging the population (estimated from availed information at 800) of employees of two Plateau State corporations, Industrial Training Fund (ITF) Head officeDepartments and three banks in Jos/Bukuru metropolis, it became imperative to select a representative sample. The simple random sampling procedure was adopted in the selection of the participants, after some initial purposive approach by ensuring participation from broad functional divisions in the public entities.

For quality input, drivers, cleaners, security personnel, and directors were excluded from the survey, consistent with Mbah and Ikemefuna (2012) who excluded non-skilled personnel, general managers and expatriates considered unlikely to leave. Using Yamane's (1967) formula of $n=N/1+N(e)^2$, with N and e being population (800) and 1 *less* assumed confidence level (95%), the sample size was determined to be 150, assuming variability rate of TI in the population between 30% and 40%, with sample size between 142 and 252 respectively (Watson, 2001, p.4). The size was judged appropriate largely in line with Saunders, Lewis and Thornhill (2016, p.279), that considering the relevant influences including the nature of analysis, population and cost, "the sample size is almost always a matter of judgement as well as of calculation".

3.3 Data Collection Instruments

The data were collected through a structured questionnaire, which was in three parts for respondents' demographics, OC and TI measures respectively. The responses for the OC and TI were designed on the 5-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5), consistent with Abiola-Falemu (2013) and Edeh et al. (2019) who validated the OCAI. The responses were self-explanatory with no jargon such that can be easily completed by respondents, with emphasis on voluntary participation in the study. Being focused on responses from employees only, the survey required no official approval other than from initial discussion with the unit heads/supervisors. The questionnaire was administered personally to the selected banks' staff, while those to the public organisations were done by research assistants. Of the 150 sets administered, 126 were returned, duly completed, with 119 found to have been properly completed, representing 79% of the sample.

3.4 Measures

OC was measured with the OCAI developed by Cameron and Quinn (1999), which has six measurable categories described in the third paragraph, while TI was measured using the 3-item inventory TI Scale developed by Cammanni, Fichman, Jenkins & Klesh (1979), with an internal composite consistency coefficient alpha of 0.78. Since both adopted measuring instruments have been validated globally (the OCAI by over 10,000 organisations, Cameron, 2004, let alone scholars), their validity and reliability have been solidly established and are thus not in doubt.

The measurement scales for TI were assigned to the statements originally conceived by Cammanni et al. (1979) that: 1) Employees will probably look for new job within the next one year, 2) Employees will actually look for a new job within the next one year, and 3). Employees often think of quitting.

Similarly, OC was measured by applying the appropriate scale on each of the four defining elements of the six categories (proxies) prevailing in their organisations:

Dominant Characteristics: shared personal information akin to an extended family; dynamic entrepreneurial state with individual employees taking risks; getting the job done through competitive achievement orientation; highly formal and control-oriented structure.

Organisational Leadership: mentoring, facilitating and nurturing leadership; entrepreneurial, innovative and risk-taking; no-nonsense, aggressive results-orientated; coordinating, organising and smooth-occurring efficiency.

Management of Employees*:* teamwork, consensus and participation; individual risk-taking, innovation, freedom and uniqueness; hard-driving competitiveness and achieving; security of employment, conformity, predictability and stability of relationships.

Organisational Glue: loyalty and mutual trust, and commitment to organisational achievement; commitment to organisational innovation and development; organisational goal attainment; formality of rules and policies and smooth operations.

Strategic Emphases*:* human development and high trust; acquiring new resources, creating new challenges and opportunities; competitive winning in the market place; permanence and stability, efficiency, control and smooth operations.

Criteria of Success*:* development of human resource, teamwork, commitment and concern for people; product innovation and leadership, and market innovation; winning in the market place, competitive leadership; efficiency, dependable delivery, smooth-scheduling and low-cost production.

3.5 Data Analysis Method

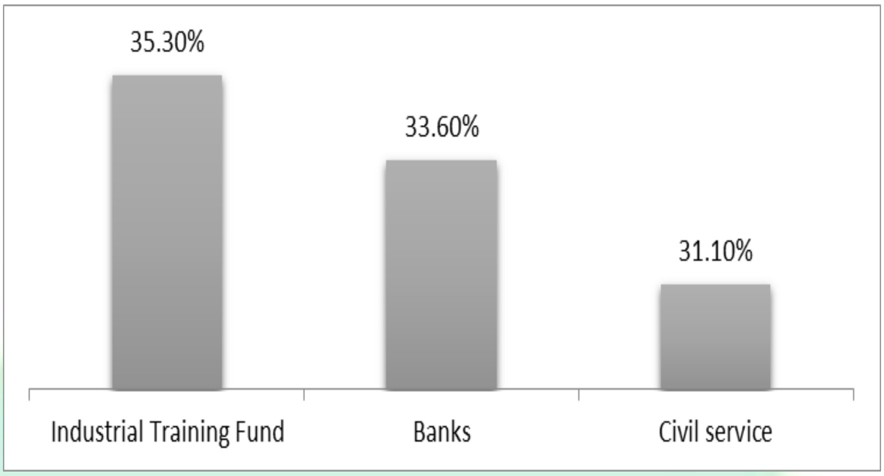
The collected data were analysed using the Pearson's Correlation Coefficient to establish relationship between OC and TI. Each dimension of OC was pitched against TI for significant or otherwise relationship. The Analysis of variance was employed to test the difference in relationship of OC and TI between the entities in the private and public sectors. The assumptions of normal distribution and homoscedasticity were mitigated by the above-30 sample groups and the largest group not exceeding the smallest by 1.5 times (Saunders et al., 2016). The Kruskal-Walis test was used to complement the ANOVA in ascertaining the differences between the specific groups.

4.0 RESULTS

4.1 Respondents Sampled

Figure 2 show that 35%, 33.6% and 31.1% of the respondents were sampled from ITF, the banks, and the Plateau State public service respectively.

Figure 2: Sampled Respondents



Source: Survey Data

4.2 Socio-Demographic Characteristics

Table 1 indicates that the majority (36.1%) of the respondents were between 26-30 years, 9.2% were between 18-25 years, 16% were between 31-35 years, 17% were between 36-40 years, and 21% between 41-45 years or more. There were more male (63%) than female respondents (37%). Overall, there is all-encompassing representation, age and sex-wise.

Table 1: Socio-demographic Characteristics

	Frequency	**Percent %**
Age Group (years)		
18-25	11	9.2
26-30	43	36.1
31-35	19	16.0
36-40	21	17.6
41-45+	25	21.0
	119	**100**
Gender		
Male	75	63.0
Female	44	37.0
	119	**100**

Source: Survey Data

4.3 Years of Service

Table 1 presents the respondents in terms of how long they have worked for their organisations, with a slim (39.5%) majority having been in their present employment for between 1-5 years; with 27.7% and 21% having put in 6-10 years and 11-15 years respectively, hence providing sufficient basis for meaningful understanding of the problem being investigated.

Table 2: Experience (years)

	Frequency	**Percent %**
1-5	47	39.5
6-10	33	27.7
11-15	25	21.0
16-20	14	11.8
Total	**119**	**100**

Source: Survey Data

4.4 Hypotheses Testing

4.4.1 Testing Significant Relationship between Culture Dimensions and Turnover Intention

The six hypotheses tested were:

H$_1$: Dominant characteristics has no significant relationship with turnover intention.

H$_2$: Organisational leadership has no significant relationship with turnover intention.

H$_3$: Management of employees has no significant relationship with turnover intention.

H$_4$: There is no significant relationship between organisational glue and turnover intention.

H$_5$: There is no significant relationship between strategic emphases and turnover intention.

H$_6$: Criteria of success has no significant relationship with turnover intention.

The Pearson correlation coefficient was used for the tests at 5% or 0.05 level of significance, consistent with general convention in the social (and management) sciences (Saunders et al., 2016), with the matrix presented in table 3.

Table 3: Pearson's Correlation Matrix

Correlations

	Dominant Character-istics	**Organisational Leadership**	**Manage Ment of Employees**	**Organisa tional Glue**	**Strategic Emphases**	**Criteria of Success**	**Turnover Intention**
Dominant Characteristics:	1						
Organisational leadership	.094	1					
Management Employees	.115	.967*	1				
Organisational Glue	.136	.035	.052	1			
Strategic Emphases	.093	.224*	.194*	.111	1		
Criteria of Success	.096	.968**	.959**	.032	.191*	1	
Turnover Intention	.022	.215*	.223*	.137	.118	.198*	1

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

The following results emerge from Table 3:

i) There is no significant relationship between dominant characteristics and turnover intention, ($r = 0.022$, $p = 0.815$), since $p>0.05$.

ii) There is a significant relationship between organisational leadership and turnover intention ($r = 0.215$, $p = 0.019$), since $p<0.05$.

iii) There is a significant relationship between management of employees and turnover intention ($r = 0.223$, $p = 0.015$), since $p<0.05$

iv) There is no significant relationship between organisational glue and turnover intention ($r = 0.137$, $p = 0.138$), since $p>0.05$.

v) There is no significant relationship between strategic emphasis and turnover intention ($r = 0.118$, $p = 203$), since $p>0.05$.

vi) There is a significant relationship between criteria of success and turnover intention ($r = 0.198$, $p = 0.031$), since $p<0.05$.

Evidently, the null versions of the hypotheses of no significant relationship between TI and each of the culture metrics of dominant characteristics, organisational glue and strategic emphases, are not rejected, hence concluding that there is no significant relationship between TI and each of the OC proxies. Conversely, we reject the null versions of the hypotheses that there is no significant relationship between TI and each of organisational leadership, management of employees and criteria of success, and thereby accept the alternate versions that there is significant relationship between TI and each of the dimensions.

4.4.2 *Testing Significant differences in Turnover Intentions of Public and Private Sector Employees*

The hypothesis tested was:

H_7: There is no significant difference in turnover intention of private and public sector employees.

The details in Tables 4.1 and 4.2 were used for the test.

Table 4.1: Analysis of Variance Summary

Tests of Between-Subjects Effects

Dependent Variable: Turnover Intention

Source	Type II Sum Of Squares	df	Mean Square	F	Sig.
Corrected Model	351.755[a]	2	175.877	56.488	.000
Intercept	4355.299	1	4355.299	1398.829	.000
Organisation	351.755	2	175.877	56.488	.000
Error	351.170	116	3.114		
Total	4961.00	119			
Corrected Total	712.924	118			

a. R-Squared = .493 (Adjusted R. Squared = .485)

Table 4.2: Descriptive Statistics

Dependent Variable: Turnover Intention

Organisation	Mean	Std. Deviation	N
ITF	3.74	.857	42
Banks	6.63	2.284	40
State Public Service	7.81	1.883	37
Total	5.97	2.458	119

The results from Table 4.1 show that there is a significant difference in the turnover intention of employees across organizations: F = 56.488, df = 2, p = 0.000. Table 4.2 portrays this statistical significance with mean TI scores of 3.74 (ITF employees), 6.63 (Bank employees), and 7.81 (State public servants). Clearly, the Plateau State public servants had the highest TI, with ITF staff having the least. Organization type was therefore significant in impacting TI, hence leading to the rejection of the Null hypothesis while accepting the alternative of a significant difference in TI of public and private sector employees.

The ANOVA test shows blanket significance of employee TI across organisations without specifics, which the Kruskal-Wallis test remedies as in the following tables with dependent variable transformed to ranks:

Table 5.1: Independent-Samples Kruskal-Wallis Test

Ranks

	Organization	N	Mean Rank
Turnover intention	ITF	42	29.18
	Bank employees	40	69.18
	Civil servants	37	85.07
	Total	119	

Table 5.2: Independent-Samples Kruskal-Wallis Test Summary

Total N	119
Test Statistic	57.262[a]
Degree Of Freedom	2
Asymptotic Sig.(2-sided test)	.000

a. The test statistic is adjusted for ties.

Table 5.3: Pairwise Comparisons of Organisation

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
ITF-Bank employees	-39.996	7.530	-5.312	.000	.000
ITF-Civil servants	-55.889	7.685	-7.273	.000	.000
Bank employees-Civil servants	-15.893	7.774	-2.044	.041	.123

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is .05.

As with the ANOVA, the overall statistical significance is evident across organisations (H = 57.262, df = 2, p = 0.0005), with ITF staff still least and State public servants highest in TI. The pairwise comparisons show that not only is there significant difference between employees in the private sector (Banks) and the public sector (H=39.996, p=0.000; H=15.893, p=0.044), it is also significant between the State and Federal arms of the public sector (H=-55.889, p=0.000), obviously because the latter being a Federal government parastatal provides more JS experiences than the former.

4.5 Summary and Discussion of Findings

From the analyses undertaken in 4.4, the following findings emerged:

i) There is no significant relationship between employees' TI and the OC dimensions of dominant characteristics, organisational glue and strategic emphases. This is contrary to Abiola-Falemu's (2016) findings where these dimensions were significantly related to most and all proxies of JS and commitment, respectively. The non-significance of these dimensions to TI here may not be unconnected with their elements, described in section 3, designed to tend to further organisational interests rather than individual employees', including getting the job done; formality of roles/ structures; creating new challenges; stable, smooth operations.

ii) There is significant relationship between employees' TI and the OC variables of organisational leadership, management of employees and criteria of success. The extent of mentoring, nurturing, entrepreneurial or control-minded leadership; team-building, participative, innovative or hard-driving employee management; with concern for people, market/product innovation, winning in the market place or efficiency, are logical grounds for TI, consistent with theoretical perspective. Empirically, these accord with the findings, including on pay, growth, supervision style, organisational justice and politics, job stress, organisational support (Eisenberger et al., 1986; Mbah & Ikemefuna, 2018; Nyamubarwa, 2013; Owolabi et al., 2012), being bases for JS and commitment, consistent with Abiola-Falemu (2016).

iii) There is a significant difference in the turnover intentions of the different organisations studied, hence evidence that employees in the private and public sectors differ in TI, consistent with Roger (2017) who found out that most public sector officials agreed that the private sector jobs pay better, though 89% of them feel satisfied, most probably because of job security, less stress, regular promotion/advancement and sundry welfare, as Gberevbie (2009) and Nwokocha and Iheriohanma (2012) concluded. Even within the public sector, there is glaring difference between the federal and state establishments studied, most probably due to the obvious fact that remunerations and other service conditions differ between the State and Federal government agencies.

5.0 CONCLUSION

The study investigated the role of organisational culture in turnover intention of employees across organisations, revealing that of the OC dimensions studied, those with greater prospects of influence on employees' personal goal attainment related with TI significantly, while those emphasising corporate goals not significantly related with TI. Conclusively, aspects of OC impact TI of employees in both public and private sectors of the Nigerian economy, though with differing levels of significance between private and public sector organisations, and between organisations in different tiers of the latter.

The practical implication for management is sufficient guide in adopting the leadership and management styles with due cognisance of what employees consider meaningful success to them personally, especially in terms of remuneration, advancement, welfare, security, sundry support, thus firm bases for JS with accompanying commitment, critical to curtailing TI. Theoretically, the findings affirm the CVF as a model for explaining sundry organisational behaviour, including TI, from a more comprehensive perspective, considering the broad scope of the measuring instrument, hence an additional methodology in the literature.

6.0 RECOMMENDATIONS

Based on the findings of the study, managements of organisations were admonished to promote OC practices in the form of leadership (strategies) that engender job satisfaction in the mould of mentoring, nurturing, facilitating job performances with reasonable degree of innovation and creativity. Secondly, employee management is advocated to revolve around building teamwork and considerable involvement allowing for reasonable individual flexibility, aside ensuring job security and predictability of advancement. Ultimately, effective organisational leadership and employee management specifically should focus on what employees define as their criteria of success, including personal development, satisfactory pay, promotion or advancement to their highest potentials, meaningful involvement in product and market innovation. Conversely, minimising TI entails management de-emphasizing practices that tend to favour organisational cohesion, operational strategies and features it considers defining from corporate goals achievement view with relatively less consideration of the employees' perspectives/interests.

Further, validating studies on TI are suggested on the broad cultural classification underpinning the CVF, as this study merely investigated its elements, typified in the OCAI, considering the dearth of studies employing this framework in this context globally. Such validating studies could include mechanisms for indicating to what extent OC explains TI.

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THE ROLE OF THE ACCOUNTING PROFESSION IN SUSTAINABLE DEVELOPMENT GOALS: FOCUS ON AUDIT FIRMS IN PLATEAU STATE, NIGERIA

By

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ABSTRACT

The Sustainable Development Goals (SDGs) influenced the change of business processes in Nigeria and the world at large. Professional accountants contribute greatly in creating this change as they are involved in the financial activities in different departments of organizations. The study examined the contributory role of the accounting profession to Sustainable Development Goals. Its focus is the audit firms in Plateau State of Nigeria. The study used primary source of data. The data is collected by using semi structured questionnaire. A cross-sectional survey was adopted to enable the researchers collect data at a single point in time. To test the hypotheses, multiple regression analysis was employed through SPSS Version 23 analysis. Among others the finding revealed that internal control evaluation has a positive and significant relationship with Sustainable Development Goals among audit firms in Plateau State. Based on this, the study recommended that key stakeholders in the promotion of Sustainable Development Goals should advocate for strong internal control evaluation by audit firms. Government should intensify effort towards promoting corporate governance in corporate organizations as this will enhance transparency and accountability, and perhaps lead to peace and Justice, which is one of the components of the Sustainable Development Goals.

Keywords: Sustainable development goals, Accounting profession, Audit firms, Plateau State

1.0 INTRODUCTION

Globally, the accounting profession plays a central role in today's challenging environment, be it national or international (Zammit, 2013). Generally, the accounting profession is considered a respected leader in the growth of strong and sustainable organizations, and in financial markets and economies. The role of the accountant is a continuously ever-changing one and it is faced with a number of challenges and opportunities shaped by forces such as globalization, changing demographics and significantly increased business complexity such as the widening use of derivative (ACCA, 2006). More so, accountants are partners in nation building and they play a significant role in the economic development of any country. They are the indispensable members who frame the economic policies of a country (Bandyopadhyay, 2016).

Moreover, the relevance of high-quality corporate reporting in ensuring financial stability and sustainable development in general and in particular the achievement of the SDGs was officially recognized during the 32nd session of UNCTAD's Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR). Accountants are highly involved in this process. They measure, evaluate, and disclose the progress of SDGs achieved by the company. Accountants act as guides and translators of the Triple Bottom Line ideas using the language of corporate sustainability. Baker (2012), from the World Business Forum for Sustainable Development, notes that "accountants are going to save the world". Accountants minimize information asymmetry and assess investment risks, they create integrated reporting and integrated audit, they provide and test standards of sustainability accounting, the involve in reporting and auditing within the new business model. With specific professional skills and involvement in governance, risk management, business analysis, decision support, due diligence, anticorruption activities, and corporate transparency, professional accountants today are reassessing their roles because of the SDGs and corporate sustainability.

Consequently, The United Nation's (UN) Sustainable Development Goals (SDGs) nowadays are generally recognized guidelines of the Global Development until 2030. They were adopted at the UN summit in New York in 2015. 17 goals were specified in 169 varied indicators. SDGs call governments, businesses, and the public from all the countries to intensify effort to resist climate changes, poverty, inequality, environmental pollution and other challenges of our time. Unlike the Millennium Development Goals (MDG), the SDGs aim at more active involvement of the business community, its innovation, and investment potential overcome these challenges by including them in business priorities. In particular, the achievement of the SDGs requires the formation of a pool of resources, comparable with 1.5 – 4% of global GDP. It emphasizes the need to attract business to government initiatives on sustainable development (Makarenko &Plastun, 2017).

Additionally, business leaders see the SDGs as new opportunities to develop their activities: 89% of CEOs noticed that commitment to sustainable development has a real impact on their industries (United Nations, 2016) and 71% of businesses already plan to take the SDGs into account in their activities (PwC, 2015). 17 SDGs and 169 indicators form a continuous basis for companies to create, and report their strategies. This will improve the companies' communication with key stakeholders. It will increase their loyalty and transparency about the business environment and quality management as a framework for corporate sustainability in terms of growth of legal, reputational risk, volatility of financial markets, and access to finance (UN Resolution, 2015).

1.1 Statement of the Problem

The Accounting profession occupies a key-place in the concept of accountability and transparency in the public and private undertakings; and hence, this noble profession should play a vital role in the economic development of Nigeria. Furthermore, transparency and accountability have over the years been recognized as instruments for reducing corruption at all levels both in public and private sectors. Lack of transparency in the public and private sectors possess a major risk to the efficiency of long-term economic sustainability and achievement of sustainable development goals. Unfortunately, the issue of transparency is a fundamental problem in Nigeria due to the high rate of corruption experienced in virtually all sectors of the Nigerian Economy. Corporate governance is a phenomenon that has recently attracted local and foreign interests due to frequent occurrence of corporate failures experienced by various organizations in both developed and developing countries like Japan and Nigeria. Some contributory factors to corruption in Nigeria include sudden collapse of several large companies, notable fraud and incidents of insider trading, the practice of shopping at places where auditors can be bribed, and lack of accountability by companies run by dominant characters.

In Nigeria, the limited scope of MDGs and failure of the program to achieve its developmental objective led to development and implementation of SDGs in 2016. The SDGs has been widely accepted as laudable for its wide approach to global development and sustainability (Akinloye2018). Scholars like Nilsson & Costanza (2015) and Gurbo (2017) have accepted the SDGs project as laudable because it is more inclusive, universal and creates global partnership based on the joint responsibility and obligation of all partners. The U.N general assembly adopted the 2030 agenda for sustainable development, accompanied by a list of sustainable development goals (17 goals and 169 targets) which all countries of the world are encouraged to achieve by 2030. Attempting to achieve the SDGs in Nigeria isn't just a show of governmental and societal goodwill, it's also a strategy increasingly made by proactive, sustainable organizations. Making SDGs alignment part of their strategies and business models can help companies generate new revenue, increase supply chain resilience, recruit and retain talent, spawn investor interest, and provide license to operate. Such business organizations want to achieve the same ends as any other company by driving revenue growth, creating value, and accelerating business expansion. This underscores the importance of seeking to examine the role of the accounting profession in sustainable development goals of audit firms in Plateau State.

1.2 Objectives of the Study

The main objective of this study is to evaluate the role of the accounting profession in contributing to sustainable development goal. The study is guided by the following specific objectives:

1) To examine the relationship between transparency and SDGs among audit firms in Plateau State;

2) To examine the relationship between auditing and SDGs among audit firms in Plateau State;

3) To examine the relationship between internal control evaluation and SDGs among audit firms in Plateau State; and

4) To examine the relationship between corporate governance and SDGs among audit firms in Plateau State.

1.3 Research Questions

1) What is the relationship between transparency and SDGs among audit firms in Plateau State?

2) What is the relationship between auditing and SDGs among audit firms in Plateau state?

3) What is the relationship between internal control evaluation and SDGs among audit firms in Plateau State?

4) What is the relationship between corporate governance and SDGs among audit firms in Plateau state?

2.0 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Concept of Sustainable Development Goals (SDGs)

The term sustainable development has been widely discussed over the past 20 years (Bebbington & Thompson 2013). The concept was raised for the first time at the United Nations Conference on Sustainable Development in 2012. The objective was to produce set of universally applicable goals that will balance the three dimensions of sustainable development which are environmental, social, and economic. Among the earliest and often cited is that “the development meets the needs of current generations without compromising the ability of future generation to meet their own needs” (World commission on Environment & Development, 1987). Thus, sustainable development goal is any human activity that nourishes and perpetuates the historical fulfilment of the whole community of life on earth. Sustainable development, also referred to as sustainability or corporate social responsibility in the context of companies, is often considered as a concept that accounts for economic growth and development in a way that effect on the environment is taken into account in the process of economic growth. Sustainability, according to Merriam-Webster (1999), is “of, relating to, or being a method of harvesting or using a resource so that the resource is not depleted or permanently damaged”.

The Sustainable Development Goals are also referred to as ‘Transforming our world’, the 2030 agenda for sustainable development or the global goals (UN, 2015). Sustainability is about using resources in a responsible manner that does not deplete the source for future dependents; “To be sustainable is to avoid collapse” (Thiele, 2017). According to Elkington (1994), Sustainable Development Goals include three dimensions; economic, environmental and social. Hence, sustainable development is a state when resources are used continuously and exploitation of nature does not cause irreversible destruction. The ambition is to hand over the world to future generations with safe natural capital, preserved social harmony, and good conditions for economic performance (Schaltegger, Bennet &Burrit, 2006).

Based on the importance of Sustainable Development Goals, the public, private, and non-governmental organizations have been directly involved in the attempt to coordinate efforts regarding the sustainability agenda (the U.N. General Assembly resolution in 2010, "United Nations Millennium Declaration - General Assembly Resolution). This process was consolidated in 2015 when the U.N. General Assembly adopted the 2030 Agenda for Sustainable Development, accompanied by a list of Sustainable Development Goals (17 objectives and 169 targets) that all countries of the world are encouraged to achieve by 2030.

2.2 Transparency and SDGs among audit firms

Professional accountants use information and provide management with high-quality reporting horizons which is the basis of the sustainable development strategy. The concept of transparency refers to the timely, clear, and relevant public reporting on its status, mandate, strategy, activities, financial management operations, and performance. Broadly defined, transparency refers to the degree to which information flows freely within an organization, among managers and employees, and outward to stakeholders (Bennis & O'Toole 2009). Transparency is a condition of communication between the company and the co-interested groups. The principle of transparency also relates to the openness of a public sector entity to it constituents. Good governance involves the right disclosure of important information to stakeholders to enable them access relevant facts and information on the performance and operations of public sector (institute of internal Auditors, 2012).

Transparency is one of the key steps to corporate governance; and it ensures that management will not engage in improper or unlawful behavior since their conduct can be and will be scrutinized. To achieve transparency, a company should adopt accurate accounting methods, make full and prompt disclosure of company information, and make disclosure of conflict of interests of the directors or controlling shareholders, etc. A key element of 'good' governance is 'transparency', which incorporates a system of checks and balances among the board of directors, management, auditors, and other stakeholders. According to the principles of corporate governance of the Sarbanes-Oxley Act, 2002, organizations should clarify and make publicly known the roles and responsibilities of board and management to provide stakeholders with a level of accountability.

Accountability ensures that managers utilize the company's resources in the most efficient and desirable manner as well as for the most appropriate goals without improper regard for personal interests. Building a culture of transparency is a fundamental first step to achieving trust. Open and honest communication supports the decision to trust. Lack of communication and transparency creates suspicion. Transparency happens only when an institution creates a culture of candor and respect where stakeholders feel free to say the truth about their companies' activities to the board and management. If the executives are willing to listen to opposing points of view and promise to consider the merits of the arguments, they create a ground for transparency. Therefore, we hypothesized as:

H_1: *There is significant and positive relationship between transparency and SDGs among audit firms in Plateau State.*

2.3 Auditing and SDGs among audit firms

Professional accountants ensure high quality reporting for stakeholders and also ensure the transparent communication of the delivery of sustainable value to stakeholders (IFAC 2011 & 2015). Accountability and auditing, especially in the public sector, as emphasized by the World Commission on Environment and Development (WCED, 1987), is necessary for achieving sustainable development. Therefore, a mechanism needed to ensure accountability in the public sector should be available, and audit could be used for that purpose (Toepfer, 2004). The audit conducted in the public and private sectors undoubtedly has been used as the main element to safeguard accountability in the country. However, the role of audit in the context of achieving SDGs can be refined as a study by

Morin (2008) shows; that despite having important role in the public sector, its contribution is minimal. Therefore, it is not surprising that the weakness of accountability continues to prevent the achievement of sustainable development goals (Najam& Halle, 2010). If audit cannot properly function as a mechanism to safeguard accountability, then the role of audit in contributing to the achievement of sustainable development goal may be questioned especially in the context of developing countries (Liu, 2009). Thus, the potential role of audit became the motivation for this study to explore the relationship between audit and SDGs in a developing country like Nigeria. This vision of professional accountants' functional roles and their positions clearly correlates with corporate sustainable development. Therefore, we hypothesize as:

H_2: *There is significant and positive relationship between auditing and SDGs among audit firms in Plateau State.*

2.4 Internal control evaluation and SDGs among audit firms

Internal control is a process designed to provide reasonable assurance regarding the achievement of objectives in the following categories: effectiveness and efficiency of operation, reliability of financial reporting, and compliance with applicable laws and regulations**.** Professional accountants protect natural, social, industrial and financial capital of the company.

Internal control evaluation is also a process accomplished by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance. This definition reflects certain fundamental concepts. Internal control is geared to the achievement of objectives in one or more categories: operations, reporting, and compliance. A process consisting of ongoing tasks and activities, a means to an end, not an end in itself achieved by people not merely about policy and procedure manuals, systems, and forms, but about people and the actions they take at every level of an organization. Internal control provides reasonable assurance to an entity's senior management and board of directors adaptable to the entity structure, flexible in application for the entire entity or for a particular subsidiary, division, operating unit, or business process. Also, accountants ensure the protection of sustainable value creation strategic, operational and financial risk, and compliance with regulations, standards and good governance. According to Kenneth (2012) internal control evaluation enhances objectivity, independence and professional skepticism on the representation of financial statements of companies. We hypothesized as:

H_3: *There is significant and positive relationship between internal control evaluation and SDGs among audit firms in Plateau State.*

2.5 Corporate governance and SDGs among audit firms

Professional accountants play the leading role in developing and implementing strategies, policies, plans, structures, and activities of the management and set a course to create sustainable development values: taking leadership roles in the design and implementation of strategies, policies, plans, structures, and governance measures that set the course for delivering sustainable value creation. The accounting profession continues to play an important role in corporate governance culture, having responsibilities towards public interest and towards a balance and sustainable economic development. Professional accountants should understand their role in ensuring that corporate governance is effective and efficient. The account expert or the professional account is also the basis for best practices in the context of proper corporate governance within a company, as the accounting profession has to take responsibility for promoting good practices in corporate governance (Iorgulescu&Marcu, 2015; Ionescu, 2015).

Anameje (2007) asserts that corporate governance is a system that ensures that directors and managers of enterprises execute their functions within a framework of accountability and transparency to promote investors'confidence in business enterprises, and stimulate as well as sustain growth of the economy. This explains why corporate governance has, in recent times, assumed global significance as a crucial tool for sustainable corporate performance. Corruption is almost becoming a way of life in

Nigeria and it has reached a stage that it is becoming difficult to know who to trust and how to identify those with questionable character. The increasing collapse of businesses and the underpinning incidences of fraud which occur in Nigeria and around the world have raised doubts about the credibility of the financial practice of quoted company's. Corporate governance has been seen at the forefront of establishing standards of corporate ethics to reduce unscrupulous corporate practices while preserving a fair business environment. Corporate governance makes the quality of financial accounting information that the country uses at a certain point in time important. Corporate governance is also increasingly being considered as an important part of enterprise risk management (Adeyemi&Fagbemi, 2010). Therefore, we hypothesized that:

H_4: *There is significant and positive relationship between corporate governance and SDGs among audit firms in Plateau State.*

2.6 Theoretical Framework

This study is anchored on Institutional theory propounded by DiMaggio & Powell 1983, Scott (2008). The theory suggests that adherence to professional code of practice by members of a profession brings about similarities in behavior and practice by members of such a profession. The profounder of this theory also affirm that organizations engage in voluntary disclosure to avoid sanctions from regulatory agencies, cub environmental uncertainty, and gain normative support. Specifically, DiMaggio and Powel identified three sources of similarities (Isomorphism). These are coercive, normative and mimetic isomorphism. They say that normative isomorphism is associated with professional training by professional bodies such as the accountancy bodies; coercive isomorphism relates to rule setting either by government or management of an organization; while mimetic isomorphism is related to market competing, benchmarking and adaptive strategies when coping with uncertainty. In this study, the isomorphic influence that is most relevant is the normative mechanism. The accountancy profession lays emphasis on such values as integrity, professionalism, transparency and accountability. The profession tries to inculcate such values in its members through continuous professional education (MCPE). This is the case with the two accountancy bodies in Nigeria where the profession insists that members must earn a certain minimum credit through MCPE. The continuous knowledge update among professional accountants enhance their reporting skills that help in achieving the SDGs.

3.0 METHODOLOGY

This study adopted survey design that is cross-sectional in nature to explain the role of the Accounting profession in contributing to Sustainable Development Goals. The population of this study comprises of 54 audit firms in Plateau State, (ananweb.org.ng>firms & ICAN Jos district). For the purpose of this study, the total population of 54 audit firms in Plateau State was adopted because the population is small. This is in line with the work of Popoola (2011) who pointed out that a researcher may study the entire population when the size of the population is small and when the resources (human, money and materials) available for the study are adequate. Sampling technique was not employed in this study because the researcher adopted the entire population. The audit firms' practitioners are professional accountants who are in the right position to provide relevant responses.

In order to collect data, questionnaires were issued to staff of the audit firms under study; and the information provided was considered relevant to this study. Primary source of data was chosen because it provides firsthand information and because it is used in gathering data for specific purposes and to solve specific problems. The questionnaire comprised of six-point scale questions. Stangor (2010) contends that scales consist of a series of items that indicate agreement or disagreement with the issue to be measured, each with a set of responses on which the respondents indicate their opinions. The questionnaire was made in sections. The first section sought to collect respondent's demographic data. The second section addressed questions regarding sustainable development goals and the accounting profession. The questionnaire was tested through a small sample of respondents to ensure its validity and reliability for achieving the study objectives. An alpha coefficient of reliability, also known as Cronbach's Alpha, was used to examine its reliability. Its calculation was based on the number of items and the average inter-item correlation, ranging from 0 for a completely unreliable test to 1 for a completely reliable test. Most scholars recommend a Cronbach's Alpha of 0.7 or higher (Leech, Barrett & Morgan, 2005). At the end, the data collected was used for significant discussions and to draw conclusions for this study.

3.1 Method of Data Analysis

The main purpose of this study was to analyse the role of accounting profession in contributing to sustainable development goal. From the study, the quantitative data was analyzed using Statistical Package for Social Sciences (SPSS), software version 23. SPSS was also used to carry out descriptive hypothesis testing and multiple regressions analysis. After recovering the questionnaires from the respondents, they were sorted, serialized and entered into Statistical Package for Social Sciences (SPSS) version 23 software. This process demands cautious attention as any mistake considerably affects the final statistical results. Editing this data adopts consistent checks and treatment of outliers and missing responses, normally done through SPSS. The data cleaning exercise was also carried out in order to establish the distribution of data to assess whether the assumptions of parametric data was tenable. Precise assumptions tested include normal distribution of the data, homogeneity of variance, the linearity of the data, and multi-collinearity as recommended by Field (2005).

4.0 RESULTS

This chapter discusses the presentation, analysis, and interpretation of data. The data was gathered in the course of this research work through administered questionnaire. A total of fifty-four copies (54) of the questionnaire were administered to audit firm practitioners. Out of the 54 administered, only fifty- two (52) were completed and returned for analysis. This accounted for response rate of 96%. The analysis was carried out using the descriptive statistics and multiple regression analysis.

4.1 Descriptive Statistics

The respondents for the study were audit firms practitioners. The following table below illustrates the response categories of the practitioners in Plateau State-Nigeria.

Table 1: Respondents' Profile

Characteristics	Frequency	Percentage (%)
Gender		
Male	34	65.4
Female	18	34.6
Total	52	100
Years of service		
1-5 years	11	21.2
6-10 years	17	32.7
11-15 years	10	19.2
16 & above	14	29.9
Total	52	100
Members of professional bodies		
Yes	49	94.2
No	3	5.8
Total	52	100
Professional bodies		
ICAN	30	57.7
ANAN	16	30.8
ACCA	3	5.8
OTHERS	3	5.8
Total	52	100
Educational Qualification		
Degree	21	40

Masters	23	44.4
PhD	8	15.4
Total	52	100
Professional training		
Accountants	51	98.1
Lawyers	1	1.9
Total	52	100
Marital status		
Single	15	28.8
Married	33	63.5
Widow	2	3.8
Widower	2	3.8
Total	52	100

Source: Field survey, 2018

Table 1 shows that the data collected is a representation of views of both men and women. The men were more and accounted 65.4% while the women accounted for 34.6%. This means that the practitioners in audit firms in Plateau State where the research questionnaires were administered are more of men. Furthermore, the table shows that the years of practice between 6-10 constituted 32.7%. This indicates that most of our respondents have been practicing for six to ten years. Similarly, the table above shows that 94.2% of our respondents which form the majority were members of professional bodies. This means that the respondents were right for the research. In addition, the table shows that most of our respondents were from ICAN firms (57.7%). Besides, 30.8% of the respondents indicated that they were practitioners with ANAN firms. Also, the table shows respondents with highest educational qualification where those with master's degree were 44.4% while those with first degree were 40.4%. This implies that the target respondents were knowledgeable enough to understand the questionnaire before responding to the questions, which accounts for a good response rate. Subsequently, in this table, the respondents' professional training reveals that 98.1% were Accountants while 1.9% were Lawyers. This implies that most of our respondents were professionally trained and had acquired the requisite knowledge to answer the questionnaires. Accordingly, the table shows that all categories of marital status were represented, with married respondents being the majority (63.5%). This suggests that a good number of those in practice were married people.

Table 2: Correlation Results

	1	2	3	4	5
Transparency 1	1				
Auditing 2	.669**	1			
Internal control 3	.410**	.505**	1		
Corporate Governance 4	.523**	.430**	.252	1	
Sustainable Development 5	.345*	.487**	.645**	.246	1

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

4.2 Correlation

Table 2 reveals that transparency significantly correlates with Sustainable Development Goals (r =.345, P≤0.05), auditing and sustainable development (r = .487, P ≤ 0.01) are significantly correlated, internal control and sustainable development (r = .645, P ≤ 0.01) are significantly correlated, while corporate governance and sustainable development (r = .246, P ≤ 0.01) are not significantly correlated.

4.3 **Regression**

Table 3: Regression Results

					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.345[a]	.119	.102	.45298	.119	6.766	1	50	.012	
2	.488[b]	.238	.207	.42561	.119	7.637	1	49	.008	
3	.672[c]	.452	.418	.36462	.214	18.762	1	48	.000	
4	.673[d]	.453	.407	.36817	.001	.080	1	47	.778	1.913

The above Table shows the model summary of the data analysis. The value of the R-Squared in a multiple regression model is the proportion of the total sample variation in the dependent variable which is explained by the independent variable. The closer the R^2 is to 1 or 100% the better the goodness of fit. The R^2 lies between zero and one because the sum of square error cannot be greater than the sum of square total. A value of R^2 that is nearly equal to zero indicates a poor fit of the OLS line. The coefficient of determination r^2=0.453 shows a 45.3% contribution of Transparency, Auditing, Internal Control evaluation and Corporate Governance in Predicting or explaining the dependent variable Sustainable Development Goals (SDGs). Therefore, based on the multiple regression result using SPSS Version 23, the model specifies for the data fits the data (R^2 = 0.453).

The findings of the study's first hypothesis states that there is significant relationship between transparency and SDGs among audit firms in Plateau State. After running the analysis, the result indicates that Transparency and SDGs are not related and not significant (β=.052, P>0.05), therefore, the null hypothesis which states that there is no significant relationship between Transparency and SDGs among audit firms in Plateau State is accepted. This means that variation in Transparency does not bring about any significant variation in SDGs. Hence, Transparency does not contribute significantly to SDGs among audit firms in Plateau State, Nigeria.

The second hypothesis states that there is a significant relationship between auditing and SDGs among audit firms in Plateau State. After the analysis, the result indicates that auditing and SDGs are positively related but not significant (β=.234, P>0.05), therefore, the null hypothesis which states that there is no significant relationship between auditing and SDGs among audit firms in Plateau State is accepted. Therefore, change in auditing does not bring about any significant change in SDGs. Hence, auditing does not contribute significantly to SDGs of audit firms in Plateau State, Nigeria.

The third hypothesis stated that there is a significant relationship between internal control evaluation and SDGs among audit firms in Plateau State. As shown in the regression equation above, (β=.539, P<0.05) therefore, the null hypothesis which states that there is no significant relationship between internal control and SDGs among audit firms in Plateau State is rejected. Meaning the change in internal control brings about significant change in SDGs. Hence, internal control contributes significantly to SDGs among audit firms in Plateau State, Nigeria.

Lastly, the fourth hypothesis states that there is significant relationship between corporate governance and peace & Justice among audit firms in Plateau State. As shown in the regression result above, (β=.0.036, P>0.05) there is no relationship between corporate governance and SDGs; therefore, the null hypothesis which states that there is no significant relationship between corporate governance and SDGs among audit firms in Plateau State is accepted. This means that variation in corporate governance does not bring about any significant variation in SDGs. Therefore, corporate governance does not contribute significantly to SDGs of audit firms in Plateau State, Nigeria.

5.0 DISCUSSION OF FINDINGS

The regression results of the study variables are identified as factors responsible for the growth of SDGs among audit firms in Plateau State, Nigeria. The predictor variable, transparency, has no significant relationship with Sustainable Development Goals among audit firms in Plateau State. This result indicates that audit firm's transparency in reporting duties does not necessarily lead to Sustainable Development Goals. The coefficient of transparency which is .052 shows that transparency leads to 5.2% of SDGs among audit firms in Plateau state, Nigeria but does not translate into a relationship.

Consequently, the regression result of the study variable auditing that have been identified as one of the factor responsible for SDGs among audit firms in Plateau State, Nigeria has no significant relationship with financial management (SDGs) of audit firms in Plateau State. The coefficient of auditing which is 0.234 confirms that auditing leads to 23.4% of SDGs among audit firms in Plateau State, Nigeria. This result specifies that auditing does not result significantly in SDGs.

Furthermore, the regression result of the predictor variable internal control evaluation that have been identified as factor responsible for SDGs among audit firms in Plateau State, Nigeria has a positive and significant influence on SDGs among audit firms in Plateau State. This result specifies that good internal control evaluation of audit firms will lead to SDGs. The coefficient of internal control which is 0.539 and 0.000 is a confirmation that auditing leads to 53.9% of SDGs among audit firms in Plateau State, Nigeria; thus there is a positive relationship.

Lastly, the predictor variable: corporate governance has no positive and significant influence on SDGs among audit firms in Plateau State. The coefficient of corporate governance which is .036 shows that corporate governance leads to 3.6% of Sustainable Development Goals achievement. This result specifies that a firm's corporate governance does not contribute significantly to Sustainable Development Goals among audit firms in Plateau State.

From the result of the four hypotheses tested using the regression and p-value, hypothesis one found that transparency which is one of the roles of the accounting profession has no significant relationship with Sustainable Development Goals among audit firms in Plateau State. IFAC (2011 & 2015) notes that professional accountancy ensures high quality reporting for stakeholders and also ensures transparent communication of the delivery of sustainable value to their stakeholders.

Hypothesis 2 findings show that auditing, which is also a major role of the accounting profession, has no significant relationship with SDGs among audit firms in Plateau state. This is in line with the work of Milne & Gray (2013) which notes that accounting firm's conceptualization of sustainability has been narrowed down towards corporate interest and not necessarily towards sustainable development goal.

Hypothesis three findings show that internal control evaluation is a strong factor responsible for strong institution among audit firms in Plateau State. Internal control among audit firms contributes to Sustainable Development Goals. This is evident in the work of Baker (2012) which shows that accountants are going to save the world; they create integrated audit, corporate transparency, reporting and auditing with new business model. Also, IFAC (2011 & 2015), professional accountants take leading role in design and implementation of strategies, policies, structures, and governance measure that set the course of delivering sustainable value creation. Bandyopadhyay (2016) also discovered that accountants and other finance professional are partners to nation building and they play a significant role in the economic development of the country. This internal control measures promote SDGs among audit firms in Plateau state and Nigeria at large.

Hypothesis four found that corporate governance as a role of accounting profession has no significant relationship with SDGs among audit firms in Plateau State. This is evident in the work of Bebbington & Larrinaga (2014) who outlined reasons for lack of progress in social and environmental accounting while achieving Sustainable Development Goals. They argued that SDGs is not a scientific concept but a contested term in an essentially political discourse about human activities and behavior. They undertake area of accounting investigation using full cost which is connected to sustainable development goals concerns (namely the description of externalities).

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

Sustainable Developments Goals acts as global guide line for obtaining sustainable development in Nigeria. Professional organizations such as the accounting profession provide different approaches to Sustainable Development Goals and a holistic vision to the accounting profession in the new economy. The major objective of this study is to evaluate the role of accounting profession in contributing to Sustainable Development Goals. The findings of the result show the major role of the accounting profession in contributing to Sustainable Development Goals using the audit firms in Plateau state. Transparency, as a role of the accounting profession, does not contribute significantly to Sustainable Development Goals among audit firms in Plateau state. Auditing as a role of the accounting profession has no significant relationship with Sustainable Development Goals among audit firms in Plateau state. Internal control evaluation as a role of the accounting profession contributes significantly to Sustainable Development Goals among audit firms in Plateau State, Nigeria. Corporate governance as a role of the accounting profession has no significant relationship with Sustainable Development Goals among audit firms in Plateau State, Nigeria.

This study identified the main role of the accounting profession in contributing to Sustainable Development Goals. Its objectives include the following: to evaluate the relationship between transparency and SDGs, to examine the relationship between auditing and SDGs, to examine the relationship between internal control evaluation and SDGs, and to determine the relationship between corporate governance and SDGs among audit firms operating in Plateau state, Nigeria. We can conclude from the result of findings that internal control as a role of accounting profession plays a major role in contributing to Sustainable Development Goals while transparency, auditing and corporate governance does not contribute significantly to Sustainable Development Goals among audit firms in Plateau State.

6.2 Recommendations

Based on the findings of the study, the accounting profession needs to consider formulating some formal reporting standard that can assess and support the implementation of SDG 16 which relates in part to transparent, efficient, and accountable institutions. This can also serve to articulate the expectations of corporations in this regard. Similarly, accounting firms should be role model of transparency and accountability in their own operations including auditing and reporting. Thus, mandatory legislation should be enacted concerning transparency and Sustainable Development Goals. Accountants and other finance practitioners are partners in nation building, so audit firms should undertake performance audit that examine the economy, internal control, efficiency, and effectiveness of key government programs that contribute to specific aspects of SDGs.

Furthermore, accounting professional bodies and standard setters should be included in the design and implementation of strategy, policies, and government measures so that they can set the course for corporate governance and achieve Sustainable Development Goals. Guidelines can also be prepared to influence the reporting by accounting firms which may also assist users in determining what information is reasonably expected. This may be based on the global reporting initiative.

6.3 Implications

The government should also be model of transparency and accountability in their own operations including auditing and reporting.

Second, government should introduce modified teaching and education programmes for professional accountants responsible for decisions relating to auditing and information disclosures on SDGs, both by professional bodies and higher education institutions. This should be preceded by surveys of the entities and the stakeholders alike. This would help to equip the accountants with the skills and expertise needed for Sustainable Development Goals reporting.

Furthermore, government should intensify promotion of internal control and corporate governance in audit firms. This should be given more attention as it can lead to peace and justice which is a component of Sustainable Development Goals.

6.4 Limitation of the study

The study employed a cross sectional survey, thereby posing limitations of changes in perception over time. Perhaps, a longitudinal study is desired. Data used in this research were collected only from audit firms in, Jos, Plateau State, Nigeria in 2018.

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AN ASSESSMENT OF THE IMPACT OF STRIKE ACTION ON THE PRODUCTIVITY LEVEL OF ACADEMIC STAFF OF NIGERIA PUBLIC UNIVERSITIES: A STUDY OF PLATEAU STATE UNIVERSITY, BOKKOS

By

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ABSTRACT

Strike action is often seen by employees' as a way of expressing their dissatisfaction. This dissatisfaction arises due to pending disputes between employers/management and the employees'. Low level of employees' satisfaction is synonymous to negative productivity (Ismail, Tuba, Burcu & Buket, 2014). This is because such staff lack the needed motivation for performance. The research objective focus on examining the impact and evaluating the extent to which strike action affect the productivity level of Academic staff in the Nigerian public Universities. Simple random sampling technique was adopted for the sample size. Data were collected using the survey method - questionnaire. The data were analyzed using the statistical package for social sciences and the chi square method was used to test the hypotheses that were postulated. The study discovered that strike action do have significant negative impact on the productivity level of the Academic staff. The study recommended that the welfare of staff should not be taken for granted by employers/management. The study further recommends that what is due for the staff should be given to them as at when due.

Keywords: Strike action, productivity, public universities and Academic staff

1.0 INTRODUCTION

The role of the Universities in human capital development, research and technological innovation, cannot be over emphasized. All over the world, investment in the University education is the vital component of national development. Nations today depend increasingly on knowledge, ideas, and skills which are produced through researchers in the Universities. Nations invest in University education because society expects it to contribute in producing highly skilled personnel in technology, engineering, management and other professions (Dim; Muogbo & Akpunonu 2017). However, the Education subsector especially tertiary institutions in Nigeria have witnessed in recent times incessant closures due to strike actions by the academic staff, especially that of the Academic Staff Union of Universities (ASUU).

Strike action has continued to jeopardize the Research activities that would have put Nigeria in the league of developed Nations. Achieving that developed status cannot take place in a disruptive academic environment such as the one constantly witnessed in the Nigeria public Universities. In Plateau State University, Bokkos, the strike action by Academic staff has caused a lot of delay in the graduation of students as well as disrupting the entire academic calendar for longer periods than required aside the disruption of Academic activities due to COVID-19. The constant Strike action usually put pressure on the Academic staff who work tirelessly under immerse pressure to cover their modules within a limited time frame. This issue of strike in Nigeria has become so rampant prompting the need for urgent attention by the government in order not to jeopardize the interest of the Academic staff in improving their job performance and productivity in the place of work. However, in the case of Nigeria, the Government has done little or almost noting in ensuring that the persistent strike action completely come to an end (Onah; Igwebuike & Ojonemi 2016).

2.0 STATEMENT OF THE PROBLEM

Despite the numerous strike actions that have taken place in the Nigeria public Universities, little research has been done to examine the impact and also to evaluate the extent to which the strike action has affected the Academic Staff productivity in Plateau State University, Bokkos. It is against this that the study intends to assess the impact of strike action on the productivity level of Academic staff of Plateau State University, Bokkos. To this end, the research outlined the following objectives;

1) To examine the impact of strike action on Academic staff productivity.
2) To evaluate the extent at which strike affects productivity in the public Universities.

The following hypotheses were postulated;

H_0: Strike action does not have a significant impact on Academic staff productivity.

H_1: Strike action have significant impact on Academic staff productivity**.**

H_0: There is no negative impact of strike action on University academic staff productivity.

H_1: There is a negative impact of strike action on University academic staff productivity.

3.0 LITERATURE REVIEW

Extant literature that gave insight into the assessment of the impact of strike action on employee's productivity were reviewed. More emphasis was placed on strike action and employee's productivity.

3.1 Theoretical Background

3.1.1 Productivity Theory of Efficient and Effective

There's a difference between being effective and being efficient. The theory states that, the productivity of the world is a function of the productivity of each of the world's economic, the economies in turn are as productive as the organization within them (Archer, 2010). Within the organization, individual workers perform specific jobs from the base level for all productive Endeavour. One way to view individual productivity is to consider how the effort of an individual contribute to the productivity or success of the organization as a whole (Sickles and Zelenyuk, 2019).

The theory of productivity is based on effectiveness and efficient. We can complete any number of tasks in a given amount of time, pat ourselves on the back, and not have advanced a single meaningful goal. While it may seem that we should be proud of the feat we have just accomplished, the reality is that we have moved backward rather than forward. Time is finite, and every minute spent on tasks that are not related to meaningful goals puts employees further behind. To this effect, the research will examine the impact of the strike on the productivity level of the ASUU members. The study will equally want to ascertain the extent of the strike on productivity level. Productivity to this end will be measured via the amount of time it takes the ASUU members to accomplish assigned task effectively and efficiently.

3.2 Empirical review

3.2.1 Strike Defined

Nmadu (2012) define strike as a concerted and temporary withholding of employee's service from the employers so as to exact greater concession than the employer is willing to grant at the bargaining table. The possibility of a strike is the ultimate economic force a union brings to bargaining table.

Strike can be understood as a curtailment of work, due to the collective refusal of workers to work, which occurs as a response to employee grievances. It involves, dropping out of work by any number of workers, employed in a particular industry, with an aim of creating pressure on the employers to accept their demands relating to pay scale, working conditions, trade practices and so forth.

Strike have been defined as a continuous cessation of work on the part of the employees is an organization. It is an extreme form of industrial dispute with ultimate sanction which gives reality to collective bargaining (Kempner, 1980).

The various types of strike action as highlighted by Selkirk (2018) include:

i. **Recognition strike**: This strike is to force the employer to recognize and deal with the union.
ii. **Economic Strike**: The typical common strike, based on demand for better wages, hours of working condition, better welfare e.t c.
iii. **Jurisdictional Strike**: when two unions argue about which of them has jurisdiction over a type of work and attempt to expert pressure on the employer through strike, it is called a jurisdictional strike because such strikes are illegal
iv. **Wild Cat Strike**: These are the quick, sudden and authorized works stoppages not approved by union leadership and contrary to labor agreement. Sometimes wild cat strikes are viewed as a form of fractional bargaining by a subgroups of employees who have not been satisfied through the regular grievances process or collective bargain procedures.
v. **Sit down strike** is when employees go on strike but remain at their jobs in the premises, this is called a sit down strike in the real sense of it, this is illegal and constitutes invasion of private property.
vi. **Sympathy strike**: This is a solidarity action embarked upon by workers who are not directly involved in the dispute. Sympathy strikes merely express moral and functional support aimed at bringing pressure on the employer involved in the trade dispute.

3.2.2 *Factors that Necessitate Employee Strike*

The common causes of strike actions in Nigeria ranges from improvements at workplace, increase in wages, shorter working days, to the unfair policy or condition in the work place. However, in this case, a better condition of service to the academic staff of Nigerian Public universities as well as a conducive learning environment for the Nigerian students. Fashina (2017) attributed the causes of industrial crisis in the Nigerian workplace to policy inconsistencies and wrong placement in organization priorities on the part of the management. Employers and government have in most cases been guilty of this due to their seemingly stronger force. The University of Ilorin crisis is a very clear instance, which has lingered for some years where the management refused to reinstate the 49 sacked lecturers as directed by the court (Akinyemi, 2010).

3.2.3 *Reasons for strike*

This may be due to issues concerning employee dissatisfaction due to the following:

i. Dissatisfaction while organization policy.
ii. Salary inceptive problems
iii. Increment not up to the match
iv. Wrongful discharge or dismissal of employee
v. Retrenchment of workmen and closure of an organization
vi. Hours of work and rest intervals.
vii. Bonus, profit sharing, provident fund and gratuity

3.2.4 *Objective of ASUU strike*

ASUU made it clear that their industrial action was democratic. The declaration was predicted on a referendum conducted by branches after considering the poor response of government to its grouse on the poor implementation of previous agreements and also lack of commitment by government to the memorandum of understanding reached with the union in February 2019.

The Lecturers outlined their grievances with the government amongst which are; condition of service of academic staff, funding of universities, and university autonomy and academic freedom and other matters ASUU stated that the means of achieving these cardinal demands were embedded in the 2009 agreement with the federal government. Some of which as highlighted by Adeshola (2019) includes:

- New salary structure for academics in Nigeria public universities
- A set of earned allowances
- Non salary conditions of service
- Pension for university academic staff and compulsory retirement age of 70 years for those in the professional cadre
- Formation of the Nigerian University pension fund administration (The Nigerian Universities pension management company (NUPEMCO), and modalities for the operators of the national health insurance scheme in the universities
- Funding that would inject a total of ₦1,518,331,545,304 for the period of 2009 to 2011.
- Possible sources of funding and the needs for minimum of 26% of annual budget of state and federal government to be allocated to education of which 50% shall be allocated to Universities and the need to place education on the "first charge" by the revenue mobilization, allocation and Fiscal commission.
- Federal government assistance to state for higher evaluation.
- The restructuring of the governance and leadership structure in the universities.
- The need to amend the national Universities commission act 2004, the education (National minimum standards and establishment of institution) act 2004 and.
- The agreement also highlighted the priority areas of implementation, the machinery for monitoring the implementation of the agreement, the agreement effective date and the date for review.

It is disheartening that with the lofty objectives set out to be achieved by the agreement through the identified programme of action enumerated in the MOU, government has chosen to go the old odious track of trading words, blackmail and peddling of outright lies on these matters.

3.2.5 The Impact of ASUU Strike

The impact of strikes on higher education in Nigeria is diverse. Several scholars have listed many. However, the impact of strike on the public Universities is greater. Strike prevents human resources that work at the University from being productive. It prevents them from developing in any of the areas of their duties. The human brains that are trained at the University are set loose of every level of culturization. These human brains are students who are forced to go on unplanned break, with no specific time for the conflict resolution. The impact of such phenomenon is that the society fails to benefit from the trainees, the human resources and brains which are the students. When an academic process gets interrupted with strike, all ongoing research get abandoned or delayed; students keep their books in shelves and when the strike is called off/suspended, both students and lecturers are mentally weak. "At the end of the day, the students graduate with mere certificates instead of knowledge that could impact positively on the economy (Enomah & Joseph 2010).

The University economy activities become inactive, yet there are even more expenses but no income. University workers would be paid, electricity, water and security would be paid for, more travels for university officials as they engage in travels for endless negotiations to achieve the aim of the going strike. Strike imposes cost on the employees, the employers and the entire economy. The employees may suffer loss when they are not paid during the strike period. On the part of the employers; cost may be indicated by lost output, lost number of students wanting to be admitted in public universities, and lost in management confidence. (Fashoyin, 1992).

3.2.6 *Productivity*

Employee productivity is an assessment of the efficiency of a worker or group of workers. Productivity may be evaluated in terms of the corrupt of an employee in an organization. Ali et al (1992) defined Productivity as a measure of efficiency of management, it can be described as a ration between what is put into anything. The efficiency of an employee or of a group of employees is accessed by the degrees at which they produce high quality goods or services during the shortest possible time efficiency therefore, involves doing things right.

In the words of Krugman (1994) *'productivity is everything but in the long run it is almost everything'*. Productivity may be entrusted in terms of the output of an employee, in a specific period of time typically, the productivity of a given worker will be accessed relative to an average for employees doing similar work. Because much of the success of any organization relies upon the productivity of its workforce, employee productivity is an important consideration for businesses. Employee productivity, also called workplace productivity is an assessment of employees or a group of employee's efficiency, it is evaluated by looking at the total workforce or employee output in a given time.

Another definition by Kyra (2018) is that, productivity is a measurement or calculation between input and output. Input include raw materials, machinery and labour: output are the goods or service produced. If the output is equivalent to the inputs, the worker is considered productive.

The productivity of the world is a function of the productivity of each of the world's economy, the economies in turn are as productive as the organization within them. Within the organization, individual workers performing specific jobs from the base level for all productive Endeavour. One way to view individual productivity is to consider how the effort of an individual contribute to the productivity or success of the organization.

3.2.7 *Importance of Productivity*

In other for productivity to make financial sense for any organization, employees must produce value for the business that exceeds the cost of employees' wages: When employees are productive, it can increase the company's revenue and in turn, the company may choose to offer incentives to its employees, failing to reward a productive staff can demotivate the whole team. If employees are rewarded for their productivity and are highly motivated, this can result in even better customer service and interactions (Jill, 2018).

3.2.8 *Factors Affecting Productivity*

The following are some of the factors that affects productivity;

- Office design studies have shown that there is a direct link between productivity and the design of the office, improving the physical environment in the office could improve productivity by up to 22%.
- Breaks: There is a positive effect on productivity from taking breaks, if an employee seat at his desk in the morning and works on no stop until evening, it can affect his/her productivity negatively
- Manpower: To be able to get the best result, you need to make the best selection, by giving the job to the right person.
- Technology: although technology is often seen as a distraction when properly used, it will significantly enhance office productivity.
- Vision and strategy: employees are generally more productive when they are in an environment where they are motivated to succeed, having a clear vision for the company and a strategy for getting there, it makes employees feel involved in helping the organization to succeed.
- Management: it is a well-known fact that management plays a big role in determining productivity. Effective Management often leads to good performance, management should develop and encourage employees this will determine to a great extent in achieving organizational goals.

3.2.9 *Ways to Enhance Productivity at Workplace*

The need to ensure and enhance employee productivity is a reality. For any organization to move ahead, it must consider some of these problems areas that affect employees. According to John (2019).

- Motivation is very important factor in ensuring productivity, employees who lack motivation may not have the enthusiasm to complete challenging task.
- Employees or personnel will be more motivated if they know what they are expected to achieve clearly stating goals or having a company vision provides guidance for everyone.
- Refusing to leverage technology could be considered a great mistake for any business. This are many technologies that significantly increase productivity in a workplace, it is important to study and utilize different hardware and software's that can improve employee productivity.
- Employees should be familiar with what the company expects from them, they need to know what they should be doing as well as their assigned roles.
- Communication is a crucial aspect of business operations without effective system of communication in workplace you will have difficulty in achieving goals and even in functioning properly.

4.0 METHODOLOGY

The research methodology section is the foundation for research activity, it is the foundation upon which research findings, recommendations and conclusions are based. The study adopted a descriptive survey design to enable the research produce answers to the hypothesis postulated.

The target population for this study comprised of the academic staff members of Plateau State University Bokkos. The total number of Academic Staff Union of Plateau State University is some 169. To determine the sample size needed for an experiment or survey, researchers take a number of desired factors into account. In this research, the sampling technique employed is the simple random sampling technique so that each member of the population has equal chance of being selected (McCombes, 2019). Since the population is small, the study used the statistical model initiated by Taro Yamane (1979 cited in Israel, 2003) to obtain the sample size. The formula thus;

n - 1 + N $(e)^2$
N - population size
N - sample size
1 - constant value
E - margin of error

$1+ 169\ (0.05)^2$

$1+169(0.25) = 42.5$

Thereby, giving the sample size of some 43 Academic staff for the study.

4.1 **Methods of Data Analysis**

The Research used the Statistical Package for Social Sciences (SPSS) software to analyze data collected and test the postulated hypotheses. This is to ensure that valid and reliable results are obtained on the assessment of the impact of strike action on employee productivity.

For a comprehensive analysis of the data collected, emphasis were laid on the use of absolute numbers frequencies of responses, percentage and the chi square method was used in the testing of the Hypothesis. Answers to the research questions were provided in a comparison of the percentage of Academic staff response to each statement in the questionnaire related to any specified question being considered.

Frequency in this study refers to the arrangement of responses in order of magnitude or occurrences while percentage refers to the arrangement of the responses in order of their proportion. The simple percentage methods are believed to be straight forward easy to interpret and understand.

The formula for percentage is shown as:

$$\% = F / N \times 100 / 1$$

Where:

f - frequency of respondents' response
N - total number of response of the sample
100 - consistency in the percentage of respondents for each item contained in the questions.

5.0 DATA PRESENTATION, ANALYSIS AND INTERPRETATION

Effort was made at this stage to present, analyze and interpret the data collected during the field survey. This presentation were based on the responses from the completed questionnaires. The results of this exercise were summarized in tabular forms for easy references and analysis. It shows answers to questions relating to the research questions for this research study. The researcher employed simple percentage in the analysis of data. A total of 43 (forty-three) questionnaires were distributed and 40 questionnaires were completed and returned.

5.1 Data Presentation

Table 1: Gender of The Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	8	20.0	20.0	20.0
	Male	32	80.0	80.0	100.0
	Total	40	100.0	100.0	

Source: Field Survey, 2019

Table 1 above shows the number of male and female respondents. It is visible that 32 respondents representing 80% are male while the remaining 8 respondents representing 20% are female. This explains that the University has greater number of male teaching staff as compared to female teaching staff.

Table 2: Educational Qualification of The Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	M.A	4	10.0	10.0	10.0
	Bsc	6	15.0	15.0	25.0
	M.Sc.	18	45.0	45.0	70.0
	Ph.D.	12	30.0	30.0	100.0
	Total	40	100.0	100.0	

Source: Field Survey, 2019

Table 2 shows the number and percentage of respondents based on their academic qualifications. It can be observed that 4 (10%) of the respondents had MA. 6 (15%) had BSc. 18 (45%) had MSc. and 12 (30%) had Ph.D. This indicates that the greater number of the total respondents have MSc/MA with a combine total of 22 respondents representing about 55%.

Table 3: Number of Years in Service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Above two years	33	82.5	82.5	82.5
	Under two years	7	17.5	17.5	100.0
	Total	40	100.0	100.0	

Source: Field Survey, 2019

In the Table 3 above, it shows the number and percentage of respondents and their years of service in the University. 33(82.5%) had spent over two years while 7(17.5%) are below two years in the Institution. This implies that more than half of the total respondents had spent over two years in service.

Table 4: Do you think your salary justifies your input job?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	33	82.5	82.5	82.5
	No Response	1	2.5	2.5	35.0
	Yes	6	15.0	15.0	15.0
	Total	40	100.0	100.0	

Source: Field Survey, 2019

Table 4 above shows the number and percentage of respondents based on salaries justification on the job. It can be observed that 33 Staff (82.5%) of the total number of the population said No, while 6 Staff (15%) said Yes. This means that many staff did not agree that their salaries justifies their job.

Table 5: What is your attitude towards strike action?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Negative	13	32.5	32.5	32.5
	Neutral	10	25.0	25.0	57.5
	No response	1	2.5	2.5	60.0
	Positive	16	40.0	40.0	100.0
	Total	40	100.0	100.0	

Source: Field Survey, 2019

Table 5 above, shows that 13 (32.5%) of the respondents have a Negative attitude on strike, 10 (25%) are Neutral, 1 (2.5%) no response and 16 (40%) response positively. This explained that more staff have a positive attitude toward strike.

Table 6: To what extent does strike action influence your productivity?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Negative	24	60.0	60.0	60.0
	Neutral	7	17.5	17.5	77.5
	Positive	9	22.5	22.5	100.0
	Total	40	100.0	100.0	

Source: Field Survey, 2019

Table 6 above, shows that 24 (60%) respondents said strike influence productivity negatively, 7 (17.5%) are neutral and 9 (22.5%) said it influence positively. This indicate that strike action influence negatively to employees' productivity.

Table 7: Does delay of other allowances cause strike in the University?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	8	20.0	20.0	20.0
	Yes	32	80.0	80.0	100.0
	Total	40	100.0	100.0	

Source: Field Survey, 2019

Table 7 above, shows that 8 (20%) respondent believe that delay in other allowances does not cause strike while 32 (80%) respondent said yes. This shows that larger percentage of the total respondent agree that delay in payment of other allowances such as the EAA causes strike.

Table 8: How does management respond to strike action?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Encouraging	6	15.0	15.0	15.0
	Neutral	7	17.5	17.5	32.5
	Not encouraging	27	67.5	67.5	100.0
	Total	40	100.0	100.0	

Source: Field Survey, 2019

Table 8 above, shows the responses of Management toward strike 6 (15%) said is encouraging, 7(17.5%) are neutral while 27 (67.5) said is not encouraging. This indicates that management responds toward strike is discouraging.

Table 9: How does government respond to demands of ASUU during strike action?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Encouraging	5	12.5	12.5	12.5
	Neutral	2	5.0	5.0	17.5
	Not encouraging	33	82.5	82.5	100.0
	Total	40	100.0	100.0	

Source: Field Survey, 2019

Table 9 above, shows the responses of staff of the organization with regards to government respond to the demand of ASUU during strike.5 (12.5%) response is encouraging, 2 (5%) are neutral while 33 (82.5%) said is not encouraging. In a nut shell, larger percentage of the respondents said government respond is not encouraging.

Table 10: What are the practical solutions to the problem of strikes in Plateau State University?

	Frequency	Percent	Valid Percent	Cumulative Percent
All of the above	6	15.0	15.0	15.0
Funding of University	22	55.0	55.0	70.0
None of the above	2	5.0	5.0	75.0
Payment of EAA	10	25.0	25.0	100.0
Total	40	100.0	100.0	

Source: Field Survey, 2019

Table 10 above, shows that 6 (15%) said all of the above, 22 (55%) response on funding of the University, 2 (5%) no response and 10 (25%) respondent said payment of EA. This indicates that funding of the University is the solution the strike in the University.

Table 11: Do strike action prolong employee programme?

	Frequency	Percent	Valid Percent	Cumulative Percent
No	4	10.0	10.0	10.0
No response	5	12.5	12.5	22.5
Yes	31	77.5	77.5	100.0
Total	40	100.0	100.0	

Source: Field Survey, 2019

Table 11 above, shows that 4 (10%) respondent said no that strike does not prolong their program. 5 (12.5%) did not response to the question while 31 (77.5) said yes it prolong their program. This indicates that strike action prolong employees programme.

Table 12: Does strike action affect academic staff productivity?

	Frequency	Percent	Valid Percent	Cumulative Percent
No	2	5.0	5.0	5.0
Yes	38	95.0	95.0	100.0
Total	40	100.0	100.0	

Source: Field Survey, 2019

Table 12 above, shows that 2 (5%) of the respondents said no and 38 (95%) said yes strike affect productivity. This indicates that majority of the total respondents agree that strike affect productivity.

Table 13: If your response to question 12 is Yes, is the impact on performance and productivity a positive or negative, one?

	Frequency	Percent	Valid Percent	Cumulative Percent
Negative	29	72.5	72.5	72.5
No response	3	7.5	7.5	80.0
Positive	8	20.0	20.0	100.0
Total	40	100.0	100.0	

Source: Field Survey, 2019

Table 13 above, shows that 29 (72.5%) of the respondents said strike is a negative output of strike while 3 (7.5%) of the respondents did not response and 8 (20%) of the population said yes. This indicates that strike has a negative effect on productivity.

5.2 Decision Rule

The research hypothesis were tested to achieve the objective of the study. Each of the two sets of the hypothesis were tested and the result in each case was used to determine whether null or alternative hypothesis should be accepted or rejected based on the degree of freedom (DF) and the level of confident derived, a critical value of chi-square table (X^2).

The decision rule therefore, is to reject the null hypothesis if the critical value (X^2) obtained from the table of chi-square is greater than the chi-square (X^2) computed using the formula, if otherwise do not reject the null hypothesis.

5.3 **Operational Assumption of Chi-Square**

- Level of Significance 5%
- Degree of freedom (Row-1) (Column-1)
- Adjusted contained (2)

5.4 **Testing of Hypotheses and Results**

In testing the hypotheses for this study, questions from the earlier discussed data for questions 12 and 13 were used. Which were; question 12, 'Does strike action affect academic staff productivity?' And, question 13, 'If your response to question 12 is Yes, is the impact on performance and productivity a positive or negative, one?'

H_0: Strike action does not have a significant impact on productivity.

H_1: Strike action do have a significant impact on productivity.

H_0: There is no negative impact of strike action on University academic staff productivity.

H_1: There is a negative impact of strike action on University academic staff productivity.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.925[a]	2	.007

3 cells (50.0%) have expected count less than 5. The minimum expected count is .35

Hypothesis 1

H_0 is rejected, Strike action does not have a significant impact on productivity

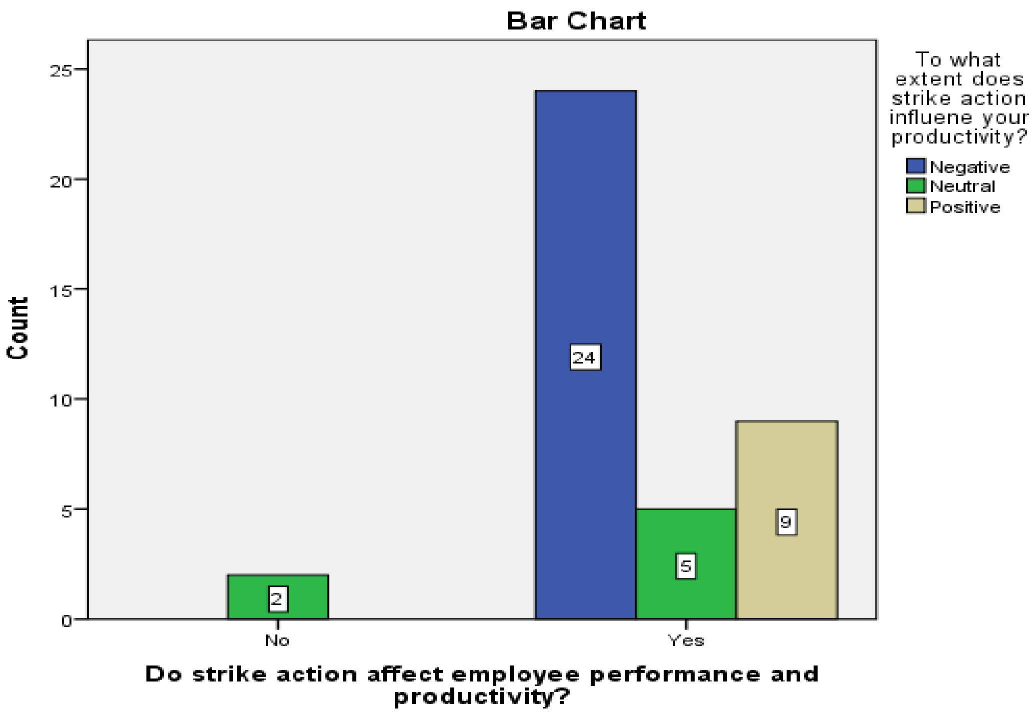
H_1 is accepted strike action do have a significant impact on productivity.

Because the P-value is 0.007 which is less than or equal to ≤ 0.05 which means there is no significant impact.

Hypothesis 2

H_0 is rejected, there is no negative impact of strike action on University academic staff' productivity because the P-value is 0.007> 0.05

H_1 is accepted, there is negative impact of strike action on University academic staff productivity.



5.5 **Analysis of the Bar Chart above**

Does strike action affect academic staff productivity? 2 person responded "No" to the question and most responded Yes". But those who responded yes have different opinion on the impact or extent of influence strike action have on productivity. Most respondents had a Negative respond to the question 24 (60%) followed by 9 (22%) have a positive response to the impact but 7 (17.5 %) were Neutral to the assertion on the impact of strike action on the productivity of employees.

6.0 CONCLUSION, RECOMMENDATION AND IMPLICATION

6.1 Conclusion

This research uncovered the reality on ground that strike actions do have negative impact on the productivity level of the Academic staff of public Universities in Nigeria. Strike actions influences directly on the productivity level therefore; its impact has a boomerang effect on the entire University system in Nigeria. These findings aligned with the assertion by Enomah and Joseph (2010) where they stated that the impact of strike affect the entire University system and especially the students who end up graduating with certificate without the requisite knowledge.

6.2 Recommendations

This research recommended the following as means of salvaging continuous strike action by the Academic Staff Union of Universities in Nigeria.

1) Management and Government should provide support through the allocation of adequate funding for the University.
2) There should always be room for collective discussion between ASUU and the Government and negotiations should always be implemented on time in order to stop ASUU from necessarily embarking on strike;
3) There should be Improvement on **communication, cooperation and concessions** from leaders on both sides; and,
4) University management should try as much as possible to improve on the welfare of the staff.

6.3 Implication

A lot has been written on strike actions in Nigeria. However, emphasis on how the strike affect the productivity level on the context of the Academic Staff of public Universities in Nigeria and Plateau State University, Bokkos to be precise has not been explore and brought to the limelight. This research has open the gate for further debates in regards to how the incessant strike actions by the Academic staff Union of Universities has impacted on the productivity level of the staff which if not properly handle by the parties involved, can lead to a devastating situation for the public University system in Nigeria and Plateau State University, Bokkos in particular.

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ASSESSING THE EFFECTS OF PARTNERING ON ORGANIZATIONAL PRODUCTIVITY IN MANUFACTURING FIRM IN ADAMAWA STATE, NIGERIA

By

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ABSTRACT

This study was prompted by the desire to assess the effects of partnering on organizational productivity in manufacturing firms in Adamawa State, Nigeria. The objective is to; determine the effects of partnering on organization and goal setting, examine the relationship between partnering and performance feedback in manufacturing firms in Adamawa State, Nigeria. The population of the study was 515 staff of the selected manufacturing firms in Adamawa State, Nigeria. The sample size of 450 was obtained using Yamane (1963) formula, proportionate stratified sampling techniques was used to select the respondents in each of the manufacturing firms. Data were collected using questionnaire. It was found that partnering had a positive effect on organizational goal setting in selected manufacturing firms, in Adamawa State. Nigeria (r = 0772, $P < 0.05$). Partnering had a significant positive relationship between partnering and performance feedback in manufacturing firms in Nigeria ($r=0.906$, $p< 0.05$). Based on the findings, the study concluded that partnering is indispensable for long time strategic relationship. Based on the conclusion the study recommends that management should continually and continuously deign effective partnering, that achieve organizational productivity.

Keywords: Partnering, organizational productivity

1.0 INTRODUCTION

1.1 Background

The study focuses on formal partnering, where there is evidence of an explicit arrangement between the parties. This is not to dispute the existence and importance of informal partnering. The National Economic Development Office (NEDO, 1991), true partnering in the formal sense only became established in the mid-1980s, the first being that between shell and partners in 1984. The most frequently cited partnering arrangement of the 1980s is the Du pont/ fluor Daniel relationship for the cape fear plant project. The partnering arrangement between Du pont and fluor Daniel was made in 1986 and was a formalization of a relationship which had existed since the 1970s. Partnering is an umbrella term applied to a series of strategies that involve producing collaborations between different types of actors which extend beyond the sector based division between government, market and civil society. Projects are dynamic by nature and therefore, the use of fixed or predetermined agreements in the initial stages lead to problems such as, time delays, cost overturns, trivial claims and dissatisfaction of the parties (Rahman & Kumaraswamy, 2005). Confronted with these problems, firms are in a great need to practice the concept of partnering to enable them to determine their goals and to educate all parties of each other’s goals and to mould them into common goals and mission. Lathan (1994) state that partnering has been increasingly used as a procurement method. Partnering enables the manufacturing organization to understand more clearly it customer’s needs and objectives including improved efficiency and cost effectiveness increased innovation, opportunities and the continuous improvement of quality products and service.

Organizational productivity is a measure of how efficiency and effective managers use available resources to satisfy customers and achieve organizational goals. Heintz and Harold (2000) opined that efficiency is the achievement of the and with the least amount of resources. Efficiency is a measure of how well productive resources are used to achieve a goal. Organizations are efficient when managers minimize the amount of time needed to produce given output of goods and services. A manager's responsibility is to ensure that an organization and its managers performs as efficiently as possible all the activities needed to provide goods and services to customers. However, a rising number of manufacturing organizations are facing delay of payments, shrinking contracts as well as difficulty in getting loans due to tough operating environments in the manufacturing organizations. Additionally, some face insufficient financing, materials price escalation, like high skilled force, lack of performance and time management and lack of productivity. Confronted with these challenges, the manufacturing organization is in a great need to practice the concepts of partnering to enable them to determine their goals, educate all parties of each other goals and to more than into common goals and mission.

1.2 Statement of the Problem

In recent years, going into partnering has become more common and is today reflected in a range of policy areas. Contracting plays a dominant role mostly in large scale and complex projects. Despite developments taking place in the discipline of Project Management in general and contracting in particular, some projects are still falling. With the increase in complexity systems and processes, there is a growing need to bring together advances from different realms of constructing research. This trend is motivated by many reasons. Projects are more complex and tolerances tighter, constructors need to focus on multiple aspects of the construction process to achieve this required level of quality and response times are decreasing from design to project. It is no longer adequate for manufacturing firms to focus on particular aspects of their manufacturing process improvement. Rather, they need to use a holistic approach for process improvement.

1.3 Objectives of the Study

The broad objective is assessing the effects of partnering on organizational productivity in manufacturing organization in Adamawa State, Nigeria. The specific objectives of the study are to:

i) determine the effect of partnering on goal setting in manufacturing firms.

ii) examine the relationship between partnering and performance feedback in manufacturing firms.

2.0 LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Concept of Organization

The environment around an organization or project influences the productivity of employees (Olusayo & Olubodun, 2018). For small, a clear relationship exists between firms' size and productivity. Various studies have shown that productivity level of small firms is below the average level, while the productivity of large firms is above average (Brick, Mursis & Fidell, 2019). The size of organization also determines the type of plant and equipment the firm can afford. The level of power and type of client also influence productivity (Uzee, 2019).

2.1.2 Concept of Productivity

This is the volume of work a skilled worker can execute in a given period or amount of times in construction (Aniekum & Okpala, 2008). It is a measure for an organization. Productivity is mainly aimed at ensuring efficiency in an organization (Buba & Sani, 2017), it focuses on completion of task and not time spent to achieve the task through firm's expert that tasks are completed within the shortest possible time. This can be achieved when workers are given clear tasks and the necessary tools and information needed to complete the assigned tasks (Srez, Sarley & Hullin, 2017). Productivity of skilled workers is better achieved when project is broken down into individual tasks and assigned to workers based on their ability and expertise. This cycle continues till the project is completed (Rollers, 2005). Beyond reviews of performance, workers' productivity is also important in pointing workers in the direction of how much they are doing to help their organization achieve their goals.

2.1.3 *Concept of Goal Setting*

This is a vital tool that attract motivation of workers (Ramous, 2001). Organizations aim to guide the conduct of its workers and motivate them for higher level of efficiency. Well defined goals are for stated and this ultimately leads to higher performance. Goal should be effectively communication is effective goals are clearer and easily understood (Ryan & Deci, 2018). Room should be made relevant feedback for the goals to achieved successfully. When this system is in place, higher efficiency is achieved, commitment is generated and workers achieve more (Pech & Slade, 2016).

Performance Feedback: This is a formal process where employees give information to workers and the workers area allowed to state their opinions and discrepancies are resolved (Smith & Johnson, 2018). The employees give instruction regarding feedback and requirements, the workers is also allowed to give a feedback and regarding the instrument. Role congruity where the worker's role and tasks are consistently allocated by his superior should be enforced (Srez, 2012).

2.2 **Open System Theory**

The historical roots of open systems theory lie with von Bertalanffy's (1956) founded general systems theory that describes dynamic, recurring patterns in biological systems. Open systems theory adapted this to the study of organizations, proposing that systems maintain themselves through contact with the environment. An open system is defined as a coalition of shifting interest groups, strongly influenced by environment factors that develops goals by negotiating its structure, activities, and outcomes. Open systems theory argues that organizations are social systems made up of a structuring of events or processes. Social systems are anchored in attitudes, beliefs, and motivations of humans, representing patterns of relationships characterized by variability in objectives that change over time and by control mechanisms to decrease variability of human behavior in the interest of stability (Katz and Khan 1978). The theory stresses complexity and variability of parts, looseness of connections, amorphous system boundaries, and attention to process, not structure (Scott, 1980). Properties of open system include: Inputs, transformation processes, and outputs (Katz and Khan, 1978).

Open systems theory describes organizations (the partnership) as social systems to transform resources from the environment into products or service for the environment (improved community health). An open system theory or model that describes a system as a set of interacting elements or sub-systems that make up an integrated whole, forming part of larger systems. Because open system theory deals with organizations in general and across all sectors, it is applicable to manufacturing firms and other organizations contributing to manufacturing firms. Open system theory provides a framework to study partnership as a social system with sub-systems that interact with each other and with the environment (Katz and Kahn, 1978).

2.3 **Empirical Review**

Kamaruzaman (2008) carried out a study on Risk Management Assessment for partnering Projects in the Malaysian Construction Industry. The study adopted a survey design and a sample size of 40 organizations. A questionnaire survey was conducted on the sample in order to examine the criticality of risk factors and to identify the effectiveness of risk mitigation measures applied in partnering. The opinions and techniques of risk mitigation were gathered through. The study found that the most critical construction partnering risk is the partner's financial resources, client's problems and economic conditions and financial problems among one of the partner. It is hope that the risk management programme will help to reduce the risks in the construction project in Malaysia. The study concluded that to minimize the chances of failure or underperformance of a partnering, risk management techniques must be introduced into the construction industry. The critical risk factors must be identified before making any meaningful partnering agreement. The critical risk factors can be systematically studied based on Internal, Project-specific and External risk groups.

Haminah et'al (2011), carried out an empirical study on partnering for small and medium contractors in Malaysia, employed a survey design using questionnaire as the technique. Copies of the survey design using questions were distributed to 250 classes of contractors in the state of Salangor, Malaysia. The author chose Salangor as the scope of the study, mainly because statistically, Salangor had the highest number of class of contractors in Malaysia. 40 copies were dully answered and returned. Though the sample size was relatively small and unable to represent the whole population. The study found that most of the class contactors had basic knowledge and understanding of the practice of partnering. Most of them believed that the concept of partnering was suitable to be applied due to the current problems in the manufacturing firms. It was also found that partnering can be used in review situations that demands productivity within a short given period, well-equipped plants and materials, enough capital and experience. Work productivity can be raised if the class contractors is fully committed to partnering.

3.0 METHODOLOGY

Survey research design was used for this study. Quantitative approach was adopted for the study. Structured questionnaire was adapted and administered to the staff of the manufacturing firms. The list of the manufacturing firms registered in Adamawa State was obtained from the Ministry of Commerce and Industry Yola, Adamawa State in August 2020. Yamane (1963) formula for sample size determination was used to arrive at a sample size of 450. The instrument used for data collection was questionnaire. The reliability of the instrument was confirmed using Cronbach Alpha formula and the result shows that all the factors were above 0.70 thus, confirming the reliability of the data. The data collected was analyzed using descriptive statistics to establish the mean and standard deviation of the identified factors which inferential statistics was adopted to establish the relationship between the partnering and organizational productivity.

4.0 RESULT AND DISCUSSION

To determine the effects of partnering on goal setting in manufacturing organization. The hypotheses are hereby presented in the table below.

Table 4.1

Statement	SA	A	U	D	SA	Mean	Std
Partnering has a positive effect on goal setting in Adamawa State.	182 (35.3)	203 (39.4)	17 (3.3)	74 (14.4)	39 (7.6)	3.81	1.27

Source: Field Survey, 2020

The responses in the above table reveal that 182 (35.3%) respondents strongly agree that partnering has a positive effect on organizational productivity in the selected manufacturing firms in Adamawa State. 203 (39.4%) respondents were undecided, 74 (14.4%) respondents did not agree and 39 (7.6%) respondents strongly did not agree. With a mean response score of 3.81 + 1.27, the respondents are of the opinion that partnering has a positive effect on goals setting in manufacturing firms in Adamawa State.

In this study, partnering has a positive effect on organizational goal setting in manufacturing firms in Adamawa State, Nigeria. The data presented in table 4.1 was tested using the regression analysis, the result is presented below:

Table 4.2: Summarized Regression Results

Variable	Coefficient	t-value	p-value
Constant	5.206	45.904	0.000
Organizational productivity OP	0.806	21.471	0.000

r= 0.772; r^2 = 0.595; Regss = 378.56; Regss = 257.330; t-value 754.682 sig.

Source: Field Survey, 2020

Table 4.3: Descriptive Statistics

	Mean	Standard Deviation	M
OP	2.2107	1.11227	515
Partnering	3.7175	1.06214	515

Source: Field Survey, 2020

Table 4.4: Correlations

	OP	Partnering
Pearson correlation OP	1.000	0.772
Partnering	0.772	1.000
OP		0.000
Significance level. (1-tailed)		
Partnering	0.000	
OP	515	515
N. partnering	515	515

Source: Field Survey, 2020

Table 4.5: Model Summary

Model	R	R^2 Square	Adjusted R square	Standard error of the estimate
1	772[a]	.895	.695	.70825

a. Predictor: (Constant) partnering

Source: Field Survey, 2020

Table 4.6: ANOVA[a]

Model	**Sum of squares**	**DF**	**Mean square**	**F**	**Sig**
Regress	378.561	1	378.561	754.682	0.000[b]
Residual	257.330	5.3	.502		
Total	635.891	514			

a. Dependent variable OP
b. Predictor: (constant), partnering

Source: Field Survey, 2020

Table 4.7: Coefficients

Model	**Unstandardized Coefficients**		**Standardized coefficients**	**T**	**Sig.**
	B	Std Error	Beta		
1(constant)	5.206	.113		45.904	0.000
OP	.806	.029	.772	27.471	0.000

a. Dependent variable: OP

Source: Field Survey, 2020

The result of the regression analysis summarized in Table 4.2 shows that the model for the relationship between organizational productivity (OP) and partnering (P).

$$OP = 5.206 + 0.806P$$

This reveals that partnering have positive effect on organizational productivity in the selected manufacturing organizations. Furthermore, as t-value> 1.96 (t-critical) and P-value < 0.05, this effect is significant. The model fit is a predictive model that shows that without the influence of P, the value of OP will be 5.206. Also, the regression coefficient (r) of 0.772 indicate a strong relationship between the independent variable (organizational productivity) and the dependent variable (partnering).

The coefficient of determination (r^2) of 0.595 reveals that 59.5% of the variation observed the dependent variable is caused by the independent variable. Having a regression sun of square of 378.561> the residual sum of square of 257.330, this variation is not due to chance. The f-value and corresponding significance value of 754.682 (0.000) shows that these results are significant. The constant value of 5.206 shows that without he influences of P, the value of OP will be 5.206. Based on this, the results indicate partnering has a positive effect on organizational productivity in selected manufacturing organization in Adamawa State, Nigeria.

The extent of the relationship between partnering and Performance Feedback in selected constructions firms in Adamawa State, Nigeria

The perception of the respondents about the relationship between partnering and performance feedback in selected manufacturing firms in Adamawa State, Nigeria is presented in Table 4.8

Table 4.8: The Relationship between Partnering and Performance Feedback in Selected Construction Firms in Adamawa State, Nigeria

Statement	SA	A	U	D	SA	Mean	Std
Partnering has a significant positive relationship with performance feedback in the selected construction firms in Adamawa State.	122 (23.7)	198 (38.4)	83 (16.1)	72 (14.0)	40 (7.8)	3.56	1.21

Source: Field Survey, 2020

Table 4.8 reveal that 22 (23.7%) respondents strongly agreed that partnering has a significant positive relationship with growth in the selected construction firms in Adamawa State, 189 (38.4%) respondents agreed that partnering has a significant negative relationship with growth in the selected construction firms in Adamawa State, while 83 (16.1%) respondents were undecided. 72 (14%) respondents and 40 (7.8%) respondents disagreed and strongly disagreed that partnering has positive relationship with performance feedback in the selected construction firms in Adamawa State, Nigeria. From the mean of 3.56$\pm$1.21, it is the view of the respondents that partnering has a significant positive relationship with growth in the selected construction firms in Adamawa State, Nigeria.

Partnering has a significant positive relationship with organizational performance feedback in the selected manufacturing firms in Adamawa State, Nigeria

In testing this hypothesis, the data presented in Table 4.9 was tested using the regression analysis. The results are presented below:

Table 4.9: Summarised Regression Results for Hypothesis Five

Variable	Coefficient	t-value	p-value
Constant	6.056	80.170	0.000
Organizational Growth (OG)	0.952	48.370	0.000

r= 0.906; r^2 = 0.820; Regss = 606.464; Res = 132.974; F-value= 2339.670, sig. = 0.000

Source: Field Survey, 2020.

Table 4.10: Descriptive Statistics

	Mean	Standard Deviation	M
OG	2.5670	1.19942	515
Partnering	3.6641	1.14076	515

Source: Field Survey, 2020

Table 4.11: Correlations

		Organization Growth (OG)	Partnering (P)
Pearson correlation	OG	1.000	0.772
	P	0.906	1.000
	Partnering	.	0.000
Significance level. (1-tailed)			
	P	0.000	
	OG	515	515
N.	partnering	515	515

Source: Field Survey, 2020

Table 4.12: Model Summary

Model	R	R^2 Square	Adjusted R square	Standard error of the estimate
1	.906	.920	.820	.50913

a. Predictor: (Constant) partnering

Source: Field Survey, 2020

Table 4.13: ANOVA[a]

Model	Sum of squares	DF	Mean square	F	Sig
Regress	606.464	1	606.464	2339.670	0.000[b]
Residual	132.974	513	.259		
Total	739.439	514			

a. Dependent variable OG
b. Predictor: (constant), P

Source: Field Survey, 2020

Table 4.14: Coefficients

Model	Unstandardized Coefficients		Standardized coefficients	T	Sig.
	B	Std Error	Beta		
1(constant)	6.056	.076		80.170	0.000
OG	.952	.020	.906	48.370	0.000

a. Dependent variable: OG

Source: Field Survey, 2020

The result of the regression analysis summarized in Table 4.17 shows that the model for the relationship between partnering (P) and organizational growth (OG):

$$P = 6.056 + 0.952OG$$

This reveals that partnering has positive impact on organizational growth in selected construction industry. Furthermore, as t-value > 1.96 (t-critical) and p-value < = 0.05, this impact is significant. The model fit is a predictive model that can predict the level of partnering given a particular level of organizational performance.

Also, the regression coefficient (r) of 0.906 indicates a strong relationship between the independent variable (partnering) and the dependent variable (organizational growth). The coefficient of determination (r^2) of 0.802 reveals 82% of the variation observed the dependent variable is caused by the independent variable. Having a variation is not due to chance. The F-value and corresponding significance value of 2339.670 (0.000) shows that these results are significant. The constant value of 6.056 shows that without the influence of OG, the value of P will be 6.056.

Based on this, the results indicate that partnering has a significant positive relationship with organizational growth in the selected manufacturing firms in Adamawa State, Nigeria.

5.0 CONCLUSION

Every organization, especially manufacturing organizations, aim at ensuring survival and sustainability. The findings of this study revealed that partnering had a positive effect on organizational productivity in selected manufacturing organizations in Adamawa State, Nigeria.

This finding is in line with the findings of Haminah et al. (2011), who did a study on partnering for small and medium contractors in Malaysia, employed a survey design using questionnaire as the techniques. His study revealed that partnering can be used in review situations that demands productivity within a short period, well-equipped plants and materials, enough capital and experience. Work productivity can be raised if the class of manufacturers if fully committed to partnering.

6.0 RECOMMENDATION

Based on the finding of the study, it is recommended that management of manufacturing firms should continually and continuously design effective partnering that will achieve organizational productivity.

6.1 Limitation of the Study

The study is limited to manufacturing organizations in Adamawa State and this clearly shows that further study can be conducted in financial institutions, service organizations etc.

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MEDIATING EFFECT OF CUSTOMER SATISFACTION ON SERVICE QUALITY AND CUSTOMER LOYALTY IN NIGERIAN INFORMAL SECTOR

By

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ABSTRACT

Loyalty has become one of the most strategic and sustainable goals of businesses which any business organizations dream to attain. Customer loyalty is a key variable that inspire corporate businesses to compete in order to gain competitive advantage and continuous patronage against their competitors. The purpose of this paper is to investigate the mediation effect of customer satisfaction in the relationship between service quality and customer loyalty in the non-formal sector of the Nigeria economy. The study considered the informal business sector comprising of hair salons, auto repairs, tailoring and masonry in Jos and Bukuru metropolis of Plateau state Nigeria with emphasis on tailoring and auto repairs as the unit of analysis. The sample size of the study is derived by applying the Yamane sample size formula of 1967; the research arrived at 372 as the minimum sample size for the study. Data was collected from a questionnaire survey and analyzed using ADANCO 2.1.1 to test the hypotheses. Findings from the study reveal that customer satisfaction mediates service quality and customer loyalty. Service quality and customer satisfaction also have direct relationship with customer loyalty. This applies that business is not the only factor that can directly affect customer loyalty, but must first go through customer satisfaction. This means that businesses must first understand what the customer needs and service quality to be provided in other to attract customer loyalty when the level of satisfaction is resolved. The study recommended that, service quality offered by this sector needs to be improved upon to enhance customer satisfaction and loyalty.

Keywords: Service quality, customer satisfaction, customer loyalty, informal sector

1.0 INTRODUCTION

Businesses depend on the continuous patronage of their customers not to only succeed in the short term but to also remain sustainable over the long term. In this regard businesses, especially service providers like auto repair shops, hair salons, tailoring and masonry must come up with enduring plans that meet with or even exceed the expectations of their customers to continue to remain relevant in the business (Belz & Peattie, 2012). The informal sector in Nigeria as earlier mention above hardly retain customer due to improper service delivery. Therefore, the study aims at investigating customer's loyalty in the informal sector. (Danish & Humayon 2018; Zhang & Wei, 2018) Due to intense competition, sophisticated nature of customers, flexible and unpredictable demand and similarity of services offered by auto repair shops and tailoring shops, enhanced service quality to satisfy customers is regarded as the main concern to retain loyal customers in Nigeria.

Over time especially in the 1980s, the subject of service quality has attracted diverse empirical research work to find out its impact on customer satisfaction and loyalty (Cahyono et al., 2020). There are many studies examine the effects of service quality on customer satisfaction and trust; customer satisfaction and trust on customer loyalty. Gimenez Garcia-Conde, Marin, and Ruiz de Maya, 2016, came up with such models as the Technical and Functional Quality Model. Many studies examine effects of service quality on customer satisfaction, customer loyalty and trust in different areas such as the banking sector and large organizational setting (Talebi et al., 2012; Kranias & Bourlessa, 2013; Khan & Fasih, 2014; Hidayat, Akhmed & Machmud, 2015) ADSL Technology (Rizka & Widji, 2013), Branding (Ashraf et al., 2018), Hospitality (Naing et al., 2019), sport(Aghaei & Elahi, 2019), healthcare (Hashem & Ali, 2019), retail industry (Ivanauskiene & Volungenaite, 2014).They came up with such models as the Technical and Functional Quality Model (Gimenez Garcia-Conde, Marin, & Ruiz de Maya, 2016), SERVQUAL (Brogowicz, Delene, & Lyth, 1990), and SERVPERF (Priporas et al., 2017) all in a bid to find the meeting point of quality and satisfaction in service industries like tourism, hospitality, banking, health, telecommunications, transportation and insurance (Nguyen, Nguyen, Nguyen, & Phan, 2018). The study of (Cahyono 2020) concluded that service quality has a significant effect on student loyalty and satisfaction has a significant effect on student loyalty. Scholars have also agreed that to be competitively relevant every business must pay attention particularly to its service quality which in turn leads to continued patronage due to customer satisfaction and ultimately to customer loyalty thereby building an effective relationship (Setiawan & Sayuti, 2017). Therefore, when it comes to a business relationship between all stakeholders the desirable outcome beneficial to all is that of loyalty as in itself it shows that the right outcome is being achieved, the business enjoys a favorable disposition of the customer and subsequently guarantees consistent revenues for the business (Mandhachitara & Poolthong, 2011). For these reasons that relationship marketing especially as espoused in its service quality dimension has come to be treated with such importance as it is a market differentiator that adds an edge to a company's competitiveness.

However, these models brought forth by scholars have been variously employed in carrying out further studies(Famiyeh, 2018; Park, Lee, Kwon, & del Pobil, 2015) in the aforementioned service industries that had helped to throw more insights on the relationship marketing dimensions of service quality, customer satisfaction and loyalty; All of these studies dwelt on formalized businesses leaving out the important informal sector that forms the fulcrum of any economy especially a developing one like Nigeria. This sector which is described as including all unregulated economic endeavors that are not sufficiently under supervision of formal agencies of government (Becker, 2004), that are characterized by low capital, low level of skills/education required by operators, small inputs and subsequent outputs, and a high level of labor intensiveness (Onwe, 2013). Pioneer economists like Lewis W. Arthur had assumed that as economies develop the informal sector comprised of such diverse small-scale business activities like auto repairs, hair salons, tailoring and masonry would simply disappear and fritter away in the face of more organized and highly capitalized corporations. On the contrary, the sector has not only remained resilient but has become a major contributor to GDP of developing economies accounting for 80% of new jobs in Africa, a major provider of consumables especially for the lower class (Becker, 2004), engaging retrenched/retired people as a result of structural adjustments/globalization and a convenient avenue for entrepreneurial minds (Onwe, 2013). Li Chao (2016) finds that the perceived value of customers plays a complete mediating role in the positive and indirect effects of personalized service on customer loyalty; the third is the five dimensions of service quality, respectively, have an impact on customer loyalty levels. Li Yan (2014) believes that it can be divided into six aspects, customer satisfaction as the middle of the variable, responsiveness, functionality and credibility have a significant positive impact on customer satisfaction and customer loyalty

This work, therefore, sets out to fill the gap left by other studies on the concepts of service quality, customer satisfaction, and customer loyalty as they relate particularly to the non-formal sector of the Nigerian economy. Two similar studies carried out in Nigeria (Izogo & Ogba, 2015) and in Ghana (Famiyeh, 2018) dwelt on the context of automobile repair shops and employed the SERVQUAL dimensions to arrive at their findings. This study is on its part is contextualized within the entire non-formal sector which also includes auto repair shops, hair salons, tailoring and masonry with respondents drawn from anyone who has ever used any form of those service within the sector and so it is expected to come with more generalized findings. This study aims to investigate the mediation effect of customer satisfaction in relationship with service quality and customer loyalty in the non-formal sector of the Nigeria economy. The study uses descriptive research design based on a cross-sectional survey questionnaire approach. Primary data was gathered through a self-administrated questionnaire which was modified to better fit the context of this study. Furthermore, this research was conducted in order to further understand which variable played a bigger and more important role in affecting customer loyalty in the non-formal sector.

2.0 LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Model Building

This study reviews the previous scholars' research on service quality, customer satisfaction and customer loyalty. It is reference "Empirical Study on the Impact of Service Quality on Customer Loyalty in Chinese Chain Catering Industry" (Lihua Wei, 2013) and "Empirical Study on the Impact of Supermarket Service Quality on Customer Loyalty" (Shuwei Tang, 2013), the construction model is as shown in the following Figure 1.

Figure 1: Research Model

2.2 Hypotheses Development

Hypotheses of the study are following:

H_1 Service Quality positively influences customer satisfaction.

H_2 Customer Satisfaction positively influences customer loyalty.

H_3 Service Quality positively influence customer loyalty.

H_4 Customer satisfaction mediates the effect of service quality on customer loyalty.

2.3 Theoretical Review

This study is guided by relationship marketing theory. It outlined how the theory and the model were employed in the study.

2.4 Relationship Marketing Theory

Relationship marketing theory states that successful relationship marketing is occasioned by certain aspects of cooperative relationships that characterize successful relational exchanges (Arnett & Badrinayanan, 2005). The theory suggests that successful relationship marketing efforts enhance customer loyalty and firm's performance through stronger relational bonds (Sirdeshmukh, Singh, & Sabol, 2002). There are diverse perspectives about which relational constructs mediate the effects of relationship marketing efforts on outcomes. Besides commitment, trust and communication, satisfaction and quality service have been identified as vital components of relationship marketing orientation (Sin et al., 2005; Eisingerich & Bell, 2006). Relationship marketing theory is adopted in this study to explain the link between the various components of relationship marketing (particularly service quality, customer's satisfaction) and customer loyalty.

Therefore, the advancement of relationship marketing indicates an important movement in the truism of marketing, the basic aim of relationship marketing is to improve the marketing output through attaining effectiveness and efficiency (Sheth & Sisodia, 2000). Several relationship marketing tactics enable efficiency, for example, efficient consumer response (ECR), customer retention and the allocation of resources among the marketing actors. Several studies have adopted the loyalty model regarding the service quality, customer satisfaction and customer loyalty in the service industry. In proposing the relationships between the service quality, the customer satisfaction and customer loyalty, this study applied the approach proposed by Choi and Kim (2013). Choi and Kim (2013) developed a model in which the influence of the service quality on customer satisfaction was investigated, revealing that the outcome quality had a direct effect on customer satisfaction. It was also concluded that customer satisfaction was a mediator variable between service quality and customer loyalty. Liat and Abdul-Rashid (2013) provided a model of customer loyalty in the hotel industry in which loyalty was affected by satisfaction, while satisfaction was influenced by the process and outcome quality. Liat and Abdul-Rashid (2011) found that customer satisfaction mediated the relationship between the process and outcome quality with customer loyalty.

Relationship marketing theory is adopted in this study to explain the link between the various components of relationship marketing (particularly service quality, customer's satisfaction) and customer loyalty. The theory of relationship marketing is related to this study base on adoption of it dimensional model with key factors underlying the variable of this study (Service Quality, Customer Loyalty and Customer Satisfaction). In this study, TRM is used for explaining the relationship of the variables. Though no study known to us has applied this framework to CS in the informal sector, we contend that since several of its dimensions have been successfully tested for significant relationship with or effect on related sectors.

2.4.1 Customer Satisfaction

Customer satisfaction is customer expectations which are strategy and this strategic component is very important, it compel customers towards a particular product or services(Danish et al., 2018). If the relationship is negative, more chances of switch the customer to another supplier (Fraering & Minor, 2013). Satisfaction is the awareness of each person separately. These feelings plagiaristic by comparing expected service with perceived service. (Ratanavaraha et al., 2016). Customer satisfaction is individual person reaction toward particular product when compare the performance of the product with any person expectation (Leong, Hew, Lee, & Ooi, 2015). Customer satisfaction considered psychosomatic state reaction of customer when its emotion about expectations not positive in near future(Naing et al., 2019).

2.4.2 Customer Loyalty

The approach based on behavior, loyalty is the behavioral reaction based on Influence as the function of psychological processes by the decision-maker in the existence of one or more alternative in time (Jacoby & Keyner, 2007). According to Gounaris and Stathakopoulos (2004), there are four types of loyalty based on purchase, social effect and emotional devotion to the brand. Loyalty is a psychological condition related to behavior toward a product, consumers form their beliefs, whether they like it or not, and decide whether they want to buy the product or not (Hasan, 2008). In business, customer loyalty plays an important role in a business as maintaining customer's means of improving performance and maintaining the viability of the business (Hashem & Ali, 2019). It is the main reason for businesses to maintain their customers. To obtain the consumer's loyal several stages are starting from obtaining potential customer until obtaining partners.

2.4.3 Service Quality

Quality has varied definitions such as “fit for use,” “fulfilment of requirements,” and “variation” (Kotler, 2007). The American Society for Quality (Kotler & Keller 2007) defines quality as the totality of features and characteristics of a product or service that bear on its ability to satisfy expressed or implied needs. Service quality which is often abbreviated to Servqual (Service Quality), according to (Hashem & Ali, 2019) is the comparison between two main factors, namely, the customer perception on the real received/perceived service and the actual expected/desired service. If the reality is better than the expected service, the service can be said to have high quality. Service quality is the provision of service that can meet the expectations of customers (Aghaei & Elahi, 2019) . (Agwu, 2018) had defined service quality as "function of the difference between service expected and customer's perceptions of the actual service delivered." Researchers have pointed out that service quality leads to customer satisfaction (de Oña & de Oña, 2015; dell' Olio et al., 2010). Parawansa

(2016) found that service quality influent the positive significance of customer loyalty. (Naing et al., 2019) reported that the service quality of financial services in Europe has significant positive media to give a big impact on customer loyalty. There is a notable relationship between service quality and customer satisfaction, and it affects the customers of service industries (Yilmaz & Ari, 2017). In this article, functional service quality, technical service quality, and service planning and reliability are seen as indicators of service quality; these factors may be well distinguished.

2.5 Empirical Review and Hypotheses Testing

This study reviewed scholars' findings on service quality, customer satisfaction and customer loyalty to see the basic relationship that exist between them, both in the global and Nigeria contexts based on different measurement method and instruments.

H_1 - Service quality positively influences customer satisfaction.

Service quality is the customer assessment of the excellence/specialty of products or whole service (Danish et al., 2018) It means that the service quality is the customer assessment of the service company's performance compared to customer hope. According to (Hashem & Ali, 2019; Of et al., 2017; Zhang & Wei, 2018) good service quality will influent the customer satisfaction. One of the ways of the company to get customer loyalty is giving the service quality to the customer. Makanyeza and Chikaze (2017) in their study, they found service quality, satisfaction influent directly significant positive to the bank customer loyalty in Zimbabwe. Kashif (2016) found that customers of Sharia Bank in Pakistan are satisfied with the service quality offered. The opinion above lead to the study to be observes in informal sector of Nigeria context.

H_2 - Customer satisfaction positively influences customer loyalty.

Satisfaction is happiness or the sadness of someone that appeared after comparing the product performance thought to the performance hope (Kotler & Keller 2011). Customer satisfaction is the commitment held deeply to buy or support the product or service preferred in the future although the influence situation and the marketing effort has a potential to make the customer changing (Kotler & Keller, 2011). Minh and Huu (2016) found that customer satisfaction influent significant positive to customer loyalty. Parawansa (2016) found that service quality influent the positive significance of customer loyalty. (Abu-alhaija et al., 2018; Jaén et al., 2013) reported that the service quality of financial services in Europe has significant positive media to give a big impact on customer loyalty. Customer Satisfaction has a significant positive impact on customer loyalty and it can mediate the service quality relationship and customer loyalty (Makanyeza & Chikaze, 2017). Opinions mentioned above lead to the following hypotheses. That product quality, rather than service quality, determines customer satisfaction in the automobile industry. Therefore, adding product quality into the proposed model would be another key area for future research which is the contribution of this study to literature.

H_3 - Service quality positively influence customer loyalty.

(Hashem & Ali, 2019) employed the SERVQUAL model developed by (Naing et al., 2019; Vencataya et al., 2019) with five dimensions to evaluate the impact of service quality on customer loyalty among bank customers in Penang, Malaysia. Customer satisfaction was used as an intermediate variable. The findings show that improvement in service quality can enhance customer loyalty. The service quality dimensions that play a significant role in the equation are reliability, empathy, and assurance. The findings indicate that the overall respondents evaluate the bank positively, but still there are rooms for improvements.

H_4 - Customer satisfaction mediates the effect of service quality on customer loyalty

Customer satisfaction is the outcome that customers received when service experienced meets and/or even exceed their expectation. In marketing, it is being viewed as the global evaluation of service experience over time (Lim 2006). Customer satisfaction is generally known as an outcome of service quality. Numerous studies in different industries have proved this relationship. Szwajca (2018; 2016), Ngo and Pavelková (2017) in airline, Srivastava and Sharma (2013) in telecommunication, and (Vencataya et al., 2019) in the banking industry. Customer satisfaction portrays the quality of products or services provided to the customer in a positive manner, whereby the level of customer satisfaction enhanced along with an increased level of service quality (Yeo 2015). Customer satisfaction depends on the quality of the service provided (Zhang & Wei, 2018). Del Castillo and Benitez (2013) found time satisfaction, comfort, accessibility, connectivity, and information as important factors of customer satisfaction. It is important to identify which factors of service quality have an important effect on customer satisfaction. A study by Shen et al. (2016) showed that safety and security were the most important factors that influence the passengers to use the urban rail transit in Suzhou. Canming and Jianjun (2011) studied the mediating role of customer satisfaction between service quality and customer loyalty, and the results showed that service quality had a direct effect on customer satisfaction and an indirect effect on customer loyalty for Nanjing Shanghai high-speed rail. This shows that the more positive customers' perceived service quality, the better their satisfaction level with the service provider is likely to be. The concept of customer value should be an important element in the design and implementation of corporate strategies. According to (Tefula & Tefula, 2017), good value contributes to higher customer loyalty and retention. The indirect influence of the value on the behavioral intention via satisfaction was supported by service marketing researchers and postulated the value as a direct and indirect predictor of loyalty (Chen & Chen, 2010; Kim 2013; Ashraf 2018). Moreover, it was supported that customer satisfaction plays a mediating role between service quality and customer loyalty in several industries (Lai et al., 2009).

In proposing the relationships between the service quality, the customer satisfaction and customer loyalty, this study applied the approach proposed by Choi and Kim (2013). Choi and Kim (2013) developed a model in which the influence of the service quality on customer satisfaction was investigated, revealing that the outcome quality had a direct effect on customer satisfaction. It was also concluded that customer satisfaction was a mediator variable between service quality and customer loyalty.

Summarizing the above, lots of attributes should be taken into account when assessing the service quality, customer satisfaction, and reuse intention of urban rail transit, and these attributes may belong to different categories. As widely treated in the previous literature, service quality, customer satisfaction, and reuse intention are a multidimensional construct, and then, the variation of the quality level perceived by the users depends on how passengers' satisfaction with the various service aspects changes over time. Base on literature review studies on the relationship between service quality and customers' satisfaction have been study and relationship tested. Therefore, mediating the relationship is important base on empirical review, which this study aims at investigating and contribute to literature.

3.0 METHODOLOGY

3.1 Design, Population and Sample Size

The study uses descriptive research design based on a cross-sectional survey questionnaire approach. The population (estimated from available information at 5250) which comprises auto repairs mechanics and tailors random sampling procedure was adopted in the selection of the participants from their various association incubators from NACIN (National Association of Cortege Industries in Nigeria) in their zonal office at school of catering Riyom LGA, it is imperative to select a representative sample.

The study considered the informal business sector comprising of hair salons, auto repairs, tailoring and masonry in Jos and Bukuru metropolis of Plateau state Nigeria as the unit of analysis. The sample size of the study is derived by applying the Yamane sample size formula $n=N/1+N(e)^2$ with N and (e) being population (5250) and 1 *less* assumed confidence level of (95%). The researchers arrived at 372 as the minimum sample size for the study. However, as advice by Israel (2013), the study adds 20% of the sample size to make up for the unreturned questionnaire. Regarding the amount of sample size determined in this research, Hair et al. (2010) stated that between 150 to 400 sample sizes were the right number for a research or study considering the relevant influences including the nature of analysis, population and cost either both structural model (PLS-SEM) and ADANCO. Beaver, Iwata and Lerman (2013) had also stated that for a multivariate research, sample size between 150 to 300 respondents had been deemed appropriate. Furthermore, previous research by Wilson and Keni (2018) also underlined that for a research, the total number of sample size determined by researchers should exceed 200. Based on the theories stated above, a total of 550 sample size was determined and set for this research, in which this number was twice the amount of sample size suggested by researchers stated above.

3.2 Measures

Primary data was gathered through a self-administrated questionnaire which was modified to better fit the context of this study. The questionnaire consists of two-part; the demographic part and statements on the variables used in the study. Service quality was measured using six (6) items adopted from (Cahyono et al., 2020). Customer satisfaction was also measured with six (6) items adopted from Kabu and Soniya (2017). Finally, customer loyalty was measured with five (5) items adopted from(Cahyono et al., 2020). All items were measured using a five-point Likert scale. The questionnaire was validated through expert interviews and by a panel of expert practitioners which was then physically administered to respondents. The results of the validity assessed using the content validity indexes were above 0.6.

4.0 DATA ANALYSIS

Out of the 447 questionnaires that were distributed, only 387 were collected back, amounting to 92% response rate. Missing data has been seen to be a problem in most data analysis. Adhering to the advice of Hair *et al.*, (2014), 10% was used as a maximum threshold for missing values. Out of 6,592 data points, only 83 were found to be missing in the data set, which constitutes 1.25% of the data set which is far below the 10% benchmark. Mean substitution was used by the study to replace the missing data (Hair *et al.*, 2014).

Table 1: Demographic Characteristics of Respondents (n=387)

Characteristics	**Frequency**	**Percentage**	**Cumulative Percentage**
Gender			
Male	309	79.8	79.8
Female	78	20.2	100.0
Age Distribution	**Frequency**	**Percentage**	**Cumulative Percentage**
18 – 25	56	14.5	14.5
26 – 35	149	38.5	53.0
36 – 45	102	26.3	79.3
45 and Above	80	20.7	100.0
Year of Operation	**Frequency**	**Percentage**	**Cumulative Percentage**
6 Month – 2 Years	65	16.8	16.8
3 Years – 5 Years	182	47.0	63.8
6 Years and Above	140	36.2	100.0
Occupation	**Frequency**	**Percentage**	**Cumulative Percentage**
Mechanic	175	45.2	45.2
Tailor	212	54.8	100.0

Table 1 presents the demographic distribution employed in the study. The gender distribution of the sampled respondents shows that 79.8% of the sampled respondents were males, which show that males were more sampled than females. As presented in the table, it can be deduced that most of the sampled respondents of this study are either between the ages of 26-35 and ages 36-45, with 38.5% and 26.3% respectively, therefore most of the respondents are between ages 26 to 45. The year of operation of sampled respondent's shows that majority of the respondents have been in operation between 3 years to 5 years which represent 47% of the total population, 36.2% are in operation from 6 years and above and 16.8% are between 6 months to 2 years. The occupation of the respondent sampled in the informal sector shows that 54.8% while 45.2% are mechanics, According to (Wilson, 2018) that demographic profile is important to determine average respondent which provide sufficient basis for meaningful understanding of the problem being study. The objective of study is to investigate the relationship between the variables.

4.1 Accessing Model Fit

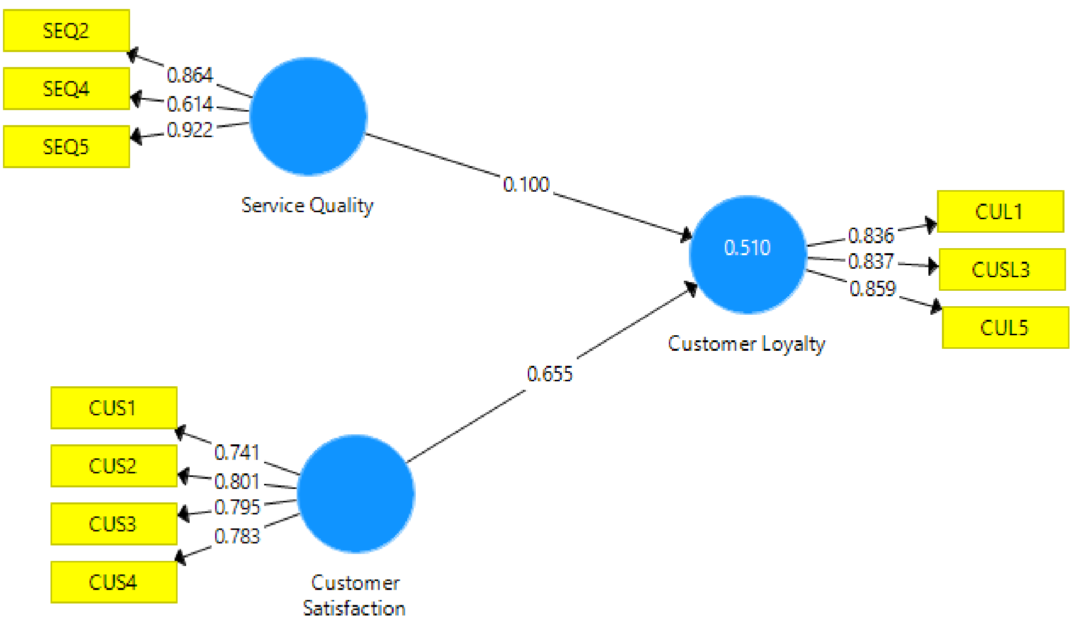

Figure 2: Measurement Model

Table 2: Construct Reliability and Validity

Construct	Items	Loadings	AVE	CR
Service Quality	SEQ2 SEQ4 SEQ5	0.864 0.614 0.922	0.657	0.849
Customer Satisfaction	CUS1 CUS2 CUS3 CUS4	0.741 0.801 0.795 0.783	0.608	0.861
Customer Loyalty	CUL1 CUL3 CUL5	0.836 0.837 0.859	0.713	0.882

Note: AVE represents Average Variance Extracted; CR represents Composite Reliability; CA represents Cronbach's Alpha

Table 2 shows the indicators loading on their intended factors. According to Hair *et al.* (2014), loadings should not be below 0.5; therefore, indicators that do not meet this prerequisite were deleted. Composite reliability should be greater than 0.7 and average variance expectation should be greater than 0.5 (Garson, 2016). From the table, the composite reliability ranges from 0.849 to 0.882 and AVE of the variables ranges from 0.657 to 0.713. This implies that the overall reliability measurement of the instrument is acceptable in terms of reliability thus depicting its internal consistency. Convergent validity is items in a scale ability to come or load together as a single construct. It is determined by examining each loading for each indicators block. The whole path coefficients in this study are statistically significant and larger than 0.50. Discriminant validity indicates how fit individual item factor attaches to its hypothesized construct comparatively to other construct. Discriminant validity is approximated via: The relationship between correlations among first-order constructs and the square roots of AVE.

Table 3: Discriminant Validity

Construct	Customer Loyalty	Customer Satisfaction	Service Quality
Customer Loyalty			
Customer Satisfaction	0.862		
Service Quality	0.568	0.642	

Note: The heterotrait-monotrait ratio of correlations (HTMT) measures the factors' discriminant validity.

Table 3 presents the result of discriminant validity. The heterotrait-monotrait ratio of correlations (HTMT) measures the factors' discriminant validity. Henseler et al. (2015) proposes a threshold value of 0.90 for structural models with constructs that are conceptually very similar. The smaller the HTMT of a pair of constructs, the more likely they are to be distinct. HTMT values should be below 0.9, or, better, below 0.85 (Henseler, 2017). Table 3, shows HTMT report, all values are below the minimum threshold of 0.85 therefore, the construct of the study achieved discriminant validity. None of the 95 percent upper-bound HTMT scores were above 1.00, thus satisfying the third condition. Our measurement model, therefore, demonstrates satisfactory discriminant validity.

4.2 Test of Hypotheses

It is important to carry out a bootstrapping analysis to determine the direct effect of the independent variables on the independent variable of the study. Bootstrapping was done by using 5000 subsamples using 387 cases.

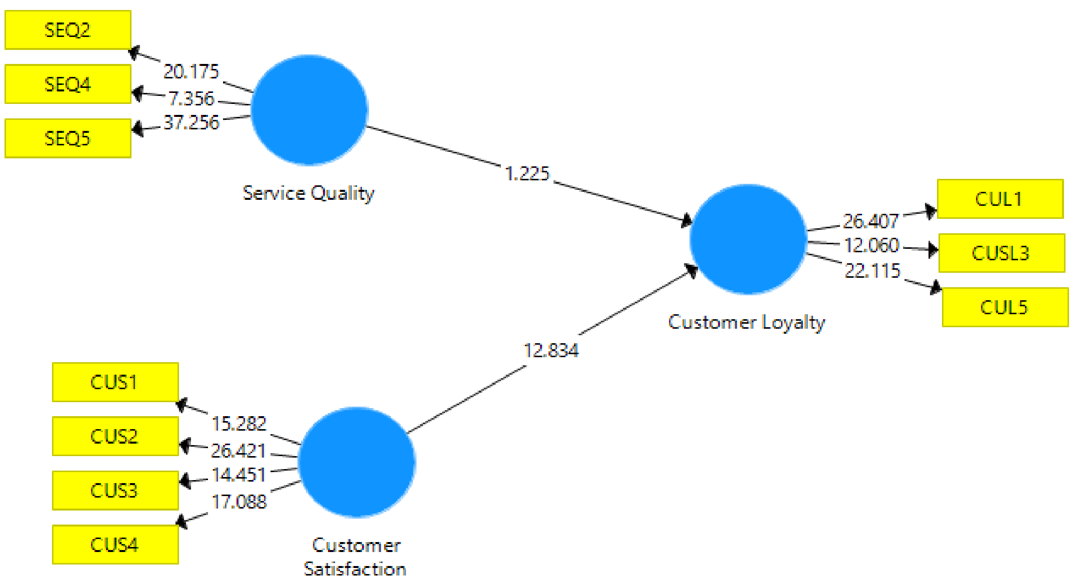

Figure 3: Structural Model

Table 4: Direct Path Coefficient

Hypotheses	Beta Value	Standard Deviation	T Stat	P-Value	R^2	Decision
CUS -> CUL	0.655	0.051	12.834	0.00***	0.510	Supported
SEQ-> CUL	0.100	0.082	1.225	0.22		Not Supported

***p< 0.01, **p< 0.05, *p< 0.1

Table 4, shows that service quality has a positive and significant effect on customer loyalty, significant at (β=0.65, p<0.01). Therefore, the stated alternate hypothesis is supported. Service quality has a positive and insignificant effect on customer loyalty at (β=0.65, p>0.1), thus, the stated alternate hypotheses are not supported empirically. The R square of 0.510, indicating that service quality and customer satisfaction account for 51.0% of customer loyalty the remaining 49% is accounted for by other variables that are not incorporated in this study.

4.3 Mediating Effect

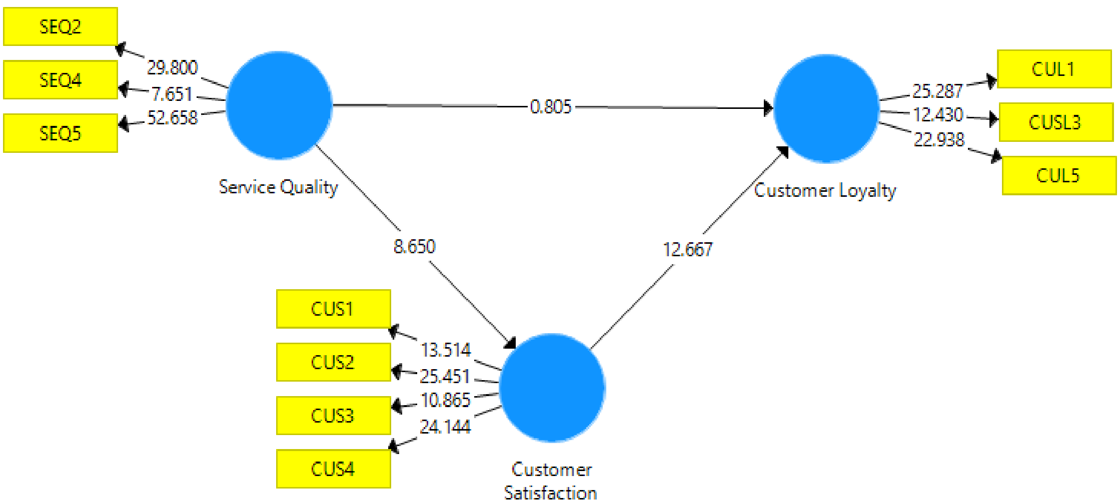

Figure 4: Structural Model (Mediating Path)

Table 5: Mediated Path Coefficient

Hypotheses	Beta Value	Standard Deviation	T Stat	P Value	Decision
CUS -> CUL	0.666	0.053	12.667	0.00***	Supported
SEQ -> CUL	0.076	0.095	0.805	0.42	Not Supported
SEQ -> CUS	0.571	0.066	8.650	0.00***	Supported
SEQ-> CUS-> CUL	0.380	0.050	7.638	0.00***	Supported

***p< 0.01, **p< 0.05, *p< 0.1

Table 5 presents information on the test of hypotheses. Results in table 5 and figure 4 indicate that, 3 out of 4 hypotheses are supported. CUS significantly predicts CUL. Hence, H1 and H3 are supported with (β=0.666, t=12.667, P<0.05) and (β=0.571, t=8.650, p<0.001). Additionally, SEQ significantly predicts CUL. Hence H2 is Not supported with (β=0.076, t=0.805, P<0.001). Furthermore, the results highlighted that, CUS significantly mediates the relationship among SEQ and CUL (β=0.380, t=7.638, P<0.001), hence H4 is supported. It is seen that customer satisfaction has a positive and significant effect on customer loyalty. Service quality has a positive but insignificant effect on customer loyalty. Service quality has a positive effect on customer satisfaction. However, there is a positive effect and significant relationship when testing for the mediating effect of customer satisfaction on service quality and customer loyalty.

5.0 DISCUSSION OF FINDINGS

The study examined the mediating effect of customer satisfaction on service quality and customer loyalty in the informal sector. The result shows that service quality has an insignificant effect on customer loyalty. This can be interpreted to mean that the quality of services does not necessarily determine or make a customer loyal. This might be as a result of intense competition in the informal sector where prices of services determined the loyalty of a customer. Also going by the relative scarcity of money in the current economic reality in Nigeria which has reduced purchasing power of an individual, the customers tends to be price-conscious. On the other hand, customer satisfaction has a significant effect on customer loyalty in the informal sector. The result states that when customers are satisfied with services rendered, they tend to be loyal. Therefore, when customers are well satisfied, they tend to stay loyal to a particular service. In auto repairs customers turn to by loyal if they are satisfied with the service provided, so, also tailoring in Nigeria.

The associations among SEQ and CUS and CUL have been investigated widely. This study's results provide extra support for these causal relationships, mainly in the auto mobile repairs and tailoring customers, and propose that SEQ is additional significant factor that indirectly affects these significant customers' outcomes. Similarly, the results also revealed that SEQ has an indirect effect on CUL and CUS, among customers within the auto repairs and tailoring in Nigeria, which confirms the mediation role that CUS has in this context, this is supported by previous studies (Al-Ali et al., 2019; Alkhateri et al., 2019; Deng et al., 2010; Qoura & Khalifa, 2016). This concept has significant value for researchers interested in customer loyalty.

However, the mediating effect of customer satisfaction on the relationship between service quality and customer loyalty show a significant effect. This shows that providing the customer with quality service needs to be enhanced by satisfaction before they can be loyal. Therefore, providing customers with quality services is not enough to gain their loyalty, thus the need to ensure that customers are well satisfied. Customer satisfaction is important in the relationship between service quality and customer loyalty. The strength of the relationship between service quality and loyalty accounted by the mediator was (0.380-7.638), which equal to 51.10% of direct effect. Therefore, there is evidence that satisfaction is partially mediating the relationship between service quality and customer loyalty and it also shows that satisfaction as mediator has mediating influence on service quality and customer loyalty relationship in the non-formal or informal sector in Nigeria.

6.0 CONCLUSION

The study examined the mediating effect of customer satisfaction on service quality and customer loyalty in Nigerian informal sector. The study with it dimension adopted from the theory of relationship marketing shows that customer satisfaction and service quality have a positive and significant effect on customer loyalty. Customer satisfaction was found to have mediated the relationship between service quality and customer loyalty. The study, therefore, concludes that service quality and customer satisfaction are important factors considered to influence customer loyalty. Achieving greater success in the aforementioned variables will help Nigeria informal sector to reward loyal customers with quality and satisfactory services.

7.0 IMPLICATIONS

The study drew its conceptual framework from relationship marketing theory and has contributed to the theory development by empirically examining that the relationship marketing theory is pegged on major factors. These are trust, service quality, customer satisfaction, relationship commitment, and communication as a predictor of customer loyalty in Nigeria informal institutions. The study has contributed to literature and knowledge by establishing a relationship between service quality and customer loyalty, and also the mediating role of customer satisfaction. Hence, the study reaffirms the findings of other scholars that service quality along with other mediating variables like customer satisfaction should be enhanced to achieve customer loyalty.

8.0 RECOMMENDATIONS

The study recommends that the informal sector should devote their time to creating good customer relationship by providing quality and satisfactory services that will attract repeat buying behavior. The study is only restricted to Jos and Bukuru metropolis of Plateau state, Nigeria. The study uses descriptive research design based on a cross-sectional survey questionnaire approach and primary data was gathered through a self-administrated questionnaire which was modified to better fit the context of this study.

9.0 AREAS FOR FURTHER STUDY (RESEARCH)

Further research could be conducted in the formal and informal sector respectively in Nigeria that this research work could not capture and also different methodological approach and theory could also be examined. It is equally possible that there are other factors that can moderate and may contribute to influencing customer loyalty in Nigeria informal sector of the economy that were not part of this study.

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ENTREPRENEURIAL ORIENTATION AND THE GROWTH OF SMES IN COVID-19 PANDEMIC

By

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ABSTRACT

This research examined entrepreneurial orientation and growth of SMEs in the COVID-19 pandemic, with particular focus on SMEs in Plateau State. COVID-19 pandemic has caused serious disruptions to business activities around the world and has impeded the commitment of resources to drive business growth. Even before the COVID-19 pandemic, there seems to be a reduction in entrepreneurial activities (made manifest by the low number of SMEs in the state): strongly suggesting a lack of growth in Small and Medium Enterprises SMEs. We believe that entrepreneurial orientation is crucial in explaining this phenomenon. To achieve our objectives, a questionnaire, designed by Lumpkin and Dess (2001) was adapted and administered to 319 owners/managers of SMEs in Plateau State. The questionnaires were coded in SPSS version 23.0 and multiple regression analyzes were used to test the hypotheses. The results show that the entrepreneurial orientation dimensions of Innovativeness, Proactiveness, Autonomy and Competitive Aggressiveness were positively related to SMEs' growth in the State. However, the relationship between Risk-taking and SMEs' growth was not significant. Therefore, it was recommended that for SMEs to grow in the COVID-19 pandemic, owners and managers should be innovative, proactive, autonomous, and competitively aggressive in the State.

Keywords: Autonomy, Competitive Advantage, Entrepreneurial Orientation, Innovativeness, Proactiveness, Risk-taking, and SMEs Growth.

1.0 INTRODUCTION

Small and Medium Enterprises (SMEs) are very important to economic growth and they play very important roles in the development of many economies around the world. The SME sector accounts for the majority of businesses globally, and it is the growth engine of the economy contributing to job creation and global economic development(PWC, 2020). Data from World Bank indicates that SMEs represent about 90% of businesses and more than 50% of employment globally. In emerging economies, formal SMEs contribute up to 40% of national income (GDP). In Nigeria, over 40 million SMEs dominate the enterprise landscape employing more than 80% of the country's total workforce and contributing nearly 50% to GDP (SMEDAN/NBS, 2017; World Bank, 2020). Despite their enormous contribution to economic development around the world, the majority of SMEs, especially in Africa do not have growth prospects to become large firms (World Bank, 2020). According to World Bank (2017), SMEs in developing economies show lower growth rates compared to their counterparts in developed economies.

It is quite a concern that SMEs are vulnerable to a high rate of failure. According to the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) cited in Asikhia et al. (2020), 80% of SMEs in Nigeria die before their fifth anniversary. The situation is such that most new SMEs in

Nigeria do not move beyond the first stage of existence to other stages such as survival success, take-off, and resource maturity (Asikhia et al., 2020; Dzomonda & Fatoki, 2019). It is evident that growing a firm to a particular level hasn't always been easy, especially in today's highly competitive and volatile business world (Garba et al., 2019). This situation may be worsened by the COVID-19 pandemic where movements and work disruptions have affected business activities, causing emotional and psychological strain to entrepreneurs and managers of SMEs. The unfortunate uncertainty occasioned by the pandemic may dampen positive business sentiments, including impeding the commitment of resources to drive growth (PWC, 2020). Recent studies by Ojong-Ejoh et al. (2021) revealed that 88.6 percent of the SMEs reported being negatively affected by the pandemic. This becomes especially challenging for small- and medium-sized enterprises (SMEs) that are known to operate in an environment of scarce resources (Miocevic, 2021).

Firm growth in northern states is just one-third of that of southern states, indicating that there are significant intra-regional disparities (World Bank, 2020). Even before the outbreak of COVID-19, entrepreneurial activities in Plateau State, Northcentral Nigeria have taken the downward path. Available statistics show a decline in the number of SMEs in the state from 2180 in 2013 to 1574 in 2017(SMEDAN/NBS, 2017). This shows a 27.8% decline in SMEs in the state. This is worrisome, as it amplifies the perception of the state as a civil service state: Rather than take to entrepreneurial activities, most people in the state seem to prefer civil service work. Despite GEM reports that Nigeria is a world leader in entrepreneurial spirit (Abdul, 2018; Terjesen et al., 2012), SMEs in the state have not witnessed growth. These ostensibly poor levels of growth have contributed to global SMEs' inefficiencies, which may be traced back to the SMEs' lack of entrepreneurial focus. (Al-Mamary et al., 2020).

Entrepreneurial Orientation (EO) which has to do with the tendency of businesses to act autonomously, innovatively, competitively aggressive, take risks and proactively take initiatives to exploit potential market conditions is crucial in explaining the growth of SMEs. For instance, Al-Mamary (2020) documented that EO is positively related to the growth, competitive advantage, and superior performance of SMEs. This is further reinforced by the findings of Khan et al. (2021) that entrepreneurs that engage in innovative activities, risky ventures, and substantial involvement in proactive innovations of the market, product, or process will successfully grow their businesses. With the COVID-19 pandemic still ravaging the world, to succeed in today's fierce domestic and global competition, SMEs must examine and adjust their strategy to the changing and dynamic environment (Al-Mamary et al., 2020). Even though an individual’s entrepreneurial orientation has a significant impact on whether or not a company grows (Garba et al., 2019), owners and managers of SMEs around the world do not all value innovation, proactiveness, risk-taking, autonomy, and competitive aggression in the same way (Ayeni, Agbaje & Osho, 2015). Furthermore, not all Entrepreneurial Orientation (EO) dimensions may be present or useful, as this is dependent on the specific environment. (Hughes & Morgan, 2007). Hence, the need to examine the contribution of the various dimensions of entrepreneurial orientation to the increase/decrease in growth of SMEs in Plateau State.

A review of extant literature shows that several empirical studies found a positive and significant relationship between entrepreneurial orientation and SMEs performance in Nigeria (Benneth et al., 2019; Adegbuyi et al., 2018; Duru et al., 2018), however, there is scanty literature on the effect of entrepreneurial orientation on the growth of SMEs in Nigeria. Indeed, the limited literature available shows that t EO and growth orientation are positively correlated. However, it remains unclear if the same result is obtainable amid a ravaging global COVID-19 pandemic. Therefore, this research, anchored on these empirical gaps examined the effect of entrepreneurial orientation on the growth of SMEs in Plateau State during a pandemic, using Dees and Lumpkin's five models of entrepreneurial orientation.

2.0 CONCEPTUAL REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Entrepreneurial Orientation (EO)

The term EO comes from Miller's (1983) study, which defines entrepreneurial organizations as those that are orientated toward product-market innovation by taking risky ventures and being the first to develop ideas proactively to beat their competitors. (Al-Mamary et al., 2020; Casillas & Moreno, 2010; Moreno & Casillas, 2008). To put it another way, a company is only considered entrepreneurial if it excels in all three conventional dimensions of innovation, proactivity, and risk-taking. Dess and Lumpkin (2005) take a different approach to entrepreneurial orientation. They combine Miller's three dimensions with competitive aggressiveness and autonomy to create a total of five dimensions. These five qualities (innovativeness, proactiveness, risk-taking, competitive aggressiveness, and autonomy) are all present in a firm's decision-making methods and practices. EO, according to them, refers to the strategy-making procedures used by organizations to find and develop new operations. It denotes a mindset and viewpoint on entrepreneurship that is represented in a company's continuous procedures and culture. (Dess & Lumpkin, 2005). EO can also be defined as the processes used by key decision-makers to carry out their organization's mission, maintain its vision, and gain a competitive edge (Al-Mamary et al., 2020). As a result, EO is critical for a company's survival in a competitive environment since it allows it to recognize business issues and devise methods to solve them and surpass competitors (Benneth et al., 2019).

In general, research on the relationship between EO and business growth suggests that the two variables are positively associated, supporting the widely held belief that EO has a favorable impact on the corporate success (Casillas et al., 2010; Casillas & Moreno, 2010; Garba et al., 2019; Moreno & Casillas, 2008). This study is unique in that it looks at the relationship between entrepreneurial orientation and SMEs growth on a multi-dimensional level during the COVID-19 pandemic, to determine which aspects of EO are most important for securing SMEs' growth in these difficult circumstances. All five dimensions may be advantageous, but it's also possible that only a subset of dimensions is beneficial (Hughes & Morgan, 2007). All five dimensions of the entrepreneurial orientation construct are described in detail below to help you better understand it:

2.1.1 *Innovativeness and SMEs Growth*

There are numerous ways to define business growth. Changes in sales, assets, employment, productivity, earnings, and profit margins are commonly used to describe business growth (Asikhia et al., 2020; Olawale & Garwe, 2010). Entrepreneurs who want to optimize their profits must be prepared to expand their company in several areas, including employment, assets, sales, and turnover. (Garba et al., 2019). While it is true that the primary goals of most entrepreneurs are to earn wealth and maximize personal benefits, all firms must remember the need to maintain a balance between profitability and growth (Asikhia et al., 2020). Any business must grow as well as be profitable to sustain and stay relevant in the marketplace. This is based on the understanding that growth is an antecedent to the attainment of sustainable competitive advantage .and the belief is that firms that are undergoing growth phases have higher rates of survival (Asikhia et al., 2020). The dynamic of SMEs growth requires the business to move through five stages of growth: existence, survival, success, take-off, and resource maturity to be able to meet the primary goal of the entrepreneur (Olawale & Garwe, 2010). Hence, growth opportunities should always be explored, since growth goes hand in hand with business success(Asikhia et al., 2020). Creating and maintaining a successful business necessitates specific entrepreneurial behaviors based on the entrepreneur's values and attitudes (Garba et al., 2019).

Innovativeness can be a source of great progress and strong corporate growth(Dess & Lumpkin, 2005). Innovativeness refers to a firm's efforts to find new opportunities and novel solutions that could positively contribute to the growth of the business. It involves creativity and experimentation that results in new products, new services, or improved technological processes. Innovativeness is one of the major components of an entrepreneurial strategy (Dess & Lumpkin, 2005). Innovativeness captures a bias toward embracing and supporting creativity and experimentation, technological leadership, novelty, and R&D in the development of products, services, and processes (Hughes &

Morgan, 2007). Innovations come in many different forms. Technological innovativeness consists primarily of research and engineering efforts aimed at developing new products and processes. Product-market innovativeness includes market research, product design, and innovations in advertising and promotion (Dess & Lumpkin, 2005). Administrative innovativeness refers to novelty in management systems, control techniques, and organizational structure (Dess & Lumpkin, 2005). Thus, Moreno and Casillas (2008) state that strategy of innovation in new products and new processes have a positive and significant influence on the firm's growth rate. Based on the theory of entrepreneurial orientation, we argued that the innovativeness of an SME would bring forth the imagination of the firm and their ability to come up with innovative ideas and creative processes to stimulate growth during the COVID-19 pandemic. In other words, SMEs can weather the storm of the COVID-19 problem by embracing organizational-wide innovation. This is because scholars strongly believe that of the five dimensions that integrate the EO construct, innovativeness is the one that meets with the greatest degree of consensus regarding its positive relationship with company growth (Casillas & Moreno, 2010). Therefore, we hypothesize that:

H_1: *There is a significant relationship between innovativeness and the growth of SMEs in the COVID-19 pandemic.*

2.1.2 *Risk-Taking and SMEs Growth*

Risk-taking refers to a company's desire to jump at a business opportunity even if it isn't sure if it will succeed and to act without thinking about the implications (Dess & Lumpkin, 2005). Risk-taking is characterized by resource commitment to uncertain outcomes and activities and reflects an acknowledgment of the inherent uncertainty and risk in the original action (Hughes & Morgan, 2007). Making decisions and taking action without knowing what the likely outcomes will be; such ventures may also require considerable resource commitments in the process of moving forward (Dess & Lumpkin, 2005).

Insights offered by recent research in this area indicate that the current COVID-19 pandemic brought economic insecurity for both firms and consumers, and the consequences will be felt long into the future (Miocevic, 2021). In the pandemic, SMEs faced market risk (loss of customers, strong competition, stagnation in the market, and unreliable suppliers), financial risk (shortage of long-term financing, insufficient profit, unpaid claims, and inability to pay obligation due to shortage of working capital), operational risk (incomplete use of production capacity, low level of innovation, growing number of complaints and obsolete production facilities) and economic risk, i.e., inflation, interest rates, exchange rate and increase in prices of all types of energy (Grondys et al., 2021). These factors culminated in the #EndSARS protest that led to massive looting and destruction of many businesses. All these added and worsen the general economic uncertainty and political situation in the country.

Because the COVID-19 pandemic poses a general risk to all SMEs, it would seem natural that those SMEs capable of taking on higher-risk initiatives will gain a greater benefit in the form of increased growth. Scholars (who and who) concur that, in addition to challenges, the COVID-19 pandemic will provide the opportunity for many SMEs to reorganize resources for future growth (Miocevic, 2021). To be successful in business, SMEs must often take on riskier ventures, even if this means abandoning tried-and-true processes or products (Dess & Lumpkin, 2005). Risk-taking behavior is common in SMEs with entrepreneurial orientation, such as taking on heavy debt, introducing new products into new markets, investing in untested technologies, or making large resource commitments in the pursuit of high returns (Casillas & Moreno, 2010; Dess & Lumpkin, 2005). Therefore, we hypothesize that:

H_1: *There is a significant relationship between risk-taking and the growth of SMEs in the COVID-19 pandemic.*

2.1.3 *Proactiveness and SMEs Growth*

Proactivity refers to a company's efforts to take advantage of fresh chances (Dess & Lumpkin, 2005). It refers to a forward-thinking approach in which businesses actively seek out possibilities to develop and introduce new products to gain first-mover advantages and influence the environment's direction (Hughes & Morgan, 2007). Proactive organizations keep an eye on trends, identify future needs of existing consumers, and anticipate changes in demand or growing difficulties that could lead to new business ventures (Dess & Lumpkin, 2005). Proactivity is a way of reacting to opportunities (Lumpkin & Dess, 2001). It's a good mode for companies that operate in dynamic surroundings or in industries that are still in their early stages of development, where conditions are constantly changing and prospects for expansion are many (Al-Mamary et al., 2020). Proactivity entails not only detecting changes but also being willing to act on them before the competition. Proactive strategic managers keep their eyes on the horizon, looking for new opportunities for growth and development (Dess & Lumpkin, 2005). By putting competitors in the position of having to respond to first-mover activities, proactiveness aids corporations in gaining a competitive edge. The more proactive businesses, have higher growth rates (Casillas et al., 2010). Scholars (your list of scholars should come here) have discovered a link between proactiveness and growth in second-generation businesses, family and non-family businesses, and microbusinesses (Casillas et al., 2010; Garba et al., 2019; Moreno & Casillas, 2008). Hence, it was hypothesized that:

H0$_3$: *There is a significant relationship between proactiveness and growth of SMEs in the COVID-19 pandemic.*

2.1.4 *Autonomy and SMEs Growth*

Autonomy refers to an individual's or a group's ability to take independent action to develop and implement a business strategy or goal (Dess & Lumpkin, 2005). It refers to whether an individual or group of individuals within a company has the flexibility to develop and implement an entrepreneurial idea. In general, it refers to a person's skill and will to pursue opportunities on their own. Autonomy is the list, activities conducted in the absence of suffocating organizational restraints in the workplace (Al-Mamary et al., 2020). Even though one of the main sources of growth for small and medium enterprises (SMEs) is their ability to enter into collaboration agreements that allow them to use a larger number of resources and capacities without having to own them, autonomy is one of the most important foundations for innovative and entrepreneurial behavior (Moreno & Casillas, 2008). Autonomy-oriented businesses are free of the shackles of corporate bureaucracy, allowing their employees to develop and implement new business ideas, which may lead to the correction of some defects (Al-Mamary et al., 2020; Benneth et al., 2019). We argued that the social distancing measures put in place by governments to curb the spread of the virus would enhance the ability of organizations to act independently in the implementation of their growth goals. Since the COVID-19 pandemic wreaked havoc on SMEs, we reasoned that the strategic dimensions of autonomy would allow a team (or individual) to not only solve problems but also to define the problem and the goals that will be met to solve that problem (Casillas & Moreno, 2010; Gupta, 2019). Many research demonstrates a favorable association between autonomy and growth (Casillas et al., 2010; Casillas & Moreno, 2010; Garba et al., 2019; Gupta, 2019; Moreno & Casillas, 2008). Therefore, we hypothesized that:

H0$_4$: *There is a significant relationship between autonomy and growth of SMEs in the COVID-19 pandemic.*

2.1.5 *Competitive Aggressiveness and SMEs Growth*

Competitive aggressiveness refers to how businesses respond to market trends and needs that already exist (Lumpkin & Dess, 2001). Competitive aggressiveness reflects a tendency toward outmaneuvering and outdoing competitors, as well as the intensity with which a company chooses to compete and efforts to outperform competitors (Hughes & Morgan, 2007; Saha et al., 2017). In a competitive marketplace, it is defined as a combative posture or aggressive response aimed at improving position or overcoming a threat (Dess & Lumpkin, 2005). This aspect of EO is reactive, with a focus on maintaining a competitive position rather than building a new position or competitive advantage (Casillas & Moreno, 2010).

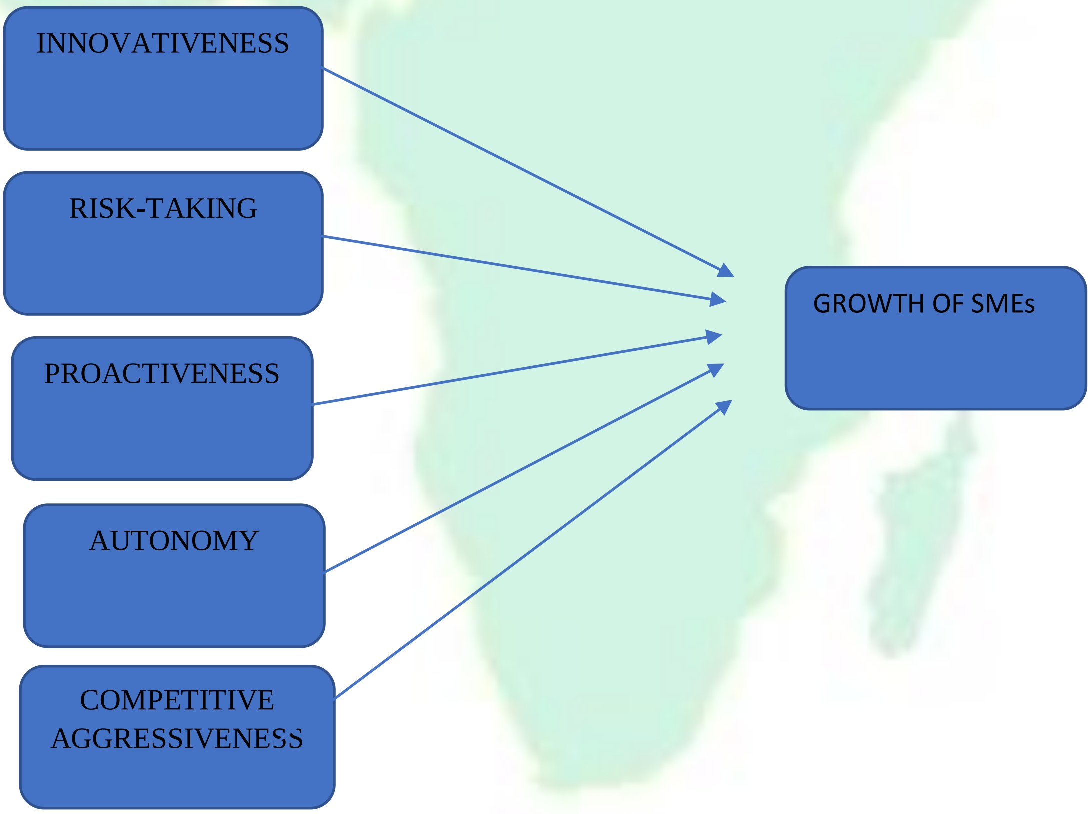
SMEs with an aggressive mindset is eager to go toe-to-toe with competitors, which may entail reducing prices and sacrificing profitability to gain market share, or spending aggressively to acquire growth capabilities. In an unpredictable economic environment like the COVID-19 pandemic, competitive aggressiveness as a means of SMEs development and expansion may entail being very assertive in leveraging the benefits of other entrepreneurial activities like innovativeness or proactiveness. Competitive aggression can be used by strategic SMEs to battle industry trends that threaten their existence or market position. Firms must sometimes be tenacious in defending the competitive advantage that has propelled them to the top of their industry (Dess & Lumpkin, 2005). Studies by Garba, et al (2019) indicate that competitive aggressiveness has a significant univariate effect on SMEs' growth across rural and urban areas. Similarly, studies by Casillas, et al (2010) show that there is a positive relationship between competitive aggressiveness and firm growth in second-generation family firms. Hence, we hypothesized that:

$H0_5$: *There is no significant relationship between competitive aggressiveness and growth of SMEs in the COVID-19 pandemic.*

2.2 <u>Conceptual Framework</u>

<u>Figure 1</u>: Conceptual Framework

<u>Entrepreneurial Orientation</u>



3.0 METHODOLOGY

3.1 Population and Sample

This study is a cross-sectional survey where the relationship between entrepreneurial orientation and SME growth was examined. The study population consists of all the SMEs in Plateau State. The unit of analysis was the owner-managers of the SMEs. There are one thousand, five hundred, and seventy-four (1574) SMEs in the state. The figure was obtained from SMEDAN & NBS National Micro Small and Medium Enterprise Survey 2017. Since the population of the study was large, adequate sample size was determined scientifically. The sample size was determined using Yamene's (1967) formula for determining sample size in the social sciences. The formula is expressed as:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

N = Population Size
n = Appropriate sample size
e = Margin of error
1 = Constant

Thus,

$$n = \frac{1,574}{1 + 1574(0.05)^2}$$

$$n = 319 \text{ respondents}$$

Therefore, the sample size for the research is 319 SMEs.

3.1.2 Procedures

The study used a simple random sampling technique, where individual respondents were randomly drawn. The data were collected through a personal approach. The data collection approach was chosen because the inefficient postal system and poor internet penetration in Nigeria could not allow the researchers to mail, email, or fax the questionnaire to the respondents. Participation was voluntary, and anonymity was guaranteed.

3.1.3 Measures

To guarantee reliable and valid measurement, scales from prior studies were adapted. The research adapted the questionnaire developed by Lumpkin and Dess (2001). The questionnaire consisted of two parts: the first part was about respondent's demographic information and the second part was about entrepreneurial orientation and SMEs growth. Entrepreneurial Orientation (EO) was perceived as a multidimensional construct comprising of Innovativeness, Proactive, Risk-taking, Autonomy, and Competitive Aggressiveness. The questionnaire was a 5-point Likert scale ranging from "1 (strongly disagree) to 5 (strongly agree)" which consists of 25 questions. The questionnaire was modified to include SMEs Growth to answer all the research questions. SMEs Growth was considered a unidimensional construct. The measure consisted of 5 questions. Unanswered questions were treated as missing values.

3.1.4 Common Method Variance

Using the Correlation Matrix Procedure, the Common Method Variance (CMV) for this study was calculated. The method of measuring CMV impact by latent variable correlations was described by Bagozzi, Yi, and Philips (1991): When there is a significant correlation between the primary constructs ($r > 0.9$), the common technique bias will be obvious. If the correlation between constructs is less than 0.9, CMV will not be a problem in any investigation (Bagozzi, et al, 1991). The correlation matrix in table IV was used to determine the CMV for this investigation. The correlation amongst all the variables was found to be less than 0.9. As a result, CMV isn't a concern in this research.

3.1.5 Method of Analysis

Multiple linear regression analysis method was adopted for this study with the help of the Statistical Package for Social Scientist (SPSS) version 23.0 software. When there are two or more independent variables, the equation describing such a relationship is the multiple regression equation (Kothari, 2004). Multiple regressions consist of two or more independent variables and one dependent variable. In this research, there are 5 independent variables (Innovation, Risk-taking, Pro-activeness, Autonomy, and Competitive Aggressiveness) and one dependent variable (SMEs Growth).

Table I: Demographic Distribution of Respondents

Gender	**Frequency**	**Percent**
Male	232	75.6
Female	75	24.4
Total	307	100.0
Age		
26-35	54	17.6
36-45	109	35.5
46 years and above	144	46.9
Total	307	100.0
Marital Status		
Single	55	17.9
Married	229	74.6
Divorce	7	2.3
Separated	16	h5.02
Total	307	100.0
Highest Educational Level		
First School Leaving Certificate	12	3.9
SSCE	79	25.7
OND/NCE	106	34.6
B.SC/HND	93	30.3
Masters and above	17	5.5
Total	307	100.0

Source: Field Survey, 2020

3.1.6 Respondents Profile

The sample characteristics reveal that males were more (75.6%) than females (24.4%), where most of them were 46 years and above (46.9%). Also, the majority of the respondents (74.6%) were married and most of them (34.6%) were holders of the National Diploma (ND)/National Certificate of Education (NCE). This means that most of the respondents had OND/NCE which makes them sufficiently educated to answer the questionnaire.

4.0 RESULTS

4.1 Data Analysis

To evaluate our measurement model, convergent and discriminant validity were assessed. Convergent validity measures the degree to which multiple indicators evaluating the same concept agree (Henseler et al., 2016). This was achieved by examining the factor loading and Average Variance Extracted (AVE) of each indicator. The results presented in Table II show that loading for all items surpassed the recommended value of 0.5 (Hair, Hult, Ringle, & Sarstedt, 2017), therefore the criterion is not violated. Meanwhile, some items (RT2 and RT3) were removed from risk-taking due to low factor loading.

Table II: Exploratory factor analysis indicating factor loading, AVE and reliability results

Variables	Factor Loading	AVE	Reliability
A1	.702		
A2	.840		
A3	.906		
A4	.705	.630	.753
I1	.803		
I2	.832		
I3	.679		
I4	.805		
I5	.712		
I6	.825	.606	.796
P1	.879		
P2	.804		
P3	.731		
P4	.609	.581	.826
RT1	.729		
RT4	.506		
RT5	.840		
RT6	.906	.578	.755
CA1	.675		
CA2	.748		
CA3	.841		
CA4	.816		
CA5	.754	.591	.721
G1	.707		
G2	.836		
G3	.896		
G4	.564		
G5	.538	.522	.706

Note: RT2 and RT3 were deleted for low factor loading

The Kaiser-Meyer-Olkin Measure (KMO) of Sampling Adequacy and Bartlett's (1954) Test of Sphericity was calculated to ascertain whether the questionnaire items yield unique and reliable factors. For the dimensions of entrepreneurial orientation, the results show that Autonomy has KMO = 0.705, Bartlett Test of Sphericity = 341.462 and Total Variance Explained = 57.632%; Innovation has KMO = 0.664, Bartlett Test of Sphericity = 117.984 and Total Variance Explained = 45.344%; Proactiveness has KMO = 0.694, Bartlett Test of Sphericity = 271.463 and Total Variance Explained = 54.956%; Risk-Taking has KMO = 0.502, Bartlett's Test of Sphericity = 37.093 and Total Variance Explained = 59.892%; and Competitive Aggressiveness has KMO = 0.673, Bartlett Test of Sphericity = 166.662 and Total Variance Explained = 39.986% . For SMEs Growth, the results indicate that KMO = 0.609, Bartlett Test of Sphericity = 197.961, and Total Variance Explained = 39.907%. Overall KMO values ≥ .70 are desired (Hoelzle & Meyer, 2013; Lloret et al., 2017), but values less than .50 are generally considered unacceptable (Child, 2006; Hair et al., 2010; Watkins, 2018). Therefore, it was determined that the correlation matrix was appropriate for factor analysis.

Cronbach's α coefficient was calculated to ascertain the internal consistency of the scales of the variables. The results indicate that the standard Cronbach's coefficient for all the scales were found to be above 0.7 recommended by Nunnaly and Bernstein (1994): Autonomy α = .753; Innovativeness α = .796; Proactiveness α = .826; Risk-Taking α = .755; Competitive Aggressiveness α = .721 and SMEs Growth α = 0.706.

Table III: Correlations

	Mean	Std. Dev.	Innovativeness	RiskTaking	Proactiveness	Autonomy	Competitiveagg	SMEs Growth
Innovativeness	4.0858	.50817	1					
Risk-Taking	4.1824	.49807	.392**	1				
Proactiveness	3.9446	.77322	.411**	.356**	1			
Autonomy	3.9414	.78813	.636**	.786**	.385**	1		
Competitiveagg	4.0936	.61169	.762**	.414**	.326**	.692**	1	
SMEs Growth	3.9389	.70547	.603**	.427**	.781**	.517**	.420**	1

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

The results in table III showed the correlations among the study variables. The correlations reveal many important findings. There was a strong positive association between Innovativeness and SMEs Growth ($r = .603$, $p<0.01$). Risk-taking was significantly correlated with SMEs Growth ($r = .427$, $p<0.01$). Proactiveness was positively and significantly associated with SMEs Growth $r = .7813$, $p<0.01$). The correlation between Autonomy and SMEs Growth was positively moderate and significant ($r = .517$, $p<0.01$). Moreover, there was a positive significant association between Competitive Aggressiveness and SMEs Growth $r = .420$, $p<0.01$).

The regression results indicate an R^2 value of .723 which means that 72.3% variation in SMEs' growth during the COVID-19 pandemic could be explained by Innovativeness, Risk-taking, Proactiveness, Autonomy, and Competitive Aggressiveness. The other 27.7% could be explained by other variables outside the scope of this study.

Table IV: Result of Path Coefficient

Hypotheses	Relationship	B	Std β	t - stat	Sig.	Decision	VIF
$H0_1$	Innovation → Growth	.547	.394	7.936	.000	Supported	2.679
$H0_2$	Risk-Taking → Growth	.020	.014	.272	.786	Not supported	2.947
$H0_3$	Proactiveness → Growth	.564	.619	18.084	.000	Supported	1.273
$H0_4$	Autonomy → Growth	.134	.149	2.254	.025	Supported	4.770
$H0_5$	CompetiAgg. → Growth	- .220	- .191	-3.631	.000	supported	3.008

Notes: CompetiAgg means Competitive Aggressiveness

Results of path analysis in line with hypothesized relationships were evaluated in Table IV. Findings reveal that: (H1) the relationship that links innovativeness and SMEs growth yielded a $\beta = 0.394$, t-value = 7.936, sig. value = .000. This signifies that the hypothesis which states that there is a significant relationship between innovation and growth of SMEs in the COVID-19 pandemic is supported. The difference is statistically significant. That is, for every one standard deviation increase in innovation, SMEs grow by a standard deviation of 0.394. (H2) The relationship connecting risk-taking and growth of SMEs shows $\beta = 0.014$, t-value = .272 sig. value = .786. This means that the hypothesis which states that there is a significant relationship between risk-taking and growth of SMEs in the COVID-19 pandemic is not supported. The difference is not statistically significant. For every one standard deviation increase in risk-taking, SMEs grow by a meager standard deviation of

0.014. (H3). The link between proactivity and SMEs growth revealed β = .619, t-value =18.084, sig. value = .000. The hypothesis which states that there is a significant relationship between proactivity and growth of SMEs in the COVID-19 pandemic is strongly supported. The difference is statistically significant. For every one standard deviation increase in proactivity, there is a positive increase in growth by a standard deviation of .619. (H4) The connection between autonomy and SMEs growth yields a β = .149, t-value = 2.254, sig. value = .025. The hypothesis which states that there is a significant relationship between autonomy and SMEs growth in the COVID-19 pandemic is supported. The difference is statistically significant. For every one standard deviation increase in autonomy, there is a positive increase in growth by a standard deviation of .149. (H5) The link between competitive aggressiveness and SMEs growth reveals a β = -.191, t-value = -3.631, sig. value = .000. The difference is statistically significant. This means that the hypothesis which states that there is a significant relationship between competitive aggressiveness and SMEs growth in the COVID-19 pandemic is supported. For every one standard deviation decrease in competitive aggressiveness, growth would decrease by a standard deviation of 0.191.

What these results revealed is that there is a significant relationship between entrepreneurial orientation and SMEs growth in the COVID-19 pandemic. However, risk-taking as a dimension of entrepreneurial orientation does not influence SMEs' growth in the COVID-19 pandemic. Meanwhile, entrepreneurial orientation dimensions such as innovativeness, proactivity, autonomy, and competitive aggressiveness do have a strong positive relationship with SMEs growth in the COVID-19 pandemic.

4.2 Discussion of Findings

This research found several findings that contribute to the literature on entrepreneurial orientations and SMEs' growth. It was discovered that there is a significant relationship between innovativeness and the growth of SMEs in the COVID-19 pandemic. It is a well-known fact that the COVID-19 pandemic adversely affected the operations of SMEs across the globe as a result of lockdown measures imposed by governments in order to halt the spread of the virus. This made several businesses to think outside the box to survive. SMEs that were innovative in their processes, techniques, and/or discover new markets or improve existing products witnessed growth. This finding agrees with Duru, Ehidiamhen, & Chijioke (2018) who found that that innovativeness exerted a positive and statistically significant impact on the performance of SMEs in Abuja, Nigeria.

The research also established that there is no significant relationship between risk-taking and the growth of SMEs in the COVID-19 pandemic. The pandemic cast a shadow of uncertainty over the entire economic landscape, where entrepreneurs and managers of SMEs faced life existential threats and business existential threats. In such dire situations characterized by the gloomy, frightening, morbid, and poor economic outlook, investing in high-risk projects, encouraging employees to take the risk with new ideas, and emphasizing both exploration and experimentation for opportunities do not improve the growth of the SMEs. Taking uncalculated risk is known to dwarf the growth of some organizations and in some cases, lead to the death of the organization. This finding agrees with Nwugballa, Elom, & Onyeizugbe (2016) who found that risk-taking had no significant correlation with any of the performance measures including growth.

It was further found that there is a substantial relationship between pro-activeness and growth of SMEs in the COVID-19 pandemic. It is quite clear that the COVID-19 pandemic is not going anywhere soon. Even with the mass vaccination around the world, countries are witnessing a spike in the number of cases necessitating lockdowns in several cities. Hence, SMEs owners and managers who are proactive in their activities are expected to grow their businesses. This finding also agrees with Taiwo, et al. (2019) who found that pro-activeness has a positive significant effect on growth.

It was also discovered that there is a significant relationship between autonomy and growth of SMEs in the COVID-19 pandemic. In other words, the entrepreneurial orientation of autonomy exhibited by entrepreneurs and managers of SMEs do influence business growth in the pandemic. Autonomy is one of the most important foundations for innovative and entrepreneurial behavior. The social distancing measures put in place to curb the spread of the virus enhanced the capacity of entrepreneurs and managers of SMEs to act independently in pursuit of their growth goals. This finding agrees with several studies that demonstrate a favorable association between autonomy and growth, Casillas & Moreno, 2010; Garba et al., 2019; Gupta, 2019).

The research also established that there is a significant relationship between competitive aggressiveness and the growth of SMEs in the COVID-19 pandemic. The competitive aggressiveness of SMEs owners or managers significantly improves the growth of the business. This finding is in line with findings by Musawa & Ahmad (2018) who found that competitive aggressiveness enables a firm to act resourcefully and organize its resources in a way that contributes to marketing innovation performance.

5.0 CONCLUSION AND IMPLICATIONS

The findings of this study have serious implications for theory, practice, and policy. From the theoretical lens, this study contributes to the existing literature by revealing the role of entrepreneurial orientation as a predictor in explaining the growth of SMEs in the COVID-19 pandemic in SMEs in Plateau State. Still from the vistas of theory, Al-Mamary et al. (2020) had argued that the tendency of businesses to act autonomously, innovatively, competitively aggressive, take risks and proactively take initiatives to exploit potential market conditions is crucial in explaining the growth of SMEs. Hence, the insignificant relationship between risk-taking and growth of SMEs was not expected. We had thought that since the COVID-19 pandemic poses a general risk to all SMEs, it would seem natural that those SMEs capable of taking on higher-risk initiatives will gain a greater benefit in the form of increased growth. However, results from this research reveal that entrepreneurial orientation has a relationship with SMEs growth in the COVID-19 pandemic. Particularly, innovativeness, proactiveness, autonomy and competitive aggressiveness are the dimensions of entrepreneurial orientation that were found to have a significant relationship with SMEs' growth in the pandemic.

From a practical point of view, entrepreneurs and managers of SMEs in Plateau State should enhance their entrepreneurial orientation practice of innovativeness, proactiveness, autonomy, and competitive aggressiveness to grow their business and reduce the rate of business failure in the state. Especially, in the still ravaging COVID-19 pandemic. Also, risk-taking, activities such as investing in high-risk projects, encouraging employees to take the risk with new ideas, and emphasizing both exploration and experimentation for opportunities in the COVID-19 pandemic should be discouraged due to the uncertain economic outlook.

From a policy perspective, there is a need for the creation of an agency saddled with the mandate of entrepreneurial education and entrepreneurial orientation of the state. We believe that when managers, owners of SMEs, and the entire citizenry is armed with sound practical entrepreneurial education and improved entrepreneurial orientation the state could witness explosive SMEs' growth.

5.1 Limitation and Suggestions for Further Study

Like in most researches, this study is not without its drawbacks. One of the weaknesses of this research is that a cross-sectional self-response questionnaire was used. Scholars have voiced their reservations with this research designed (Podsakoff et al., 2003). A cross-sectional study of this nature could not tell a full story of the impact of entrepreneurial orientation on the growth of SMEs. We suggest that future scholars should adopt either the mixed method or qualitative approach to give a more context-specific explanation to the hypothesized relationship between entrepreneurial orientational orientation and SMEs growth in the COVID-19 pandemic. Besides, the trajectory of COVID-19 is showing that the virus is not leaving any time soon, as it keeps mutating and spiking the number of cases in several countries around the world. That means that a one-off study could only tell a one-off result. Hence, we suggest that scholars could do a longitudinal study to track the trend of the impact of entrepreneurial orientation on the growth of SMEs in the COVID-19 pandemic.

Moreover, this study was conducted in an environment and the environment is bedeviled by insecurity. These factors could have watered down the relationship between risk-taking and SMEs' growth. Future researchers could find the mediating role of environment and insecurity in explaining the relationship between entrepreneurial orientation and SMEs' growth.

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THE CONTRIBUTION EFFECT OF ANTI-FRAUD POLICY MECHANISMS ON THE FINANCIAL PERFORMANCE OF A SELECTED BANK IN NIGERIA

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ABSTRACT

The study seeks to establish the contribution effect of anti-fraud policy mechanisms on the financial performance of a selected bank in Nigeria, using First Bank Jos Main Branch as the study context. The survey was collected through a primary field data, i.e. a questionnaire survey was gathered from forty bank respondents operating in Jos Main Branch. The study employed a hierarchical regression analysis to establish the contribution effect of the study variables. The results discovered that anti-fraud policy mechanisms on financial performance has a greater contribution effect on financial performance (R^2 change =54.5%) compared to internal control (R^2 change =19.2%). The results suggest that anti-fraud policy mechanisms matter a lot in explaining variations in the financial performance of banking industries. Hence, the originality of this study lies in the fact that previous studies investigated the relationship between the five dimensions and also studies in different context on financial performance have frequently missed the reality of the three dimensions and study in Nigeria on banking industry financial performance.

Key words: Anti-fraud policies mechanisms, fraud detection, fraud deterrence, internal control, financial performance and banking industry firms

1.0 INTRODUCTION

With the emergence of new innovations in technology, financial crimes have become more complex and sophisticated. When financial institutions adopt or integrate high- tech artificial intelligence, machines learning and intelligent analytics in their fraud management platforms, banks can stay ahead of these challenges and reduce their fraud management costs thereby increase their financial performance.

The banking sector has been singled out for special protection because of the rising cases of financial fraud and the role they also play in the economy. The banking institutions plays a very significant role in the growth of any economy (Adeyemo, 2012). Banks in most economies of the world is key, and the success of monetary policy, to a large extent depends on the soundness of the banking sector through which the policies are implemented (Adeyemo, 2012; Godwin, 2009; Oye, 2003). Financial institution like banks must be protected against fraud. Fraud is commonly understood as dishonesty calculated for advantage. According to Idolor (2010) submits that fraud is a conscious and deliberate action by a person or group of persons with the intention of altering the truth of fact for selfish personal gains, and it has become the most single veritable threat to the growth of banking industry. fraud has been identified a major threat to the growth and development of banking sector globally. Survey by KPMG (2019) reports discovered that, in 2018 the US by Federal Bureau of Investigation (FBI) reported that business email compromise scams resulted in global losses of over US$12 billion between 2013 and 2018. Also, in Australia, the Australia Competition and Consumer Commission (ACCC) reported that almost half a billion Australian dollars was lost to scammers in 2018 alone. Joseph (2020) in his study discovered rising cases of bank distress in Ghana as a result of bank fraud which has become a concern for policy makers, also found how Ghanaian business people has fell victim to activities of this fraudsters to the tuned of £10,000, US$75,000 and GH¢400,000 within the period.

Fraud has been cited as Nigeria 's biggest single problem both in public and private sectors. (Gbegi & Adebisi, 2015). Banking fraud has been facilitated by technological advancement in the banking industry in Nigeria. Oludayo (2020) discovered that about ₦15.5 billion was lost to bank fraud in Nigeria in 2018. Fraud and fraudulent activities are more common in Deposit Money Banks because of the instruments of their trade. Banks are most prone to financial fraud as a result of money and near money instruments used in the process of their operations despite the strong policies put in place.

The major concern or reasons for fraud in deposit money banks is poor adherence to fraud management mechanisms like fraud detection, deterrence and weak internal control. Detection of frauds lies in the identification of frauds that is done as fastest as possible after any such fraud is committed. Frauds are uncovered following the failure of the prevention against frauds (Bolton & Hand, 2002).

Fraud deterrence refers to measures that seek to stop fraud from occurring according to Naicker (2006). Becker's research (Becker, 1974) on the economics of crime offers information on how organizations may deter fraudulent behavior. She asserts that people may be deterred from getting involved in fraudulent activities when organizations put in place higher fines and penalties.

Internal controls are processes designed to provide reasonable assurance that management achieves effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations (Grant, Miller & Alali, 2008). Internal audit can specifically assist an entity to manage fraud control by providing advice on the risk of fraud, advising on the design or adequacy of internal controls to minimize the risk of fraud occurring, and by assisting management to develop fraud prevention and monitoring strategies.

Financial performance refers to the potential of a venture to be financially successful (Eljelly, 2004). Sollenberg and Anderson (1995) assert that, performance is measured by how efficient the organization is in use of resources in achieving its objectives. Previous studies were undertaken on anti-fraud prevention mechanism with focus on fraud control mechanisms on financial performance. This study tried to test the contributing effects of each of these control mechanisms on the financial performance of deposit money banks in Nigeria, this is to determine which of the mechanisms is more effective in combating fraud risk prevention, which can be rely on in addressing the menace. The gap in this study is the contributing effect of the various control measures, the deterrence, detection and internal control measures on financial performance of deposit money banks in Nigeria.

This study is motivated by the fact that recent reports of fraudulent activities recorded in financial institutions globally, where large sums of funds are reportedly to have been lost to financial crimes and thereby resulting to banks' distresses. This study chooses to focus on the contributing effects of fraud deterrence, fraud detection and internal control on financial performance of deposit money banks in Nigeria a study of First Bank of Nigeria Limited.

1.1 Statement of the Problem

Fraud has become the most dreaded threat to the global economy. Economic crimes had for long been categorized as a menace that led to the collapse of many reputable financial institutions in the world. Survey by KPMG (2019) reports that in 2018 business email compromise scams resulted in global losses of over US$12 billion between 2013 and 2018. Joseph (2020) discovered rising cases of bank distress in Ghana as a result of bank fraud, he also stressed how Ghanaian business people has fell victim to activities of this fraudsters to the tuned of £10,000, US$75,000 and GH¢400,000. In Nigeria the acts of financial fraud have persisted in deposit money banks in spite strong measures put in place to forestall and control any planned intention to steal the bank's money. Nyakarimi, Kariuki & Kariuki (2020) studied the assessment and fraud prevention in banking system in Kenya and concluded risk assessment has significant effect on fraud prevention in banking industry in Kenya.

Badejo, Okuney & Taiwo (2017) studied on fraud detection in the banking system in Nigeria challenges and prospects and discovered that lack of adequate motivation is a major cause of fraud in banks looting of funds by bank managers and directors in Nigeria.

Adetiloye, Olokoyo & Taiwo (2016) studied on fraud prevention and internal control in the Nigerian banking system found that internal control on its own is effective against fraud, but not all staff are committed to it. Measures to detect, control and eradicate fraud in banking sector in Nigeria have been quite ineffective as the fraudulent practices persists despite policies put in place. The reviewed studies focused on the various fraud preventive mechanisms in banking sector. This study therefore would fill the gap by focusing on the contributing effects of individual fraud mechanisms on financial performance in deposit money banks in Nigeria.

1.2 Research Questions

1) To what extent is the effects of fraud deterrence on financial performance of deposit money banks in Nigeria.
2) To what extent is the effects of fraud detection on financial performance of deposit money banks in Nigeria.
3) To what extent is the effects of internal control on financial performance of deposit money banks in Nigeria.

1.3 Objective of the Study

The primary objective of this study is to test the contributing effect of fraud management mechanisms on financial performance of deposit money banks in Nigeria. The specific objective of this study is to:

1) examine the effect of fraud deterrence on financial performance of deposit money banks in Nigeria?
2) establish the effect of fraud detection on financial performance of deposit money banks in Nigeria?
3) determine the effect of internal control measures on financial performance of deposit money banks in Nigeria?

1.4 Research Hypothesis

The study will be guided by the following hypotheses:

$H0_1$: Fraud deterrence has no significance effects on financial performance of deposit money banks in Nigeria.

$H0_2$: Fraud detection has no significance effects on financial performance of deposit money banks in Nigeria.

$H0_3$: Internal control measures has no significance effects on financial performance of deposit money banks in Nigeria.

1.5 Significance of the Study

Fraud has been described as any deliberate intention to deceive an organization or an individual for a financial benefit. Fraud is a global phenomenon that has become a serious threat to the world economy. This study focuses on the contributing effects of fraud control measures that will aid stakeholders in the financial institutions especially, the deposit money banks in Nigeria. This study will be of great significance to the government such that the findings will help in formulating fraud control policies that will reduce or eliminate the menace in the economy. It will be of immerse help to the banking sector or financial institutions in measuring on which of the fraud control measure is more effective to rely on to ensuring effective control of this threat. The study will also contribute new knowledge to the body of existing literature for researchers and academicians.

2.0 LITERATURE REVIEW

This section conceptualized some key variables of this study.

2.1 Conceptual Review

Fraud has rapidly grown over period of time. Fraud is the intentional misrepresentation of a material fact to encourage a party to act to its own detriment, fraud is as old as the human race itself. Fraud according to Adeyemo (2012) is any illegal act characterized by deceit, concealment or violation of trust. Osisioma (2013) defined fraud as all the multifarious means which human ingenuity can devise and are resorted to by one individual to get any advantage over another. These stated definitions are in harmony, the two opinions looked at fraud has a way people or fraudulent people take advantage of others to defraud them of their hard-earned funds through trick or cunning way. However, Mahinda (2012) introduces a different concept to definition of fraud. He asserts that the menace occurs as a result of a person in position of trust or accountability who advances his own personal interests at the expense of the interests through digressing from the set standards and rules.

Fraud in deposit money banks varies widely in nature, character, and method of perpetration. Olaoye, Dada & Adebayo (2014) identified perpetrators into three which are; management of the banks (management fraud), insider (employees), outsiders (customers and non-customers of the bank). Thus, management fraud is fraud perpetrated by the high-profile officials of the bank, which could be the managing directors, the executive directors and these people have the authority to override internal control. The victim to this type of fraud are the investors, shareholders even the government. Insiders' fraud are frauds perpetrated by the employees of the banks because the instruments and also understand the operations of the organization and is detrimental to the customers, organization and general public. The outsider fraud is the one committed by the customers and even the non-customers of the bank this is detrimental to the bank, and this type of fraud is in most cases committed with the effort of insiders. For this type of frauds to be successful, there must be and insider providing necessary information and other logistic in secret (Olaoye, et al 2014).

2.1.1 Fraud Deterrence

The world of fraud deterrence and detection has experienced dramatic change in recent years. Fraud itself has been as old as the history of man, and recent accounting scandals have brought the practice of investigating, detecting and deterring fraud into the limelight. Sarbanes-Oxley Act 2002 demands increase responsibility to corporate executives to ensure that adequate control measures exist within an organization to prevent fraudulent financial reporting.

According to Cendrowski & Martin (2007) fraud deterrence is the proactive identification and removal of the causal and enabling factor of fraud. Fraud deterrence is based on premise that fraud is not a random occurrence, fraud occurs where the conditions are right provided for it to take place. Fraud deterrence attacks the root causes and enablers of fraud, this analysis could reveal potential fraud opportunities in the process, but is performed on the ground that improving organizational procedures to reduce or eliminate the causal factors of fraud which is the single best defense against fraud. Fraud deterrence involves both short-term (procedural) and long-term (cultural) initiatives. Fraud deterrence is not earlier fraud detection, but it involves an analysis of the conditions and procedures that affect fraud enablers, that is, looking at what could happen in the future given the process definitions in place and the people operating that process. Unlike fraud detection involves a review of historical transactions to identify indicators of a nonconforming transactions. In essence, deterrence is a preventive measure, reducing input factor.

2.1.2 Fraud Detection

Fraud is a menace that deserves serious attention and immediate action by all and sundry, because the of it can cause serious damage to the organization. fraud detection involves a review of historical transactions to identify indicators of a nonconforming transactions. Fraud prevention practices may not stop all potential perpetrators; organizations should ensure that systems are in place that will highlight occurrences of fraud promptly. This only achieved through fraud detection (Murray, 2015). Fraud detection methods are meant to uncover fraud when it occurs. A fraud detection strategy should involve the use of analytical and other procedures to highlight anomalies and the introduction of communication/reporting mechanisms that provide for communication of suspected fraudulent acts. Critical elements of a comprehensive fraud detection system would include exception reporting, data mining, trend analysis and on-going risk assessment (Mwega, 2013).

Fraud detection may highlight on-going frauds that are taking place or fraud offenses that have already occurred. Such schemes may not be affected by the introduction of prevention techniques and, even if the fraudsters hindered in the future, recovery of historical losses would only be possible through fraud detection (Bishop, 2014). Potential recovery of damages is not the only objective of a detection programme though, and fraudulent behaviour should not ignore just because there may be no recovery of losses. Fraud detection also allows for the improvement of internal systems and controls. Most of the fraudulent act do exploit deficiencies in control systems. Through screening of such scams, controls can be tightened making it more difficult for potential perpetrators to act (Gates & Jacob, 2013).

2.2.3 Internal Control

Internal control is a major integral part of every organization structure. Internal control is defined as a process affected by organization's structure, work and authority flows, people and management information systems, designed to help the organization accomplice specific goals or objectives (AICPA, 2003). COSO defines internal control as a process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in these categories; effectiveness and efficiency of operations, Reliability of financial reporting and compliance with applicable laws and regulations.

According to Gamage et al. (2014), internal control is the process designed and affected by those charged with governance, management and other personnel to provide reasonable assurance about achievement of an entity's objectives with regard to reliability of financial reporting, effectiveness and efficiency of operations and compliance with applicable laws and regulations. The ICS is designed and implemented to address identified business risks that threaten the achievement of the organization's objectives. Rajkumar (2009) as cited by (Gesare, Michael & Odongo, 2016) an effective internal control system requires that all material risks, internal and external, controllable and uncontrollable that could affect the achievement of the bank's objectives are recognized and continually assessed. Management must establish mechanisms to identify, measure, analyze and manage the various kinds of risks faced by the bank at all levels and in all departments including credit risk, country and transfer risk, market risk, interest rate risk, operational risk, liquidity risk, legal risk, reputational risk among others.

Abiola (2013), assert that the concept of internal control is very important for proper management of an organization's risk, which may constitute barriers to the attainment of its set objectives if neglected. Poor internal controls lead to scandals, losses, failures and damage, to an organization's reputation and that where new ventures are undertaken without a means of controlling risks, then problems are likely to occur. Internal control system are regarded as effective when they promote efficiency, reduce risk of asset loss, deter and detect errors, fraud and theft and help to ensure the reliability of financial statements and compliance with laws and (Manass'eh, 1993).

2.2.4 Financial Performance

Financial performance refers to the potential of a business outfit to be financially successful (Eljelly,2004). Sollenberg & Anderson (1995) assert that, performance is measured by how efficient the firm uses its resources in order to achieve its objectives. There are three basic situations that can describe business financial situation. It can be profitable; break even or operate in a loss. In most cases, an organizational goal is to make profit. The grand objective of deposit money banks is to make profit or to maximize shareholders' wealth. To measure the profitability of deposit money banks, there are a variety of ratios used of which Return on Asset, Return on Equity and Net Interest Margin are the major ones (Murthy & Sree, 2003, Alexandru et al., 2008).

2.2 Theoretical Review

This study anchored on diffusion of innovation theory. This theory explains how people, as part of a social system, adopt a new idea, behavior in managing their resources. Diffusion of innovations theory was pioneered by Rogers in 1962. Rogers (2003) described innovation as an idea, practice, or project that is perceived as new by an individual or other unit of adoption. An innovation may have been invented a long time ago, but if individuals perceive it as new, then it may still be an innovation for them. In the banking sector, new ideas are very critical components in the operations and survival because of the volume of transactions and other financial involvements. Huge financial transactions are involved in the banking industry and as such this if not well managed through the adoption of ne ideas and knowledge, would cause a down trend in their performance. This theory suite this study because new ideas and use of modern technology helps detect fraudulent transactions, thereby improve financial performance. The theory is relevant to the study in the sense that a strong and effective fraud management mechanisms require new ideas persuasion and effective decision in order to manage the thread of this economic menace. On the other hand, financial performance to be enhance properly in any organization requires also the innovation of new ideas, knowledge and persuasions.

2.3 Empirical Review

Agyemang (2020) assessed the effect of internal control on fraud prevention, questionnaires were used to obtain data for the study. A combination of positive sampling and random sampling techniques were used to select the sample elements. A sample of ten (35) management staff including the internal auditors was selected for the study. The study revealed that, the internal control measures put in place by management have helped the bank in preventing fraud. It was again revealed that majority of the respondents agreed that management needed to prevent and detect fraud are provided.

Similarly, Nyakarimi, Kariuku, & Kariuku (2020) assessed the effect of risk assessment on fraud prevention in banking industry in Kenya. The study involved all banks in Kenya. Disciple and correlation research designs were used in this study. Factors analysis was undertaken to reduce the factors and remain with factors that had higher loading which was determined through the use of Eigen values. Correlation analysis was applied to determine the strength and direct relationship between variables and regression analysis based on Structural Egration Modeling (SEM) was used to test the hypothesis. The discipline analysis showed that the respondents strongly agreed that the parameters put in place are capable of preventing frauds in banking industry in Kenya. From the results of tests, it was concluded that the risk assessment mechanisms put in place to assess the risk have significant effect in fraud prevention and as such they should be enhanced to complete prevent fraud in banking sectors.

Subsequently, Emmanuel, Sunday, & Christian (2019) examined the impact of forensic audit on fraud detection and prevention in the Nigerian banking industry. The study took a censor of the 16 Deposit Money Banks (DMBs) listed on the Nigerian Stock Exchange as at 31st December, 2016. The study used the secondary source to collect data from the Nigerian Deposit Insurance Corporations (NDICs) annual reports of 2013 and 2016. Data generated were analyzed using charts, graphs, tables and regression. Our findings revealed that forensic audit has a significant negative impact on number of fraud cases, number of staff involved in bank fraud, and actual amount of bank losses through fraud in the Nigeria banking sector. However, forensic auditing has insignificant impact on expected losses generated through fraud activities in the Nigerian banks.

Additionally, Kamaliah et al (2018) examined the extent of monitoring mechanisms within public systems curbing fraud incidents. The authors' survey concerned three dimensions of monitoring mechanisms: good governance, internal control procedures and fraud prevention programs. This survey has been conducted among various Malaysian government officers. The results show that, generally, misappropriation of assets is ranked as the most frequent fraudulent case in government agencies. Based on regression analysis, internal procedures or policies were significant in reducing fraud incidents. Additionally, both good governance and fraud prevention programs were proven to have a significant relationship with the occurrences of fraud within government agencies. In terms of the practical aspect, the study provides important information for public servants on the effectiveness and usefulness of good governance, internal control procedures, and fraud prevention program in the public sector. This paper provides an interesting contribution to the understanding of fraud incidents inside government agencies.

More still, Agwor (2017) In his study focused on Fraud prevention as a dimension of Audit function on Business Profitability, effectiveness and Efficiency as measures of performance. Primary and secondary data were collected; sample size was thirty (32) quoted manufacturing companies. Pearson Product Moment Correlation powered by Statistical package for social sciences and QSR-NVIVO software aided the data analysis. The study found that the influence of fraud prevention is more positive and very significant on business profitability, than on effectiveness and business efficiency, which appears to have weak influence in the quoted manufacturing companies in Nigeria. Conclusively, the more stringent fraud prevention measures tend to be the more businesses will achieve higher growth in terms of profitability. It is recommended that firms should improve on the fraud prevention mechanism to track all dubious tendencies to avoid being defrauded.

In addition, Eme, Inyang, & Joshua (2016) their studies aimed at investigating the mechanisms of fraud prevention and detection and their levels of effectiveness in Nigeria. The study involved the collection of quantitative data from accounting practitioners. The questionnaires shared as the survey instrument. The study identified several fraud prevention and detection mechanisms that are currently used in Nigeria, such as systems 1 + - test indicates a significant difference between the perceived effectiveness and actual usage of fraud prevention and detections mechanisms in Nigeria. It was further discovered that the most effective mechanisms like the forensic accounting techniques are the least used in fraud prevention and detection. This implies that the current mechanisms of fraud prevention and detection are not proactive in dealing with the fraud.

More about this is in the study of Gesare, Michael & Odongo (2016) who assessed the influence of Internal control system on fraud risk management among banks in Kisii town**.** The study targeted all the 15 banks in the town and the respondents were stratified into three categories comprising of 15 branch managers, 74 departmental managers, and 68 clerks. Saturated sampling method was used for the branch managers while simple random sampling was employed to select a third of the rest of the respondents giving a sample size of 130 respondents. Interview schedules and questionnaires were used to solicit information from the respondents. Collected data was descriptively analyzed by using weighted means and standard deviations and inferentially by use of Pearson’s correlation and regression analysis with the help of Statistical Package for Social Sciences (SPSS). The study findings revealed that Internal control system influence 67.7% of fraud risk management; control environment positively and significantly influences fraud risk management (ß= 0.391; $p < 0.05$) and risk assessment positively and significantly influences fraud risk management (ß =0.401; $p < 0.05$). The study will be significant to policy makers, bank managers and academic researchers. The study recommends that the management of banks seal all loopholes that may create opportunities for undermining of internal control systems by putting in place tight fraud handling policies; put in place policies on lifestyle audits; report all employee related frauds to relevant investigative authorities and take a pro-active and dynamic risk assessment approach.

Adetiloye, Olokoyo & Taiwo (2016) established the issues of internal control viz; fraud prevention in the banking industry, adopting both primary and secondary data. Primary data was used to test internal control while secondary data were employed to test fraud prevention. The main primary variables were separation of duties, monitoring, and staff qualifications while the main secondary variables are bank profit, regulation, technology and M2. In both cases regression techniques were adopted. The results show that internal control on its own is effective against fraud, but not all staff are committed to it, while the secondary data is quite supportive of the primary data but more exemplifying in that M2, staff qualifications and technology were significant throughout the various dependent variables. It is also clear from the regressions that technological based fraud is significant. The paper recommends the continuation of the cashless policy of the Central Bank to reduce available cash and improvement in educated staff engagement to reduce fraud in the banking system.

3.0 METHODOLOGY

3.1 Design, Population and Sample

The study employed a cross-sectional survey design, and confined to financial performance of deposit bank in Jos, Nigeria. The choice of this state was because whereas as it is predominantly having the different branches of the Bank and it remains a threat to other Banks. A sample size of 40 employees of the Bank was drawn from a list of the branch (Primary data, 2020). The participants were selected using simple random sampling technique; and data were collected through a personal approach which yielded a response rate of 100 %. The data collection approach was chosen because the limited availability and efficiency of postal and communication services in Nigeria could not allow questionnaires to be mailed, faxed or couriered to respondents without causing selection bias.

3.2 Measures and Questionnaire

The study employed a Likert-scale questionnaire, designed to measure the opinion or attitude of a respondent was utilized to obtain self-reported information. The questionnaire designed is based on our review of relevant literature on financial performance, through the elements of anti-fraud policies mechanisms including fraud deterrent, fraud detection mechanisms and Internal Control mechanisms. Table 1 presents the details.

Table 1: Operationalization and Measurement of Variables

Variable	Dimension	Issues to examine	Measures	Sample qnnr items
Financial Performance	Uni-dimensional	"The ability of organization's fraud risk management practices to improved its financial performance" Murthy and Sree, (2013); Alexandru et al., (2011)	Respondents' mean score of the **6 items** included in the questionnaire on a 5-point Likert-scale	*"Well established fraud risk management techniques have seen the organization save a lot on fraud investigation"*
Anti-fraud policies mechanisms	Fraud deterrent	The ability of the organizations to have clear division of duty guide against fraudulent activities.	Respondents' mean score of the **9 items** included in the questionnaire on a 5-point Likert-scale	*"Staff supervision help in reducing fraud" "Monitoring work performance reduces fraud risk".*
	Fraud detection	The ability for ethical organizational culture that influences the success in detecting fraud within the organization.	Respondents' mean score of the **6 items** included in the questionnaire on a 5-point Likert-scale	*"The organization has successfully implemented a great number of fraud detection instruments". "The organization's fraud detection processes mostly rely on technology".*
	Internal Control	Laws and regulations on fraud risk management mainly influence the establishment of the organization's internal control. *Grant, Miller, and Alali, (2008); Rae and Subramanian (2008)*	Respondents' mean score of the **7 items** included in the questionnaire on a 5-point Likert-scale	*"The organization's internal control cannot over-ridden" "The organization's internal control facilitates the identification and measurement of risk".*

Control variables: This study predicts financial performance and as such, we used respondent characteristics like age, gender and highest qualification in the regression analysis to control for confounding effects associated with them. Age of respondent was controlled using four discrete categories (18-25 years, 26-35 years, 36-50 years and above 50 years), however, 48% of the respondents were between 36-50 years, about the employees 52% were males, in terms of qualification 64% had bachelor's degree, 67% have their professional qualifications and 64% of the respondents have worked with the organization from 6-10 years. Responses were enlisted from different fields of study.

3.4 Tests for Validity and Reliability

The study establishes convergent validity; an exploratory factor analysis this was performed for each variable by running principle component analysis using varimax rotation method. Factor loadings below 0.5 coefficients are suppressed to avoid extracting factors with weak loadings. In this study, specifically, factor analysis was performed on Anti-fraud policies mechanisms (Fraud deterrent, fraud detection and Internal Control). The KMO and Bartlett's (1954) test of sampling adequacy was used to assess whether the questionnaire items used yield distinct and reliable factors (Kaiser, 1974). Financial performance in this study was treated as a uni-dimensional variable. The results show [give KMO, Bartlett test, and total variance explained for Anti-fraud policies mechanisms =KMO=.949 Bartlett test=7284.586, Total Variance Explain=45.77%.

Cronbach's α coefficients were computed to determine the internal consistency (reliability) of the scales of the study variables. The standardized Cronbach's α coefficients for all the scales, are all found to be above 0.7 recommended by Nunnally and Bernstein (1994) (Anti-fraud policies mechanisms α=.782, and Financial performance α=.89). The following steps were taken to detect whether common methods variance (CMV) was present as it leads to a false internal consistency. First, the items on the dependent variable were present before the independent variables. Second, dependent, independent and control variables in this study are not similar in content. Third, the anchors for the dependent, independent and control variables are not similar. Fourth, anonymity of the respondents was assured.

The tests for regression assumptions were run to assess the suitability of the data to perform hierarchical regression analysis. Specially, normality, linearity, homogeneity and multi-collinearity were assessed using statistical and graphical means. The results showed that all the parametric assumptions were met.

Table 2: Exploratory factor analysis of Anti-fraud policies mechanisms

Code	Statement	Fraud deterrent	Fraud detection	Internal Control
FDR1	Clear division of duty guide against fraudulent activities.	.793		
FDR2	Staff supervision help in reducing fraud	.675		
FDR3	Monitoring work performance reduces fraud risk.	.562		
FDR4	Whistle blower strategy, incentives, hotline, protection promote fraud risk management.	.676		
FDR5	Ensuring safe controls when accessing system helps in reducing fraud risk	.738		
FDR6	Strict legal consequences help in reducing fraud risk in organizations	.647		
FDR7	High fines and penalties reduce fraud risk.	.748		
FDR8	Fraud risk register help in curtailing fraud risk.	.582		
FDR9	Fraud awareness training promote fraud risk management.	.696		
FDT1	The organization has successfully implemented a great number of fraud detection instruments.		.773	
FDT2	Selection of the suitable and effective fraud detection instruments is enhanced by availability of expertise within the organization.		.675	
FDT3	The organization's fraud detection processes mostly rely on technology.		.619	
FDT5	Success in detecting fraud depends greatly on the support from the top management.		.760	
FDT6	Ethical organizational culture influences the success in detecting fraud within the organization.		.598	
ICT 1	The organization's internal control cannot over-ridden			.763
ICT 2	Fraud risk prevention is associated with an increase in the number of implemented internal control.			.682
ICT 3	Continuous internal and external audits assist in grounding the set internal controls.			.875
ICT 4	Part of the current organization's internal controls are as a result of learning processes from previous fraud occurrences.			.727
ICT 5	Laws and regulations on fraud risk management mainly influence the establishment of the organization's internal control.			.817
ICT 6	The set internal control enhances monitoring and financial reporting processes in the organization.			.679
ICT 7	The organization's internal control facilitates the identification and measurement of risk.			.615
	Percentage	32.75	21.48	45.77
	Cumulative Percent	27.14	22.61	50.25
	Eigen Value	7.405	6.487	9.025
	Scale reliability analysis			
	Cronbach's alpha	.719	.609	.629

Kaiser Meyer Olkin measure of sampling adequacy = .949

Bartlett test for sphericity = 7284.586, df=833, significance level =.000

Giving the results of the Exploratory Factor Analysis (EFA) each item loadings have (above 0.5) on the rotated component matrix. This explain from the theoretically point of view that convergent validity is established of Anti-fraud policies mechanisms having each items measuring separate dimensions of the global variable. Similarly, the reliability tests relating to each component scale were satisfactory, with Cronbach's alpha coefficient of all study variables having 0.7 and above. This means that there are strong reliability values. The three factors were labelled giving the percentages of the total variance explain as follows, Fraud deterrent (32.75%), Fraud detection (21.48%), and followed by Internal Control (45.77%) respectively. This implies that internal control has more explanatory power than fraud deterrent and fraud direction to cause variability to the main construct Anti-fraud policies mechanisms.

3.5 **Model**

Four regression equations were generated to define the models used in investigating the contribution effect of Anti-fraud policies mechanisms on financial performance of first Bank Nigeria PLC. The first regression equation for Model 1 related to the control variables of the respondent EDUCATIONAL QUALIFICATION. The second regression equation for Model 2 is related to the addition of fraud deterrent, the third regression equation for Model 3 is related to the addition of fraud direction whereas the equation for Model 4, the fourth Model 4, relates to the internal control variables. The regression equations for the models are specified as below:

3.5.1 Regression Analysis

Regression involving Anti-fraud policies mechanisms as a global variable

Three models were specified as:

1) Model 1: $FP = b_0 + b_1A + b_2EDUC + \varepsilon$
2) Model 2: $FP = b_0 + b_1A + b_2 EDUC + b_3FDR + \varepsilon$
3) Model 3: $FP = b_0 + b_1A + b_2 EDUC + b_3FDRc + b_4FDT + \varepsilon$
4) Model 4: $FP = b_0 + b_1A + b_2 EDUC + b_3FDR + + b_4FDT + b_5ICT + \varepsilon$

where:

FP	- financial performance
b_0	- is a constant
b_1Educ Qual	- is the unstandardized B coefficient of respondents
b_2Fdr	- is the unstandardized B coefficient of fraud deterrent
b_3Fdt	- is the unstandardized B coefficient of fraud direction
b_4Ict	- is the unstandardized B coefficient of Internal Control
ε	- is the error term

3.5.2 Results Zero Order Correlation Analysis

The results in table 3 showed a positive and significant association between the study variables; fraud detection mechanism and financial performance reveals that r=.677, p<.05 indicating that financial detection is significant and positively associated to financial performance in this context; additionally, fraud deterrent mechanism and financial performance is also significantly and positively correlated having the coefficient r=.814, p<.05. the results have it that deterrent in financial institution is key to financial performance of first bank; more so, fraud internal control mechanism and financial performance is highly correlated, explaining that control mechanism is vital to financial performance of first bank r=.864, p<.05; The overall correlation results have it that is significant and positively correlated to the study variables.

The results in column 1 of table 2 show the control variables have a non-significant contribution in explaining financial performance (adjusted R^2 = -.054; F=.99; p<.05). Column 2 shows that when fraud risk mechanism was added in the equation, the relation was positive and significant. In addition, financial risk mechanism accounted for 3.27% of the variance explained in financial performance (β= .488, p<.05; $R^2\Delta$= .3.14; F=3.27; p<.05).

Table 3: Provides the Inter-item Correlations of the Study Variables

Variables	Mean	Std	FDTM	FDM	ICM
Fraud Deterrent Mechanism	4.4479	.55684	**1**		
Fraud Direction Mechanism	4.6361	.37489	.772**	**1**	
Internal Control Mechanism	4.5589	.48415	.757**	.847**	**1**
Financial Performance	4.6500	.46502	**.677****	**.814****	**.864****

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

3.5.3 *Hierarchical Regression Analysis*

The study employ a hierarchical regression analysis was performed to ascertain the contribution effect of Anti-fraud policies mechanisms on financial performance of First Bank Nigeria Plc Jos Main Branch, while controlling for the respondent educational qualification. The results are presented in Table 4 below:

Table 4: Hierarchical Regression Analysis

Details	Model 1	Model 2	Model 3	Model 4	Collinearity Statistics Tolerance	VIF
Control variables Educ Quali	.010	.114	.138	.103	.755	1.105
Independent variables Fraud Deterrant		**.632*****	.383	.191	.566	1.219
Fraud Direction			**.733*****	.616	.577	1.204
Inter Control				**.595****	.468	1.672
Model summary R^2	.000	.545	.737	.803		
R^2 (adjusted)	-.054	.493	.699	.767		
R^2 change	.000	.545	.737	.803		
F-Value	.997	10.47	19.08	22.40		
Durbin Watson	**1.165**					

*p<.05; **p<.001; reported results are standardized regression coefficients

The study results in Table 4 show that in Model 1, is respondent educational qualification was not a significant predictor of financial performance, while in Model 2 shows that the addition of fraud deterrents to the equation contributes an extra 54.5% variance explained by the model ($R^2\Delta$ = .54.5; sig. fΔ=.000). The results also revealed fraud deterrents is a significant predictor of financial performance where (beta= .632; p=000). Thus, the results offer support to hypothesis 2 ($H0_2$). The result noted that the addition of fraud deterrents to the equation in Model 2 renders the control variables educational qualification not insignificant in explaining financial performance of First Bank Nigeria Plc Jos Main Branch. Model 3 shows that the addition of Fraud direction to the equation contributes an extra 20.6% of the variance explained in financial performance. Further, the strength of the relationship between Fraud detection and financial performance increases and reduced but remained positive and significant (beta =.733, p=.000). It was established that the relationship between FDT and financial performance is positive and significant; thus the results offer support to hypothesis 3 ($H0_3$). Lastly, the variable internal control when added in the model explain 80.3% (Adj.

R^2=.803) the model shows the variance in financial performance, implying that the remaining 19.7% is explained by other factors not considered in this study. The study has a positive and significant relationship (beta =.595, p=.000). It can be noted that in the presence of internal control, is the strongest and significant predictor of financial performance of First Bank Nigeria Plc Jos Main Branch. Overall, all the study hypotheses were supported.

4.0 DISCUSSION OF FINDINGS

According to the present results, it is evident from the empirical results that contribution effect of fraud deterrent, fraud direction and internal control on financial performance of first Bank Nigeria Plc is now known. In this study, three things emerge. One, all the study variables; fraud deterrent, fraud direction and internal control are significant predictors of financial performance of First Bank Nigeria Plc Jos Main Branch. Two, when fraud deterrent and fraud direction are in play, the variations in financial performance are greatly caused by the internal control. From the Anti-fraud policies mechanisms perspective, the present results suggest that if First Bank Jos main branch are going to experience better financial performance, the management must emphasize on the anti-fraud policies mechanisms play an important role in creating and adding value to organizations by managing limited resources, activities and ensure employees to fulfill the organizations' objectives. A Cendrowski & Martin (2007) established that, fraud deterrence is the proactive identification and removal of the causal and enabling factor of fraud. Fraud deterrence is based on premise that fraud is not a random occurrence, fraud occurs where the conditions are right provided for it to take place.

Similarly, Adetiloye, Olokoyo & Taiwo (2016) documented that, the issues of internal control *viz.*, fraud prevention in the banking industry, adopting both primary and secondary data. Primary data was used to test internal control while secondary data were employed to test fraud prevention. More still, Agwor (2017) in his study focused on Fraud prevention as a dimension of Audit function on Business Profitability, effectiveness and Efficiency as measures of performance. This explain how relevant and anti-fraud prevention is to many organizations in the light of this practices. In addition, Eme, Inyang, & Joshua (2016) in their studies aimed at investigating the mechanisms of fraud prevention and detection and their levels of effectiveness in Nigeria. The study identified several fraud prevention and detection mechanisms that are currently used in Nigeria, such as systems 1 + - test indicates a significant difference between the perceived effectiveness and actual usage of fraud prevention and detections mechanisms in Nigeria.

5.0 CONCLUSION AND IMPLICATIONS

In conclusion, this study sought to examine the contribution effect of anti-fraud policies mechanisms on financial performance of banks in Nigeria. The study was achieved through a primary source survey by administering questionnaire of 40 employees of first bank Jos Main representing a response rate of 100 per cent. The results revealed that, all the elements of anti-fraud policies mechanism are significant predictors of financial performance of Banks in Nigeria to 80.3 per cent. However, anti-fraud policies mechanisms (AFPM) are better predictors of financial performance where: (R^2 = 54.5 per cent; beta=.623) than internal control practices is (R^2 =19.2 per cent; beta =.733). The results of this study have significant implications for academicians, practitioners and regulators. For academicians, the study suggests that the competence of the individual behind the AFPMs should not be assumed. For practitioners, the findings are essential in that, they need to emphasize the anti-fraud policies mechanism for employees in the backing industry this will translate into better financial performance. For managers and supervisors such as the accountancy bodies, the findings reveal evidence underlining the importance of competence of the organizations in terms putting measures for anti-fraud prevention mechanism in different branches.

The study has no doubt that, significant contributions to the financial performance literature of banking industry, this does not mean there it has no limitations. It is worthy to note that, first, this study was limited to baking industry to be specific First Bank in Nigeria, and it is possible that the results may only be generalized to baking industry in Nigeria, additionally, focus was on the main branch in Jos Plateau state. Secondly, the study focused on the three dimensions of anti-fraud prevention mechanism in this context. However, some scholars in their study focuses on the five dimensions of anti-fraud prevention mechanism with emphasis to enhance financial performance. Thirdly, given that it is a cross-sectional study, there is room for changes over time which may not be assessed, and also, estimates of how speedily study measures might respond to any changes cannot be provided. This is likely because organizations change, as well as systems and circumstances surrounding them may affect them to vary. Fourthly, this study employed quantitative method of survey, and responses could have been limited to those statements in the questionnaire. These limitations are avenues for further studies. For instance, future studies may replicate the study in other context to test the model's robustness; employ mixed methods approach and also consider using longitudinal study to capture changes in attitudes over time.

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INVESTIGATING BOARD SIZE AS A DETERMINANT OF RISK DISCLOSURE BY DEPOSIT MONEY BANKS IN NIGERIA

By

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ABSTRACT

The purpose of the paper is to investigate the relationship between board size and risk disclosure in the Nigerian context. Considering the 14 deposit money banks listed on the stock exchange, a Partial least squares- structural equation model was run to examine the influence of board size on the extent of risk disclosure measured through an index based on the information disclosed in their annual reports. Findings from the analysis revealed that board size has a significant relationship with the risk disclosure of deposit money banks in Nigeria. The possible explanation for such a situation could be the fact that as some of the members of the board are outsiders, they would want the banks to disclose their risk related information so that they can properly partake in the decision making process of the organisation when the time comes. The implication of this finding in the banking sector is that, board size is important in determining the level of risk disclosure of Deposit money banks in Nigeria. It is therefore recommended that policy makers should ensure that the number of members of a board be increased from the normal minimum of five (5) to twenty (20) as such larger boards lead to diversity that would assist firms in safeguarding their resources and as well, lessen the uncertainties in their operating environment and ensure effective management decision including effective risk disclosure.

Keywords: Board, risk, disclosure, size.

1.0 INTRODUCTION

Deposit money banks are resident depository corporations and quasi-corporations which have some liabilities in the form of deposits payable on demand, transferable by cheque or otherwise usable for making payments (Organization of Economic Cooperation and Development- OECD, 2014). The financial scandals that have affected the corporate world in the early part of 2000 are attributable to weak corporate governance (Wells, 2005; Onyekwelu & Onyeka, 2014). In the Nigeria context, corporate scandals have been seen in both financial and non-financial institutions. For example, the case of Cadbury Nigeria where their account was overstated by 13 billion naira between 2002 and 2005 (Muraina, et al., 2010); Oceanic bank Nigeria where the Managing Director/Chief Executive Officer- Mrs. Cecilia Ibru was accused of various inappropriate and illegal conducts (BBC News, 2010) and Intercontinental bank, where the Chief Executive Officer was accused by the EFCC of various misconducts in his management of the bank ranging from insider abuse, theft, manipulation of shares to economic crimes running into billions of naira (The Nation, 2012), are among several cases witnessed in the country. Thus, disclosure by corporate bodies is a necessary ingredient for the survival of an entity. Risk disclosure is the inclusion of the financial records of an organization of issues about managers' estimates, judgments, reliance on market based accounting policies such as impairment, derivative hedging, financial instruments and fair value as well as the disclosure of concentrated operations, non-financial information about corporations' plans recruiting strategy and other operational, economic, political and financial risk (Hassan, 2009).

Understanding risk associated with the banking industry is very relevant in the Nigerian context where the banking sector has witnessed a lot of corporate scandals leading to the collapse of many banks in the desire of economic growth and development/transformation. Examples of such scandals are seen in the case of the then Intercontinental Bank and Oceanic Bank in 2008. In these cases, the banks were able to deceive investors and the general public through creative accounting and concealing operational, transactional and financial risk in their annual reports. This further buttresses the need to promote risk disclosure by banks in Nigeria (Sahara Reporters, 2011). And in an effort to promote corporate disclosure, the Securities and Exchange Commission (SEC) requires that banks should in addition to the mandatory disclosure requirements of capital markets provide more information on risk (SEC, 2008). However, the main challenge here is that most banks in Nigeria have reputation of low adherence to such codes (Sanusi, 2010). This position is supported by the World Bank Report on Observation of Standards and Codes (ROSC, 2011, 2004). This scenario if not checked has the capacity to erode investors' confidence in the banking sector thereby leading to corporate failure. Therefore, there is the need to understand the determinants of risk disclosure in the Nigerian context.

Studies have associated risk disclosure with such factors as corporate governance elements like ownership structure, board size, board structure, auditor type and board independence (Kakande, Salim, Chandren, 2017; Ntim & Soobaroyen, 2013). Most of these studies seem to be coming from developed nations and concentrating on other aspects of the economy other than the banking industry. However, this study concentrates on board size as a major determinant of risk disclosure in the banking industry with respect to Nigeria – a developing country. It is specifically concentrating on the deposit money banks.

1.1 Objective

The objective of the study is to examine if board size has a significant relationship with the risk disclosure by deposit money banks in Nigeria.

1.2 Research Question

To what extent does board size determine the level of risk disclosure by deposit money banks in Nigeria?

2.0 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The theoretical framework relating to risk disclosures is dominated by the agency theory (Jensen & Meckling, 1976). Agency theory, is based on the assumption that, both managers and shareholders are utility maximizers (Jensen & Meckling, 1976). But managers are in a better position to maximize their utility to the detriment of the shareholder because they are in a position of information that the shareholders do not (information asymmetry). The shareholders only get information through corporate disclosure such as risk disclosures in annual reports. To align the interest of both shareholders and managers, agency theory prescribes control mechanisms such as corporate governance on firm attributes like size.

Some other key concepts relating to the study include the following:

1) **Regulatory Framework for Corporate Disclosures of Deposit Money banks in Nigeria:** The phenomenon of interest in this study is corporate risk disclosure of deposit money banks, therefore, there is the need to understand the regulatory framework guiding disclosure practices of banks within the geographical setting of the study. The geographical scope of the study is Nigeria hence, the need to appreciate the disclosure environment in Nigeria. In view of that, the study provides an explanation of both the legal framework as well as regulatory agencies guiding corporate disclosure in Nigeria.

The statute guiding corporate accounting and auditing in Nigeria is the Companies and Allied Matters Act (CAMA, 1990). This legislation has voluminous provisions that include requirements for auditing and financial reporting, information disclosures, and preparation and publication of financial statements. The law is applicable to all corporate bodies including banks. It provides in S.63(3) that the business of the company shall be managed by the board of directors and concludes by vesting all powers of the company upon the board, save those expressly reserved for the members in general meeting. Among such powers vested upon the board is the provision of S.283 (1) that directors are trustees of the company's moneys, properties and as such must account for all the moneys over which they exercise control and shall refund any moneys improperly paid away. Subsection (2) thereof similarly provides that a director may, when acting within his authority and the powers of the company, be regarded as agents of the company. However, it has been suggested by Lorsch and MacIver (2008) that many large corporations have dominant control over business affairs without sufficient accountability to, or monitoring by, their board of directors. A precondition for accountability is transparency or full disclosure of relevant information especially through the financial reporting process.

The apex regulatory body in the Nigerian capital market; the Securities and Exchange Commission (SEC) requires more disclosures as part of corporate governance practice. SEC is responsible for issuing the Nigerian Code of Corporate Governance (NCCG) to be observed by banks and all other companies participating in the Nigerian Stock Exchange market. In an effort to promote governance practice, therefore, the NCCG (2011) lays emphasis on disclosure of social, environmental, ethical, and forward-looking as well as governance information. These are considered to be essential in ensuring transparency and accountability of listed firms in the country to a wide range of stakeholder groups (SEC, 2006). SEC, however, makes compliance with such requirements voluntary (comply or explain). In addition, the regulators in the Nigerian financial sector issue separate codes of corporate governance which are only applicable to companies operating in the financial sector due to the high risk these institutions face. These are the Central Bank of Nigeria (CBN), Code of Corporate Governance (2006), Pension Commission Code (2008) and the National Insurance Commission Code (2009).

2) **Basel Committee:** The Basel Committee on Banking Supervision (BCBS) is a committee of banking supervisory authorities that was established by the Central Bank Governors of the G10 countries in 1974. It provides a forum for regular cooperation on banking supervisory matters. Its objective is to enhance understanding of key supervisory issues and improve the quality of banking supervision worldwide. The Committee frames guidelines and standards in different areas – some of the better known among them are the international standards on capital adequacy, the Core Principles for Effective Banking Supervision and the Concordat on cross-border banking supervision. The Committee's secretariat is located at the Bank for International Settlements (BIS) in Basel, Switzerland. The Bank for International Settlements (BIS) hosts and supports a number of international institutions engaged in standard setting and financial stability, one of which is BCBS. Yet like the other committees, BCBS has its own governance arrangements, reporting lines and agendas, guided by the central bank governors. The BCBS has developed a series of highly influential policy recommendations known as the Basel Accords. These are not binding, and must be adopted by national policymakers in order to be enforced, but they have generally formed the basis of banks' capital requirements in countries represented by the committee and beyond.

The first Basel Accords, (or Basel I) was finalized in 1988 and implemented in the G10 countries, at least to some degree, by 1992. It developed methodologies for assessing banks' credit risk based on risk-weighted assets and published suggested minimum capital requirements to keep banks solvent during times of financial stress.

Basel I was followed by Basel II in 2004 who's focus was to amend international banking standards that controlled how much capital banks were required to hold to guard against the financial and operational risks banks face. This was in the process of being implemented when the 2008 financial crisis occurred. Basel III attempted to correct the miscalculations of risk that were believed to have contributed to the crisis by requiring banks to hold higher percentages of their assets in more liquid forms and to fund themselves using more equity, rather than debt.

3) **Concept of Risk Disclosure**: The early analytic work on information economics is attributed to Grossman (1981) and Milgrom (1981) who suggest that managers of firms will release all information (full disclosure) they possess regardless of whether the information is good or bad. This is known as the disclosure principle. Early literature on disclosure also suggests that managers will voluntarily report all information to maximize the value of the company (Viscusi, 1978; Grossman & Hart, 1980; Grossman, 1981; Milgrom, 1981; Verrecchia, 1983; Dye, 1985, 1986; Jung & Kwong, 1988). Based on the seminal results of Grossman (1981) and Milgrom (1981) on corporate disclosure policy, Suijs (2007) summarizes the assumptions required for the disclosure principle to apply. According to Suijs (2007) there are five assumptions as follows: (i) the disclosure is costless, (ii) investors know that the firm has private information, (iii) the firm can credibly disclose its private information to investors, (iv) all investors will respond to disclosure decision in the same way and (v) the firms know how investors will respond to disclosure of its private information.

The disclosure principle introduced by Grossman (1981) arises from the so-called unravelling arguments (Suijs, 2007; Shin, 1994). In its simplest form, unravelling arguments suggest that if all those five assumptions above are satisfied, then a company will continue to unravel of its private information until it attains full disclosure results. However, the recent study by Suijs (2007) concludes that previous analytic research on the disclosure principle demonstrates that firms are not inclined to provide full disclosure.

Earlier study about full disclosure by Milgrom (1981) focuses on the concept of the favourableness of news. He applies this concept into his security market model and moral hazard model. In each of the models, the analysis was driven by a strategy for full disclosure by a company. First, in the security market model, Milgrom (1981) argues that the disclosure of favourable news about a security's future returns will cause the security price to rise. Second, in the moral hazard model of principal-agent, Milgrom (1981) argues that when the agent's effort are evidenced by high profits, the optimal incentive contracts entails a steeper fee schedule than does any efficient risk sharing contract**.** Jung and Kwong (1988) introduce a study on the notion of uncertainty about the existence of private information by managers. They argue that when investors believe that managers have received information but there is a probability that they have not disclosed it, the investors will infer the content of such information to be unfavourable. Additionally, Jung and Kwong (1988) argue that the possibility that investors have acquired credible information from other independent sources such as financial press or financial analyst may result in the disclosure of information by managers rather than to withhold the information in the first place.

4) **Risk Reporting and the Banking Industry:** A large number of financial institutions collapsed during the Global Financial Crisis (GFC) of 2007-2008 and that raised significant concern in global credit markets about their performance and risk governance (Erkens, Hung & Matos 2012; Fahlenbrach & Stulz, 2011). Thereafter, some studies have examined the performance of corporate governance and additional attention has been paid to banks' risk management (Adams, 2012; Bebchuk, 2010; Beltratti & Stulz, 2012; Erkens, Hung & Matos, 2012).

Banking crises have been a common phenomenon throughout history; indeed, banks are at the center of financial crises (Barth & Landsman, 2010). To some extent, banking crises are like periodic events that 'unexpectedly emerge from the earth' (Laeven, 2011). Reinhart and Rogoff (2013) count 268 banking crises over the period from 1800 through to 2008. Bordo, Eichengreen, Klingebiel and Martinez-Peria (2001) revealed that the frequency of banking crises has been increasing in recent decades. Reinhart and Rogoff (2013) argue that the historical frequency of banking crises is quite similar in high- and middle-to-low-income countries, with quantitative and qualitative parallels in both the run-ups and the aftermath. The National Commission on the Causes of the Financial and Economic Crises in the U.S. (2011) concluded that dramatic failures of corporate governance at many systematically important financial institutions were a key cause of financial crises.

The lack of risk management and failure of governance mechanisms are cited commonly as the key contributing factors to the GFC of 2007-2008 (Aebi, Sabato & Schmid, 2012; Beltratti & Stulz, 2012; Strebel, 2009). These raise several questions for regulators with respect to corporate governance and banks and for testing the value of 'risk governance' and 'corporate governance' (Aebi, Sabato & Schmid, 2012; Fahlenbrach & Stulz, 2011). Bebchuk (2010) suggests that excessive risk taking in the financial sector performed a key role in the financial crisis of 2007-2008. Beltratti and Stulz (2012) argue that banks with poor governance were involved in excessive risk taking responsible for huge losses during the financial crisis. Goddard, Molyneux and Wilson (2009) report an estimation of $2.7 tn (*trillion*) for write downs of the US – originated assets by banks and other financial institutions between 2007- 2010 and the estimated write downs for all mature market-originated assets for the same period are in the region of $4tn (trillion).

Accordingly, the financial crisis of 2007-2008 led to a slowdown in the global economy and a further awareness of and need for appropriate risk governance structures within banking institutions (Aebi, Sabato & Schmid, 2012). It is logical that banks that identify and analyse risks earlier than their business counterparts will be better positioned to avoid or mitigate potential risks and can create value for investors by fostering understanding of the risk profile of invested businesses. For example, Solomon et al. (2000) found stakeholders strongly demand corporate risk disclosure to improve their investment decisions. Beretta and Bozzolan (2004) argue that effective risk communication minimises investment risks and builds opportunities for stakeholders. Therefore, annual reporting of risk is needed to make available worthwhile disclosure to stakeholders in making their investment decisions (Milne, 2002).

3.0 SIZE AND RISK DISCLOSURE

Board size (BS) is considered as one of the significant dimensions of board characteristics, and it is the overall number of directors (executive and nonexecutives) serving on the board of a company (Vafeas, 1999). It has been argued that larger boards lead to diversity that would assist firms in safeguarding their resources and as well, lessen the uncertainties in their operating environment and ensure effective management decision including effective risk disclosure (Dahya & McConnell, 2005). On the basis of agency theory, a larger board size ensures effective oversight of management activities that condenses the power of the CEO on the board, hence, increasing performance (Singh & Harianto, 1989).

According to Monks and Minow (2011), larger boards devote ample time and put in significant effort unlike small boards in overseeing and controlling management. Previous studies found a significant positive association between BS and information disclosure (Andres & Vallelado, 2008). In contrast, Xie, Davidson, and DaDalt, (2003) found a negative relationship. Other studies also found the informational advantage of BS to institutional investors (Gompers, Ishii, & Metrick, 2003; Dahlquist & Robertson, 2001). From the above, the following hypothesis is formulated in a null form.

H_0: *There is no significant relationship between board size and Risk disclosure of Deposit Money Banks in Nigeria.*

4.0 METHODOLOGY

This study adopts the positivist philosophical assumption. This is so, because of what Bhattacheriee (2012) says that if a researcher sees the phenomenon under study as being structured in nature (ontology) and if the researcher is to study patterns of behaviours, then the best way to study such a phenomenon is to use objective approach (epistemology). The objective approach is independent of the person conducting the observation or interpretation, such as by using standardized data collection which is in line with positivistic philosophical assumptions. In this study, we see risk disclosure as being structured in nature. It is structured because there are well-defined guides for identification of it in the annual reports.

This study employs a survey design that is cross-sectional in nature to examine the relationship between the predictor variable (board size) and risk disclosure. The study population comprises of all the 14 listed deposit money banks on the Nigerian Stock Exchange as at December 2018 (Table 1). This includes deposit money banks that are listed on the Nigerian Stock Exchange (NSE) and are still actively participating as at the time of data collection for this study. Data for the analysis were extracted from the annual reports of the banks as at December, 2018 following the retrospective nature of reports.

Table 1: Lists of Quoted Deposit Money Banks in Nigeria

S/N	Name of Deposit Money Bank	Office Address	Website
1.	Access Bank Plc	999c, Danmole Street, Off Adeola Odeku Street, Victoria Island, Lagos	accessbankplc.com
2.	Fidelity Bank Plc	2, Kofo Abayomi Street, Victoria Island, Lagos.	www.fidelitybank.ng
3.	First City Monument Bank Plc	PGD's Place, Plot 4, Block 5, BIS Way, off Lekki-Epe Express way, Lagos.	www.fcmb.com
4.	Firstbank of Nigeria Limited	Samuel Asabia House, 35, Marina, Lagos.	www.firstbanknigeria.com
5.	Guaranty Trust Bank Plc	635, Akin Adesola Street, Victoria Island, Lagos.	gtbank.com
6.	Polaris Bank Ltd (Formerly Skye)	3, Akin Adesola Street, Victoria Island, Lagos.	www.polarisbanklimited.com
7.	Union Bank of Nigeria Plc	Stallion Plaza, 36, Marina, Lagos.	www.unionbanking.com
8.	United Bank of Africa	UBA House, 57, Marina, Lagos	www.ubagroup.com
9.	Zenith Bank Plc	Plot 84, Ajose Adeogun Street, Victoria Island, Lagos	www.zenithbank.com
10.	Ecobank Nigeria Plc	21, Ahmadu Bello way, VI, Lagos	www.ecobank.com
11.	Stanbic IBTC Bank Plc	IBTC Place, Walter Carrington Crescent, VI, Lagos	www.stanbicibtc.com
12.	Sterling Bank Plc	Sterling Towers, 20 Marina, Lagos	www.sterlingbanking.com
13.	Unity Bank Plc	Plot 42, Ahmed Onibudo Street, VI, Lagos	www.unitybanking.com
14.	Wema Bank Plc	Wema Towers, 54, Marina, Lagos	www.wemabank.com

Source: Nigerian Stock Exchange Fact book 2008/the Stalwart Report com. 2016, page 5.

4.1 Data Presentation and Analysis

The statistical tool used for testing the hypotheses is the partial least squares (PLS)- Structural Equation Model (SEM) as it provides accurate out-of-sample forecasts of returns and cash-flow growth (Kelly, Bryan, Pruitt & Seth, 2013). However, the regression model for testing the hypotheses was estimated in the form

Rdisclosure = bo+biBS+ej

Where:

Rdisclosure	- Risk Disclosure
BS	- Board Size
bo	- Constant
b1	- Regression coefficients
ej	- Error term

For the operationalisation of the study variable; board size is measured as the total number of directors on a company's board in line with earlier studies (Imam & Malik, 2007; Kakanda, Salim & Chandren, 2017 & Vafeas, 1999).

And from the disclosure literature, risk disclosure is measured using the index approach. The disclosure checklist is made up of seven (7) information items of risk disclosure in areas such as general risk information, accounting policies, financial instruments, derivatives hedging, reserves, segment information and financial and other risks (Elkelish & Hassan, 2014). The unweighted approach is used to score the items on the disclosure checklist.

Table 2: Computation of Disclosure Index

S/N	Name of Bank	Gen. Risk Info.	Accounting Policies	Financial Instrument	Derivative Hedging	Reserves	Segment Info.	Finan.& Other Risks	Total	Disclo. Index	Board Size	Leverage	Board Size	Board Indep.
1.	ACCESS BANK	1	1	1	0	1	1	0	5	0.714285714	15	8.00208	15	0.27
2.	ECO BANK	1	1	1	1	1	1	0	6	0.857142857	15	14.4592	15	0.4
3.	FBN	1	1	1	1	1	0	1	6	0.857142857	12	0.03103	12	0.25
4.	FCMB	0	1	0	1	1	0	1	4	0.571428571	10	0.0129	10	0.2
5.	FIDELITY	0	1	1	1	1	1	0	5	0.714285714	12	7.51172	12	0.17
6.	GT BANK	1	1	1	0	1	1	0	5	0.714285714	14	4.29952	14	0.21
7.	STANBIC IBTC	0	1	1	1	1	1	0	5	0.714285714	10	0.056618	10	0.2
8.	STANDARD CHARTERED	1	1	1	1	1	0	0	5	0.714285714	12	12.67894	12	0.67
9.	STERLING	0	1	1	0	1	1	0	4	0.571428571	12	10.07934	12	0.17
10.	UNION BANK	1	1	1	0	1	1	1	6	0.857142857	15	5.618606	15	0.13
11.	UBA	1	1	1	1	1	0	1	6	0.857142857	19	8.85004	19	0.21
12.	UNITY	0	1	1	0	1	1	0	4	0.571428571	9	-1.96836	9	0.11
13.	WEMA	0	1	1	0	1	1	1	5	0.714285714	12	6.75552	12	0.17
14.	ZENITH	1	1	1	1	1	1	0	6	0.857142857	11	6.35046	11	0.18

In order to test for normality of the data collected, the Kolmogorov-Smirno and Shapiro-Wilk Tests were conducted considering the small sample size (14), and the computations and results are as follows:

Table 3: Kolmogorov-Smirnov and Shapiro-Wilk Test of Normality

		Kolmogorov-Smirnov			Shapiro-Wilk		
	Mean	Statistic	df	Sig.	Statistic	df.	Sig.
Boardsize	4.00	.367	5	.066	.684	5	.056
Disclo.Ind	2.00	.201	26	.078	.926	26	.061

From the results shown on Table 3, both tests are significant (p>0.05). The data therefore, meets the assumption of normality.

The descriptive statistics was analyzed to check if the statistical mean of the data provides a good fit of the observed data and whether the study variables have relationships (correlation). The computation and the following results were found:

Table 4: Descriptive Statistics for the Study Variables

	Min	Max	Mean	Std Dev
Risk disclosure	3.00	5	4.1429	0.77033
Board size	3.00	5.00	3.7857	0.57893

The descriptive statistics for the study variable shown on table 4 indicates that the mean scores of the latent variables is around 3, on a 5- point Likert scale, while the standard deviation ranges between 0.57 and 0.77. The standard deviation is small relative to their respective means, implying that the statistical mean provides a good fit of the observed data. This agrees with the finding of Field (2009).

For the correlation, whose aim is to find out if the independent variable in the study has a relationship with the dependent variable, the Pearson correlation is used and the following were obtained:

Table 5: Correlations of the Study Variables

Board size (1)

Risk Disclosure (2) .380##

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

Table 5 reveals that board size correlates with risk disclosure (r=0.380, p≤.01). However, to find out if the relationship is significant or not, leads us to the tests of hypotheses in the next section.

Having established that the study variables are correlated with the dependent variable, Structural Equation Modeling (SEM) was then employed to test the significance of such relationships and hypothesis earlier formulated in the study. A structural model was run to test the relationships between the study variables. The results are shown on figure 1 and Table 6:

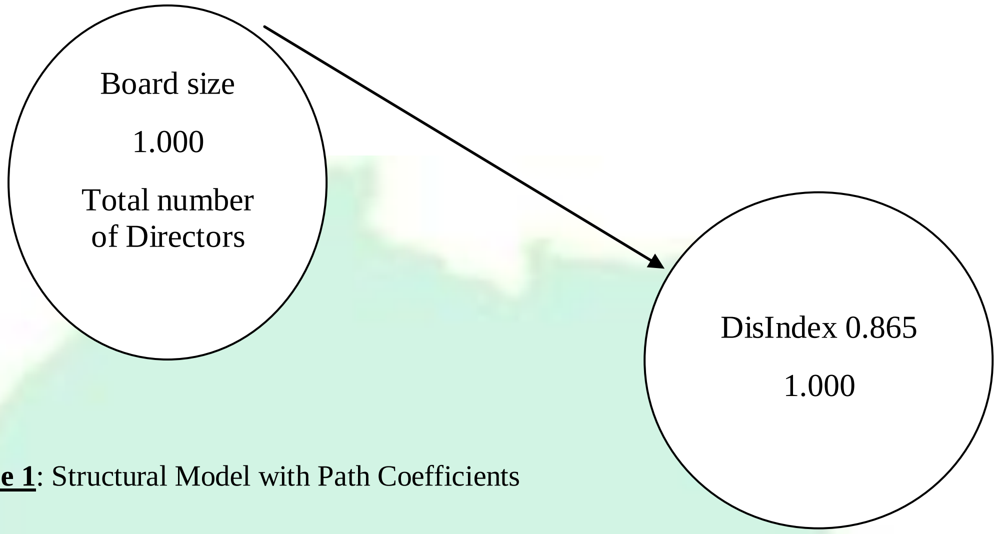

Figure 1: Structural Model with Path Coefficients

Table 6: Results of Direct Paths of all the variables

	B	t-value	p-value
Board size--------------------------------risk disclosure	-0.159	0.278	0.000
R^2 =0.8667, adj.$R^2_{=0.172,\ p=0.000}$			

5.0 RESULTS AND DISCUSSION

The decision rule is that if the p-value is less than the level of significance of 0.05, the null hypothesis will be rejected while the alternate hypothesis is accepted. But if the p-value is greater than the level of 0.05, we fail to reject the null hypothesis and reject the alternate. As shown in Figure 1 and Table 6 above, the standardized Beta-value for Board size on risk disclosure is 0.159, suggesting that this path is statistically significant at α =0.05. Given that the p-value 0.000 is less than the significant level of 0.05 as shown in Table 6, we reject the null hypothesis which states that board size has no significant relationship on the risk disclosure of deposit money banks in Nigeria, while the alternate hypothesis is accepted, meaning that board size has a significant relationship with the risk disclosure of deposit money banks in Nigeria. In other words, an increase in the size of the boards of banks, such will influence the level of risk disclosure that the banks will be ready to release.

This finding is supported by Dahya and McConnell (2005) who argued that larger boards lead to diversity that would assist firms in safeguarding their resources and as well, lessen the uncertainties in their operating environment and ensure effective management decision including effective risk disclosure. Furthermore, previous studies found a significant positive association between board size and information disclosure (Andres & Vallelado, 2008). Finally, other studies also found the informational advantage of BS to institutional investors (Gompers, Ishii& Metrick, 2003; Dahlquist & Robertson, 2001). In contrast to the above finding, Xie, Davidson and DaDalt (2003) found a negative relationship between board size and disclosure.

This finding is in line with the agency theory because a larger board size ensures effective oversight of management activities that condenses the power of the CEO on the board, hence, increasing performance which includes risk disclosure (Singh & Harianto, 1989), The implication of this finding to the banking sector and the economy is that board size is not independent of the risk disclosure of Deposit money banks.

6.0 CONCLUSION AND RECOMMENDATION

This study is undertaken on the Nigerian environment. The research developed index to measure the quantity of risk disclosure consisting of 7 points: General Risk information, Accounting Policies, Financial Instruments, Derivative hedging, Reserves, Segment information and Financial & Other risks. The researcher also investigated board size as a determinant or driver of risk disclosure by Nigerian listed deposit money banks. Results of the statistical analysis revealed that board size has a significant influence on the disclosure of risk information by deposit money banks in the Nigerian context. It is therefore recommended that, policy makers should ensure that the number of board members should be increased from the normal minimum of five (5) to twenty (20) as such larger boards lead to diversity that would assist firms in safeguarding their resources and as well, lessen the uncertainties in their operating environment and ensure effective management decision including effective risk disclosure.

7.0 IMPLICATIONS

There are several practical implications of the current study for academic and practitioners. The study contributes to the accounting literature in general, and specifically to the literature on risk disclosure. It provides empirical evidence from the Nigerian business environment- a developing country, that board size is very fundamental in assessing a bank's risk disclosure level. Furthermore, the finding has implications for regulators, accounting standard setters and legislators may wish to take cognizance of this in developing external rules and regulations concerning disclosure. For example, the emphasis should be placed on social, ethical, and environmental issues since these are key for understanding and long-term sustainability of current earnings.

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EFFECT OF WORKING CAPITAL MANAGEMENT ON FINANCIAL PERFORMANCE OF SOME SELECTED DEPOSIT MONEY BANKS IN NIGERIA

By

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ABSTRACT

Working capital management is very crucial in this period of global financial turmoil. Working capital is regarded as the lifeblood and nerve of a business concern, it is therefore essential to accommodate the smooth operations of any organization, but Studies in working capital management have provided inconclusive results. The objective of this study is to examine the effect 0f Working Capital Management on Financial Performance of Selected Deposit Money Banks in Nigeria. The study covers the period of thirteen years (2007 to 2019). Data for the study were extracted from the Deposit Money Banks' Annual Reports and Accounts. After running the Ordinary Least Square (OLS) regression, a robustness test was conducted for validity of statistical inferences; the data was empirically tested between the regressors and the regressed. The results from the analysis revealed that Working Capital Management has no significant effect on Earnings per Share (EPS) of selected Deposit Money Banks in Nigeria, but Working Capital Management has significant effect on Return on Asset (ROA) and Return of Equity (ROE) of selected Deposit Money Banks in Nigeria. In line with the above findings, the study recommended that the management should put more attention on their liquidity in order to maintain an adequate liquidity as the study has empirically proved that higher liquidity signifies more profitability; the listed Deposit Money Banks in Nigeria should try and maintain a higher quick ratio as it will have a positive effect on their profitability. Finally, the management should reduce holding too much amount of cash in current asset as it constitutes idle cash, instead the firm should invest the cash so that it could yield higher returns.

Key words: Working capital management, financial performance, current ratio, profitability ratio

1.0 INTRODUCTION

Working capital management is a delicate component of financial management, and it is critical to the existence of any organization. The ability of a company to use its current or short-term assets to satisfy its short-term liabilities is one of several elements that influence its growth. Working capital management is concerned with maximizing liquidity, profitability, and shareholder value (Muniraju & Kumar, 2018). Working capital management, along with capital structure and capital budgeting, is one of the financial concerns that a corporation's finance manager must determine (Naceur, 2017).

Working capital management is critical in managing the bank's current account, which comprises both current assets and current liabilities. This section covers the various types of current asset and current liability adjustments that a bank might make in order to meet its working capital requirements. Working capital is classified into two types: gross and net. The gross type refers to the bank's investments in current assets, which are assets that can be turned into cash during the accounting year, such as short-term securities, debtors' bills receivable, inventories, and cash and cash equivalents (Saleem & Rehman. 2016).

The primary goal of establishing deposit money institutions is to profit the shareholders. In this sense, banks and other profit-seeking organizations attempt to improve their net income and asset presence value. While acknowledging this, the bank manager's immediate priority is to offer appropriate returns to shareholders, which necessitates keeping a significant number of safe and productive assets as well as getting funds from the quickest volatile and expensive accessible sources (Naceur, 2017). According to Barth, Caprio, and Levine (2016), a bank does not have complete control over its assets and a large portion of its liabilities; rather, it has partial control over some current assets and current liabilities, entire control over others, and total control over others. Banks must make numerous modifications to meet their long-term goals within the context of their business environment limits and prospects.

The management of working capital affects the financial performance of a firm especially the deposit money banks. This is because working capital shows the strength and degree of solvency of the business. The ratio shows the extent to which the claim of creditors can be quickly meet. A low ratio indicates that two much capital is tied up in stocks. Abah (2018) opined that, the consideration of the level of investment in current assets should avoid two danger points, the excessive and inadequate investment on assets. Current asset investments should be in good condition in order to improve performance. Excessive investment in current assets should be avoided since it reduces a bank's profitability because idle investment pays no dividends to the owner.

Inadequate availability of operating capital, on the other hand, can jeopardize the bank's viability if it fails to satisfy its existing obligations. As a result, financial managers should be aware of the sources of working capital funds as well as investment outlets where idle cash can be temporarily invested. The net working capital, on the other hand, indicates a bank's liquidity position and suggests that current assets should be sufficiently greater than current liabilities to provide a margin for maturing obligations within the normal operation cycle of the bank's company (Adam, 2015).

As a result, working capital ratios, particularly the current ratio, liquidity ratio to asset ratio, loan to deposit, cash to deposit, quick ratio, cash ratio, and monetary rate, are important for planning and making successful decisions in the banking business (Graham, 2017). Furthermore, Heibati, Nourami, and Dadkhah (2019) stated that financial performance is a scientific measure of a bank's profitability and financial soundness. However, some of these financial performance statistics include I Earnings Per Share, I Return on Assets, Return on Equity, Return on Capital Employed, and Profit Margin.

This study is motivated by the fact that there have been cases of working capital management problem in some corporate entities in Nigeria. Situations exist where some promising investments with high rate of return had turned out to be failures and the companies became distressed because of inadequacy of working capital (Abah, 2018). Although, too much capital on the other head, results in idle cash and reduces profitability. The efficiency in the management of working capital will affect any entities liquidity and financial performances (Naceur, 2017).

1.1 Statement of the Problem

The need for working capital to run the day to day activities of a bank business cannot be over-emphasized. We will hardly find a bank or other firm which does not require any amount of working capital. Banks should earn enough return from their operations in order to be able to achieve their set goals, which of course includes the maximization of shareholders' wealth and as such to avoid the recent distress problems in today's banks which has its root basically from inadequate working capital caused by inefficient working capital management. The banks have to invest enough in current assets for success of their business (Agbada & Osuji, 2018). However, the bank's inability to honor claims from individuals/customers demand begins a spiral of technical insolvency. It was to avoid such embarrassing situations as liquidity, technical insolvency, high risk, and low profit that such theories, the profit ability theory, and the liability management theory, were developed in banking to guide bankers in their decision-making process (Idowu & Babatunde, 2017).

Despite the crucial nature of working capital management, many promising and viable investment with high rate of return had turned out to be failures and went down (Ogunleye, 2016). In Nigeria, many banks have been short down owing to wrong working capital management. Failure of a bank automatically connotes its working capital failure which could be highly contagious leading to a bank run on the distressed bank which may commensurate to a bank panic in the banking sector. The major cause of the bank's liquidation internally was as a result of the unavailability of sufficient working capital to carry on with the day to day running of the business. Therefore, it is against this background that this paper seeks to examine the working capital position and performance of the selected deposit money banks.

The effects of working capital management on financial performance have been a focus of substantial amount of empirical research for many years. For instance, Ibe (2018), Okoye and Eze (2018), olayinka and Farouk (2018), Owulabi and Ogunlalu (2019) carried out study on similar topic. Their studies focused on the Nigerian Deposit Money Banks’ Liquidity (proxied by Liquidity Ratio, Current Ratio, Quick Ratio, Cash Ratio, Account Payables, Account Receivables, Money Policy Rate, Bank Capitalization, and Bank Lending Rate); and Nigerian Deposit Money Banks’ Profitability (proxied by Net Margin Ratio, and Return on Employed). No study combines all the operational variables in a single study that this current research work focused., which are Nigerian Deposit Money Banks’ working capital (proxied by Current Ratio, Liquidity to Asset Ratio, Loan to Deposit, and Cash to Deposit), and Nigerian Deposit Money Banks’ Financial Performance (proxied by Earnings per Share, Return on Asset, and Return on Equity).

Furthermore, their research concentrated on industrial enterprises that did not operate in well-developed money and capital markets. Findings from these researches are difficult to generalize for Nigeria's relatively small banking system, which operates in a financial market where enterprises rely primarily on owner financing, trade credit, and short-term bank loans to fund critical working capital investments. However, studies on the effect of working capital management on the financial performance of Nigerian deposit money banks have remained a largely unexplored area of empirical research. These arguments have serious shortcomings of existing literature. In spite of the touted impact efficient working capital management may have on business survival and growth, not much has been done in the area of the provision of empirical evidence in support of the claims of working capital management on the financial performance of deposit money banks quoted in Nigerian stock exchange. Given this paucity of empirical studies, it is hoped that this study will fill a gap and provide useful support for understanding the determinants of financial performance of deposit money banks quoted in the Nigerian stock exchange.

1.2 Objective of the Study

The main objective of this study is to evaluate the Effect of Working Capital Management on Financial Performance of Selected Deposit Money Banks in Nigeria. The specific objectives are to:

i) examine the extent Current Ratio, Liquidity Ratio, Loan to Deposit, and Cash to Deposit affect Earnings per Share (EPS) of selected Deposit Money Banks in Nigeria;

ii) assess how Current Ratio, Liquidity Ratio, Loan to Deposit, and Cash to Deposit affect Return on Asset (ROA) of selected Deposit Money Banks in Nigeria; and,

iii) examine the effect of Current Ratio, Liquidity Ratio, Loan to Deposit, and Cash to Deposit on the Return on Equity (ROE) of selected Deposit Money Banks in Nigeria.

1.3 Hypotheses of the Study

Hypotheses tested in this study are:

H_{01}: Current Ratio, Liquidity Ratio, Loan to Deposit, and Cash to Deposit have no significant effect on Earnings per Share (EPS) of selected Deposit Money Banks in Nigeria.

H_{02}: Current Ratio, Liquidity Ratio, Loan to Deposit, and Cash to Deposit have no significant effect on Return on Asset (ROA) of selected Deposit Money Banks in Nigeria.

H_{03}: Current Ratio, Liquidity Ratio, Loan to Deposit, and Cash to Deposit have no significant effect on Return on Equity (ROE) of selected Deposit Money Banks in Nigeria.

2.0 LITERATURE REVIEW

2.1 Conceptual Framework

This section conceptualized the working capital management, financial performance and their proxies.

2.1.1 Concept of Working Capital Management

Working capital management is an accounting technique that focuses on maintaining adequate levels of both current assets and current liabilities. It provides a firm with enough cash to pay its short-term obligations. Working capital management is concerned with the administration of all current assets, including cash, marketable securities, shares, and current obligations. It is the functional area of finance that covers all of the firm's current accounts. It is concerned with both the sufficiency of current assets and the level of risk posed by current liabilities. Working capital management is a subset of financial management that finds appropriate policies for managing current assets, liabilities, and, more practically, optimizing the benefits of working capital management. The primary goal of working capital management is to handle a firm's current financial resources in such a way that a balance is created between the firm's profitability and the risk associated with that profitability (Bordeleaui & Graham, 2017). Working capital management plays a significant role in the liquidity of banks and other businesses. According to Okonjo (2015), working capital management is important for a firm's profitability, risk management, and value, as noted in (Bassey, 2015). Working capital management (WCM) and management of working capital (MWC) are terms that can be used interchangeably.

Working capital management (MWC) is concerned with the disparities that develop in the management of current assets, current liabilities, and the interdependence that exists between them. Muniraju and Kumar (2018) defined working capital management (MWC) as "all management actions and decisions that usually influence the size and efficacy of working capital." As a result, the goal of working capital is to best manage current assets and current liabilities in order to attain an acceptable amount of net-working capital. Thus, net working capital (NWC) is the mathematical difference between an organization's current assets and current liabilities. If a company cannot maintain a reasonable level of net working capital, it is insolvent and, if not addressed, will go bankrupt. According to Kehinde (2014), working capital is divided into two concepts: gross working capital and net working capital. He went on to say that gross working capital refers to a company's current assets, whereas net working capital refers to the difference between a company's current assets and current liabilities.

2.1.2 Current Ratio

The current ratio is a measure of an entity's liquidity on the balance sheet. It reflects a company's ability to meet short-term obligations. The current ratio assesses whether a corporation has sufficient resources to pay its debts over the next 12 months (Idowu & Babatunde). The current ratio is defined as the ratio of current assets to current liabilities. The current ratio, commonly known as the working capital ratio, assesses a company's capacity to satisfy its short-term obligations due within a year. The ratio takes into account the weight of total current assets versus total current liabilities; it reflects an entity's financial health by measuring its capacity to pay down short-term commitments with current assets (Naceur, 2017). According to experts, the optimal ratio is a 2:1 relationship; hence it is called a 2:1 ratio. This indicates that for every Naira current liability, there are two Naira current assets available to meet it when it matures. This can be calculated using the following formula:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

2.1.3 *Liquidity to Asset Ratio*

A company's liquidity to asset ratio is the ratio of its cash and liquid assets to its total liabilities. This ratio assesses a company's liquidity and its ability to service debt and cover short-term liabilities if necessary. As a result, potential creditors consider this ratio when deciding whether to offer a short-term loan. According to Agbada and Osuji (2014), the liquidity to asset ratio is the ratio of a company's cash and cash equivalent assets to its liabilities. The cash ratio is a development of the quick ratio that measures the amount to which readily accessible and ready funds are used to pay off current liabilities. This ratio is used by potential creditors to assess a company's liquidity and how readily it can be served.

The cash ratio is a liquidity statistic that compares a company's total cash and cash equivalents to its current obligations. The indicator determines a company's ability to pay short-term debt using cash or near-cash resources, such as easily marketable securities. This information is helpful to creditors when determining how much money, if any, they are willing to provide to a company. The cash ratio, on the other hand, is almost like a business indication. It informs creditors and analysts about the value of current assets that can be converted to cash rapidly, as well as the percentage of the company's current liabilities that can be covered by near-cash assets (Bordeleu & Graham, 2017).

2.1.4 *Loan to Deposit Ratio*

According to Fadare (2011), loan-to-ratio (LDR) issued to analyze a bank's liquidity by comparing a bank's total loans to total deposits for the same period. The LDR is expressed as a percentage; if the ratio is too high, it indicates that the bank may not have adequate liquidity to meet any unexpected fund requests. In the opposite case, if the ratio is too low, the bank may not be earning as much as it could. A loan-to-deposit ratio demonstrates a bank's ability to cover loan losses and customer withdrawals. Investors keep an eye on banks' LDRs to ensure that there is enough liquidity to cover loan defaults in the case of an economic downturn.

In addition, the LDR serves to demonstrate how well a bank attracts and retains clients. When a bank's deposits grow, it attracts fresh money and clients. As a result, banks will most likely have money to lend, which should boost profits. Despite the fact that it may seem counterintuitive, loans are assets for banks because banks get interest income from lending. Deposits, on the other hand, are liabilities since banks must pay interest on them, although at a modest rate. The LDR can assist investors in judging if a bank is appropriately managed. If the bank's deposits do not increase, the bank will have less money to lend. In some circumstances, banks will borrow in order to increase their interest income. However, if a bank is suing debt to finance its lending operations instead of deposit, the banks will have debt servicing costs since it will need to pay interest on debt (Ibe, 2018).

2.1.5 *Cash to Deposit Ratio*

A bank's cash to deposit ratio is equal to (total cash) / (total deposits). The bank must maintain liquidity in order to operate and will keep a certain amount of cash on hand to service net withdrawals from consumer activities such as checking and savings accounts. This is the amount of money that a bank should have as a proportion of the total amount of money that its customers have deposited with the bank. This amount is established so that consumers can be confident that they will be able to withdraw their funds from the bank if they so desire (Saleem & Rehman, 2016).

According to Barth, Carprio, and Levine (2016), the cash Deposit Ratio (CDR) is the ratio of how much a bank lends out of the deposit it has mobilized. It reveals how much of a bank's core funds are being used for lending, which is the primary banking activity. It can alternatively be defined as the sum of cash on hand and RBI balances divided by total deposits. The data provides CDR by bank class, i.e. scheduled and non-scheduled. Scheduled commercial banks are those banks that conduct banking operations in India and are included in the second schedule to the Reserve Bank of India Act, 1934.

2.2 Concept of Financial Performance

Heibati, Nourani and Dadkhah (2019) opined that financial performance is scientific evaluation of profitability and financial strength of any business concern" according to Kennedy and Macmillan financial statement analysis attempt to unveil the meaning and significance of the items composed in profit and loss account and balance sheet. The assists are the management in the formation of sound operating and financial policies. According to accounting point of view financial statement are prepared by a business enterprise at the end of every financial year. "Financial statements are end products of financial accounting." They are capsulated B periodical reports of financial and operating data accumulated by a firm in its books of accounts- the General Ledger.

2.2.1 *Earnings per Share*

Earnings per share (EPS) are the fraction of a company's earnings that is distributed to each share of common stock after taxes and preferred stock dividends. The statistic is easily determined by dividing net income earned during a certain reporting period (generally quarterly or annually) by the total number of shares outstanding during the same period. Because the number of shares outstanding can fluctuate, a weighted average is usually utilized (Okafor & Okwu, 2017).

$$EPS = \frac{\text{Net Income - Dividend on Preferred Stock}}{\text{Average Outstanding Shares}}$$

Earnings per share are widely regarded as the most essential factor in determining a share's price. It is also an important factor in calculating a price-to-earnings valuation ratio (Okafor & Okwu, 2017). EPS is a closely watched indicator that is frequently used as a barometer to gauge a company's profitability per unit of shareholder ownership. As a result, earnings per share are a major driver of stock prices. It is also the denominator in the commonly used P/E ratio. EPS can be calculated in two ways: basic and fully diluted.

Fully diluted EPS, which takes into account the potentially dilutive effect of warrants, stock options, and instruments convertible into common stock, is typically seen as a more accurate statistic and is more frequently cited (Kehinde, 2018). EPS can be further segmented according on the time period concerned. Prior (trailing) earnings, recent (current) earnings, or expected future (forward) earnings can all be used to determine profitability. Though earnings per share are usually regarded as the most essential metric, keep in mind that earnings can easily be manipulated through accounting changes and restatements. As a result, some consider free cash flow to be a more trustworthy predictor than EPS.

2.2.2 *Return on Asset*

Return on Asset (ROA) is a profit ratio that shows how much profit a company can make from its assets. It assesses a company's management's efficiency in generating earnings from its economic resources or assets on its statement of financial status (Kehinde, 2018). Return on asset is an important indication of bank performance because it influences the bank's profitability. It is defined as the ratio of net income to total assets (Bordeleau & Graham, 2017). Return on asset (ROA) is an indicator of how lucrative a firm is in relation to its total assets, according to Bassey (2015). ROA indicates how effective management is at generating earnings from its assets. It is calculated by dividing the company`s annual earnings by its total assets, ROA is displayed as a percentage. Sometimes is referred to as Return on Investment.

According to Bassey (2015), return on assets (ROA) is a form of return on investment (ROI) metric that assesses a company's profitability in relation to its total assets. This ratio measures a company's performance by comparing its profit (net income) to the capital generated in assets. The greater the rate of return, the more productive and efficient management is in exploiting economic resources. The ROA formula is broken down below.

$$ROA = \frac{\text{Net Profit}}{\text{Sales}} \times 100 \quad \frac{\text{Sales}}{\text{Total Asset}}$$

2.2.3 Return on Equity

Return on asset (ROE) is a measure of effectiveness and capital efficiency, according to Bordeleau and Graham (2017). ROE is a result of profitability (how much profit a company earns before interest, taxes, and depreciation) and activity (how much money a company has spent in operating assets to generate that level of profit). This method has the advantage of providing a standard form of evaluation for a corporation to employ when monitoring performance. At the individual business level, ROE: provides for the comparison of business units of varying sizes over time; shows where to invest more and where to cut back; and determines whether it is worthwhile to borrow more to invest: reveals whether or not shareholder expectations are being met; signifies the maximum sustainable expansion of a corporation; and is used to track whether or not a project is working as planned. ROE can be used to analyze corporate performance by testing operational efficiency, balance sheet management efficiency, and the appropriateness of return on capital used (Obiakor & Okwu).

The basic goal of investing in any firm is to achieve a reasonable return on investment (Gupta, 2004). As a result, to assess the total profitability of the relationship between profit and capital employed, divide the net profit by the capital employed.

$$ROE = \frac{\text{Net Profit (Before Interest and Tax)}}{\text{Gross Capital Employed}} \times 100$$

2.3 Theoretical Framework

This study is anchored on the trade-off theory as developed in Myers (1984). The benefit for debt was formed because it provided a tax refuge for earnings in the first version of the theory, which evolved with the addition of corporation income tax to the original irrelevance proposition of Modigliani miller theorem. Given the firm's objective's linearity, entire debt financing is inferred, as the burden of debt cannot be alleviated. The trade-off theory describes the scenario in which a corporation chooses the degree of debt financing and the quantity of equity financing to use by balancing the costs and advantages.

According to Myers (1984), an organization that follows this idea produces a standard debt/value ratio and finally moves in the target's direction. According to Murray and Vidhan (2005), the set standard is determined by matching debt tax shields to the corresponding bankruptcy costs.

The assumptions of the Myers trade-off theory are:

i) A decision maker managing a firm evaluates the alternative leverage plans as par the cost and benefit.

ii) That an interior solution is achieved to reach the optimum managerial costs and marginal benefits.

Therefore, the trade-off theory defines the scenario in which a corporation chooses the level of debt finance and the quantity of equity finance to use by balancing the costs and advantages. Investors and company managers are primarily concerned with maximizing returns while limiting risk. Bratland and Hornbrinck (2013) defined the risk-reward trade-off as the amount of risk that one is ready to accept in exchange for the investment's rewards. However, even if the uncertain condition is believed to be normally distributed, the influence of risk is unclear. As a result, Bradley (1984) and Murray and Vidhan (2005) demonstrate that the gearing ratio is adversely connected with volatility. This theory's significance can be determined by linking the risk-return trade-off to Working Capital Management practices. For example, an aggressive working capital policy results in the maximum profitability but the least liquidity, with the associated risk of insolvency, which is usually significant (Weinraub & Visscher, 1998; Chakraborty, 2006). Conversely, a conservative or liberal policy ensures greater liquidity for the corporation but with lower returns (profitability) and related lower risk. According to Ani (2012), the primary goal of a business entity is to maximize the wealth of its shareholders, and this wealth maximization can be accomplished by maximizing the entity's return for the accounting period. This goal can only be met by properly maintaining the working capital components (current assets and current liabilities) while also remaining aware of the risk/return trade-off.

2.4 Empirical Review

This section reviewed some of the work done by researchers in the past and recent times.

2.4.1 Working Capital Management and Earnings per Share (EPS)

Daniel and Ambrose (2018) investigated the impact of working capital management on Earnings per Share (EPS). Empirical Evidence from Deposit Money Banks listed on the Nairobi Securities Exchange, Kenya. The challenge of the study was to find out the relationship between Working Capital Management and Earnings by Share. The study employed a balanced panel data of five Deposit Money Banks which are listed on the Nairobi Securities Exchange (NSE). Pearson's correlation and ordinary least squares regression models were used. The study covers a period of 10 years that is 2009 –2018. The study finds out that a negative relationship exists between Working Capital Management and Earnings per Share. According to the study, current ratio has no any significant effect on the Deposit Money Banks' Earnings per Shares. The researchers concluded that banks can create value for their shareholders by improving on their working capital management. The study created a vacuum by studying only one independent variable (current ratio), but this study will fill the cap by looking at the banks' current ratio and quick ratio. Besides, their study looked at the Deposit Money Banks listed on the Nairobi Securities Exchange, Kenya, but this study looks at the Deposit Money Banks listed on the Nigeria Stock Exchange.

Uremadu (2011) carried out a study on the effect of Capital Structure and Liquidity on the Earnings per Share of selected Nigerians banks. Time series data for the 1980 to 2006 period was used for the study. The data was analyzed using descriptive statistics and regressive distributed lag (ARDL) model. The empirical results indicated a positive and significant relationship between cash reserve ratio, liquidity ratio, corporate income tax and banks' Earnings per Share. On the other hand, there was negative and significant relationship between savings deposit rate, gross national savings, balances with the central bank, inflation rate, foreign private investment and bank earnings per share. The data used for study were outdated and inadequate, because the data were used two decades ago, in the era where Nigerian Banking System was poor and inefficient. But the data used for this study are from 2007 to 2019, era where there is an improvement in Nigerian Banking System because of the banking reforms that have to do with the consolidation and recapitalization of banking sector.

2.4.2 Working Capital Management and Return on Asset (ROA)

Uremadu (2017) carried out a study on working capital management and financial performance of manufacturing sectors in Nigeria. The major purpose was to investigate the relationship between working capital management and financial performance of listed manufacturing firms in Nigeria. The study covered a six years' period between 2012-2017. Return on assets was used as a performance measure whereas cash conversion cycle, current assets to total asset and current liabilities to total assets were used as working capital management measures. The study employed correlation and regression analysis models for analysis and the result of the analysis revealed that there is no significant relationship between cash conversion cycle and performance measures and hence the study concludes that, manufacturing firms in Nigeria should follow conservative working capital management policy. The study created an Institutional Gap, because it was carried out in a manufacturing sector, but this study is carried in a banking bank.

Javaid and Kamal (2014) analyzed the determinants of top ten banks' profitability in Pakistan over the period 2009 to 2014. They focused on the internal factors only. They used the Pooled Ordinary Least Square (POLS) method to investigate the impact of assets, loans, equity, and deposits on one of the major profitability indicators of banks which is return on assets (ROA).

The empirical results found strong evidence that these variables have a strong influence on profitability. However, the results showed that higher total assets may not necessarily lead to higher profits due to diseconomies of scale. Also, higher loans contribute toward profitability but the impact is not significant. Equity and deposits have significant impact on profitability. Their study was conducted in Pakistan, a country that has a different banking system when compared with Nigeria.

2.4.3 *Working Capital Management and Return on Equity (ROE)*

The relationship between Liquidity and the Return on Equity of banks listed on the Ghanaian Stock Exchange was investigated by Lartey and Boadi (2018). The study was carried out on seven of the nine listed banks. The researchers made use of the longitudinal time dimension model. Specifically, the panel method time series analysis and return on equity were computed from the annual financial reports of the seven banks. The trend in Liquidity and Return on Equity were determined by the use Student 'T' Test of time series analysis. It was revealed that for the period 2013 to 2018, both liquidity and profitability had a downward trend. The main Liquidity ratio was regressed on the Return on Equity. The result revealed that there was a positive and statistically significant relationship between Liquidity and Return on Equity of the listed banks. Their study looked at the Deposit Money Banks listed on the Ghanaian Stock Exchange, but this study looks at the Deposit Money Banks listed on the Nigeria Stock Exchange. The two countries have different banking operations. Besides, their study used Student 'T' Test to analyze the data collected, but this study however, uses Ordinary Least Square in analyzing the data collected.

Finally, Imad, Kilani and Kaddumi (2011) studied a balanced panel data set of Jordanian banks for the purpose of investigating the nature of the relationship between the working capital management of banks and their liquidity level for ten banks over the period 2001 to 2010. Using two measures of bank's profitability: the rate of return on assets (ROA) and the rate of return on equity (ROE), the results showed that the Jordanian bank's liquidity explain a significant part of the variation in banks' profitability. High Jordanian bank profitability tends to be associated with well-capitalized banks, high lending activities, low credit risk, and the efficiency of credit management. Results also showed that the estimated effect of size did not support significant scale economies for Jordanian Banks. The study was carried out in Jordan using the data of Jordanian banks from 2001 to 2010, but this study uses data from Nigerian banks from 2007 to 2019.

3.0 METHODOLOGY

3.1 Research Design

This study employs an ex-post facto methodology, with a particular emphasis on the longitudinal Panel Series design, which is a quasi-experimental study exploring how an independent variable existent in the participants previous to the study impacts a dependent variable. This is "an after-the event" research. It involves carrying out research on something that has occurred. It is a systematic empirical study in which the researcher does not have direct control over independent variable because they have already occurred or they cannot be manipulated.

3.2 Sources and Nature of Data

Secondary data were collected from Annual Reports of the sampled banks and from Central Bank of Nigeria Statistical Bulletin covering the period 2007 to 2019. The variables that were used in the study are financial performance (profitability) indicators which were used as dependent variable and are proxy by Earnings per Share (EPS), Return on Assets (ROA) and Return on Equity (ROE). The independent variables are Current Ratio, Liquidity to Assets Ratio, Loan to Deposit, and Cash to Deposit.

3.3 Population and Sample Size

The population of this study consists of all Deposit Money Banks (DMBs) listed on the Nigeria stock from 2007 to 2019. The study population is 18 Deposit Money Banks listed on the Nigerian Stock Exchange. These periods are considered long enough for the variables to form a pattern in combination with economic activities of the industries. The periods of the study also envelop economic activities before, during and after the Nigerian economic recession; also, because of the consolidation and recapitalization exercise that reduced the number of Deposit Money Banks from 21 to 18 in 2019. Thei Convenience Sampling Technique wasi utilizedi ini thisi studyi toi determinei thei samplei size.i Thei samplei sizei fori thisi studyi isi fivei (5)i Depositi Moneyi Banksi listedi oni thei Nigeriani Stocki Exchange.iThese banks were selected based on the fact that they are among the 10 top Nigerian deposit money banks and because of the availability of their accounting records and annual financial reports from 2007 to 2019. They include; UBA, FBN, Zenith, GTB, and UBN.

3.4 Data Analysis Technique

The method of data analysis used in this study is the Ordinary Least Squares (OLS) regression method. This is because of the following reasons: The computational procedure of OLS is fairly simple as compared with other econometric techniques, OLS technique has been used in a wide range of economic relationship with satisfactory coefficients; and OLS is an essential component of most other econometric techniques. Also, in the analysis of this study, E-views version 10 was utilized.

3.5 Model Specification

Subsequent to hypotheses setting to provide an analytical basis to test their validation, we reduce them to mathematical statements. However, in specifying the mathematical models, we relied on the theories of the link between working capital management and financial performance line with Gomez (2015) and Shapiro (2015).

The mathematical representations of the functional form that represent our stated hypotheses are expressed as follows:

Model 1: Working Capital Management and Earnings per Share (EPS)

$$EPS = \beta_{01} + \beta_2 CR + \beta_3 LTAR + \beta_4 LTD + \beta_5 CTD + \varepsilon_1 \text{ --------------------- } (1)$$

Where:

β_{01} = is the intercept of the regression model of Earnings per Share and Working Capital Management variables.

CR = Current Ratio

LTAR = Liquidity to Asset Ratio

LTD = Loan to Deposit

CTD = Cash to Deposit

β_1, β_2, $\beta_{3,}$ β_4 *and* β_5 are rates of change of the Working Capital Management variables with respect to EPS

ε = is the error term associated with the model of the Working Capital Management variables with respect to EPS

Model 2: Working Capital Management and Return on Asset (ROA)

$$ROA = \beta_{01} + \beta_2 CR + \beta_3 LTAR + \beta_4 LTD + \beta_5 CTD + \varepsilon_2 \text{ --------------------- } (2)$$

Where:

β_{01} = is the intercept of the regression model of Return on Assets and Working Capital Management Variables.

$\beta_1, \beta_2, \beta_{3,} \beta_4$ *and* β_5 are rates of change of the Working Capital Management variables with respect to ROA

ε_2 = is the error term associated with the model of the Working Capital Management variables with respect to ROA

e Model 3: Working Capital Management and Return on Equity (ROE)

ROE = β_{01} + β_2CR + β_3LTAR + β_4LTD + β_5CTD + ε_3 --------------------- (3)

Where:

β_{01} = is the intercept of the regression model of Return on Equity and Working Capital Management Variables.

$\beta_1, \beta_2, \beta_{3,} \beta_4$ *and* β_5 are rates of change of the Working Capital Management variables with respect to ROE

ε_3 = is the error term associated with the model of the Working Capital Management variables with respect to ROE

Apriori Expectation:

It is expected *that* $\beta_1 \beta_2 \beta_3 \beta_4 \beta_5 > 0$

Table 3.6.1: Definition of Variables in the Model

Earnings per Shares	Net Income divided Preferred Dividend	Uremadu (2011)
Return on Equity	Net Income divided Average Total Assets	Eric (2018)
Return on Assets	Earnings Before Interest and Tax divided by Capital Employed	Eric (2018)
Current Ratio	Current Assets divided by Current Liabilities	Shah, Butt, and Saeed (2017)
Liquidity to Assets Ratio	Cash and Cash Equivalent divided by Total Assets	Shah, Butt, and Saeed (2017)
Loan to Deposit	Total Loan Divided by Total Deposit	Wamba and Bengono (2019)
Cash to Deposit	Cash and Cash Equivalent divided by Total Deposit	Wamba and Bengono (2019)

Source: Author's Compilation, 2020

4.0 DATA PRESENTATION AND ANALYSIS

The data sources are mainly from banks Financial Annual Reports and Accounts and are placed as Appendices 1, 2, 3, 4, 5, 6 and 7.

4.1 Graphical Presentation of Data

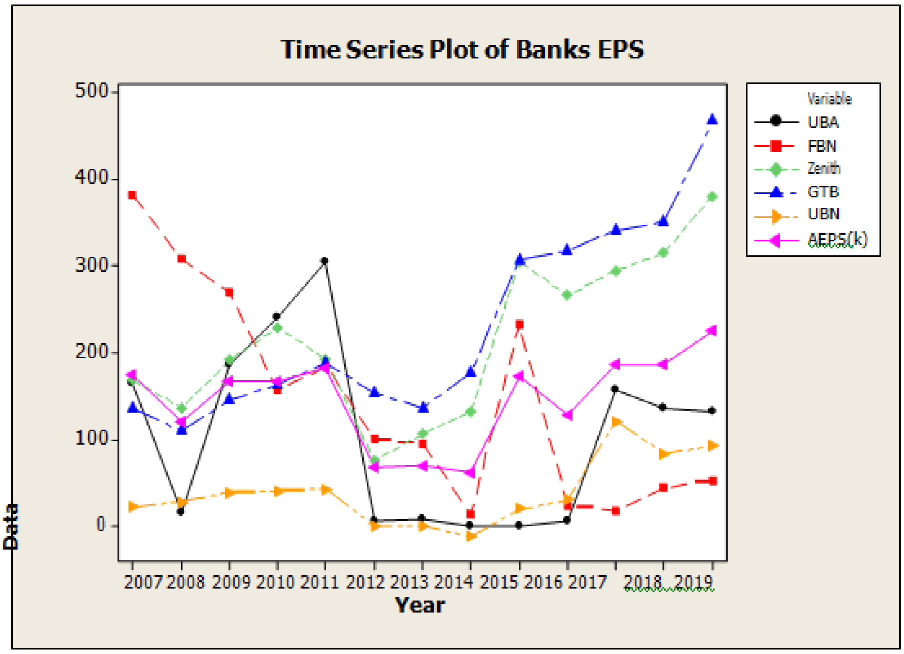

Figure 1: Time Series Plot of Selected Banks EPS

The graph above indicates that in 2007, First Bank of Nigeria has the highest Earnings per Share of 381K while Union Bank of Nigeria has the lowest earnings per share of 22K. Also, in 2019, Guaranty Trust Bank has the highest Earnings per Share of 467K while First Bank of Nigeria has the lowest earning per share of 53K.

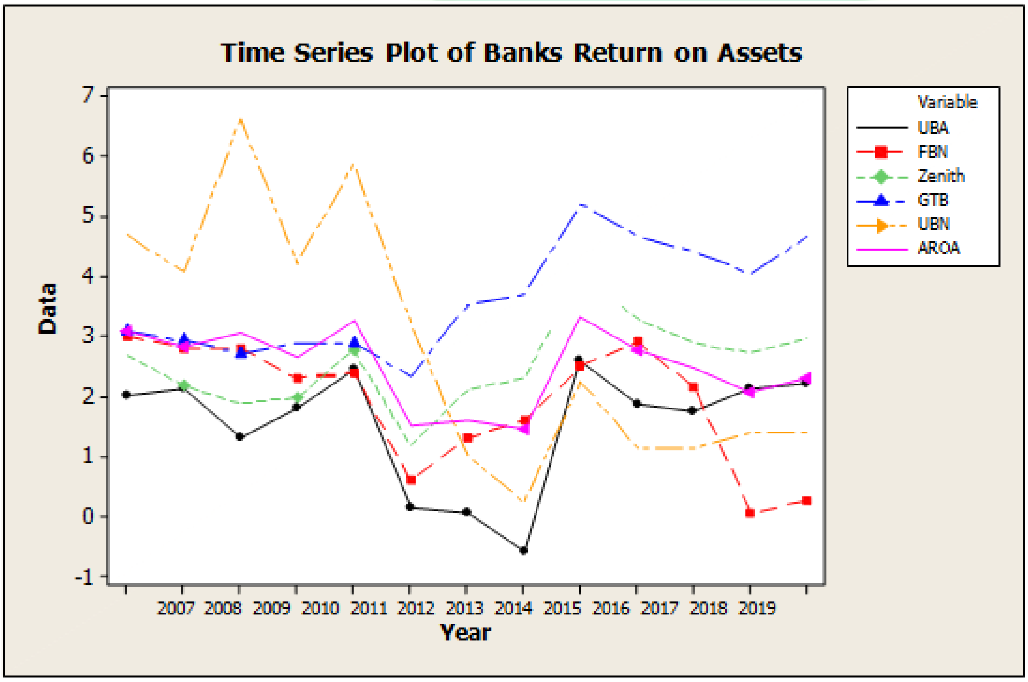

Figure 2: Time Series Plot of Selected Banks Return on Assets

The above graph shows that in 2007, Union Bank of Nigeria has the highest Return on Asset of 4.68% while United Bank of Africa has the lowest Return on Asset of 2.00%. Also, in 2019, Guaranty Trust Bank has the highest Return on Asset of 4.66% while First Bank of Nigeria has the lowest Return on Asset of 0.26%.

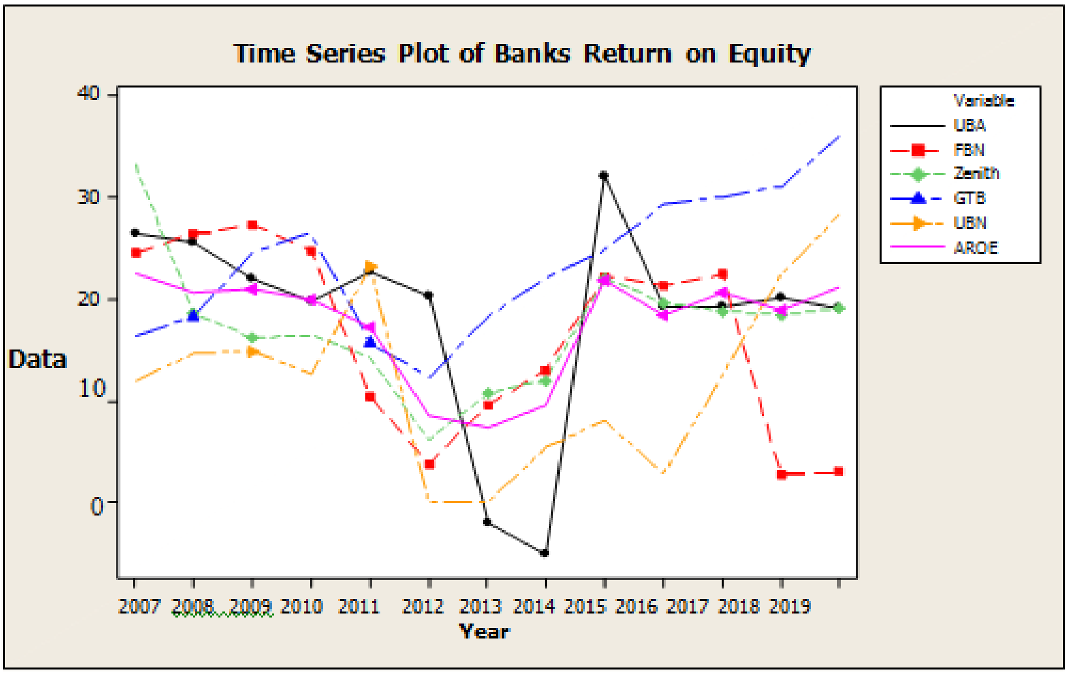

Figure 3: Time Series Plot of Selected Banks Return on Equity

The above graph shows that in 2007, Zenith Bank has the highest Return on Equity of 33.12% while Union Bank of Nigeria has the lowest Return on Equity of 12.00%. Also, in 2019, Guaranty Trust Bank has the highest Return on Equity of 35.96% while First Bank of Nigeria has the lowest Return on Equity of 3.00%.

4.2 Data Analysis and Findings

4.2.1 *Test of Hypotheses*

The results of various texts of hypotheses are presented in this section.

Decision Rule

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

Hypothesis I

Working Capital Management has no significant effect on Earnings per Share (EPS) of selected Deposit Money Banks in Nigeria.

Table 4.2.1

Dependent Variable: EARNINGS_PER_SHARE
Method: Least Squares
Date: 05/05/20 Time: 16:06
Sample: 2007 2019
Included observations: 13

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	279.0866	204.0111	1.367997	0.2085
CURRENT_RATIO	476.3500	223.2442	2.133762	0.0254
LIQUID_ASSET_RATIO	0.478002	3.952937	0.120923	0.9067
LOAN_TO_DEPOSIT	34.56151	317.5196	0.108848	0.3160
CASH_TO_DEPOSIT	137.9014	563.3002	0.244810	0.0028

R-squared	0.432538	Mean dependent var	146.4538
Adjusted R-squared	0.438807	S.D. dependent var	52.61306
S.E. of regression	48.54089	Akaike info criterion	10.88641
Sum squared resid	18849.74	Schwarz criterion	11.10370
Log likelihood	65.76168	Hannan-Quinn criter.	10.84175
F-statistic	1.524463	Durbin-Watson stat	0.973161
Prob(F-statistic)	0.283097		

Source: Compilation of the author, based on the analysiresults using Eviews

The R-square value is 0.43; it means that the model has not been able to successfully predict the variables. This implies that only 43% changes in the banks' Earnings per Share are explained by the changes in Working Capital Management of the banks. The value of 44% of the Adjusted R-squared value indicates that there is a weak relationship between the banks' Earnings per Share and Working Capital Management. Also, the P-value of 0.0254 indicates that the banks' Current Ratio has a significant effect on the banks' Earnings per Share, 0.9067 implies that the banks' Liquid Asset Ratio has no any significant effect on the banks' Earnings per Share, 0.3160 shows that the banks' Loan to Deposit has no any significant effect on the banks' Earnings per Share, and 0.0028 indicates that the banks' Cash to Deposit has a significant effect on the banks' Earnings per Share.

Finally, the P-value (Probability F-statistic) is 0.283097, greater than 0.05. We therefore, accept the null hypothesis and conclude that Working Capital Management has no any significant effect on Earnings per Share (EPS) of selected Deposit Money Banks in Nigeria.

Hypothesis II

Working Capital Management has no significant effect on Return on Asset (ROA) of selected Deposit Money Banks in Nigeria.

Table 4.2.2

Dependent Variable: RETURN_ON_ASSET
Method: Least Squares
Date: 05/05/20 Time: 17:16
Sample: 2007 2019
Included observations: 13

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.757139	2.885759	0.262371	0.0797
CURRENT____RATIO	3.893251	3.157813	1.232895	0.0036
LIQUID_ASSET_RATIO	0.032084	0.055915	0.573795	0.0219
LOAN_TO_DEPOSIT	0.081362	4.491348	0.018115	0.9860
CASH_TO_DEPOSIT	8.280693	7.967941	1.039251	0.0001

R-squared	0.884715	Mean dependent var	2.488462
Adjusted R-squared	0.889928	S.D. dependent var	0.663799
S.E. of regression	0.686616	Akaike info criterion	2.369640
Sum squared resid	3.771533	Schwarz criterion	2.586928
Log likelihood	10.40266	Hannan-Quinn criter.	2.324977
F-statistic	0.803928	Durbin-Watson stat	1.492839
Prob(F-statistic)	0.000720		

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

The R-square value is 0.88; it means that the model has successfully predicted the variables. This implies that 88% changes in the banks' Return on Asset are explained by the changes in Working Capital Management of the banks. The value of 89% of the Adjusted R-squared value indicates that there is a strong relationship between the banks' Return on Asset and Working Capital Management. Also, the P-value of 0.0036 indicates that the banks' Current Ratio has a significant effect on the banks' Return on Asset, 0.0219 implies that the banks' Liquid Asset Ratio has a significant effect on the banks' Return on Asset, 0.9860 shows that the banks' Loan to Deposit has no any significant effect on the banks' Return on Asset, and 0.0001 indicates that the banks' Cash to Deposit has a significant effect on the banks' Return on Asset.

Finally, the P-value (Probability F-statistic) is 0.000720, less than 0.05. We therefore, reject the null hypothesis and conclude that Working Capital Management has a significant effect on Return on Asset (ROA) of selected Deposit Money Banks in Nigeria.

Hypothesis III

Working Capital Management has no significant effect on Return on Equity (ROE) of selected Deposit Money Banks in Nigeria

Table 4.2.3

Dependent Variable: RETURN_ON_EQUITY
Method: Least Squares
Date: 05/05/20 Time: 16:23
Sample: 2007 2019
Included observations: 13

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.463630	25.60485	0.252438	0.8071
CURRENT____RATIO	29.92355	28.01875	1.067983	0.0067
LIQUID_ASSET_RATIO	0.000276	0.496122	0.000556	0.9996
LOAN_TO_DEPOSIT	2.068453	39.85098	0.051905	0.0099
CASH_TO_DEPOSIT	29.19962	70.69820	-0.413018	0.0004

R-squared	0.942013	Mean dependent var	17.48446
Adjusted R-squared	0.946981	S.D. dependent var	5.370196
S.E. of regression	6.092229	Akaike info criterion	6.735628
Sum squared resid	296.9220	Schwarz criterion	6.952916
Log likelihood	38.78158	Hannan-Quinn criter.	6.690966
F-statistic	0.331037	Durbin-Watson stat	0.730087
Prob(F-statistic)	0.000735		

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

The R-square value is 0.94; it means that the model has successfully predicted the variables. This implies that 94% changes in the banks' Return on Equity are explained by the changes in Working Capital Management of the banks. The value of 95% of the Adjusted R-squared value indicates that there is a strong relationship between the banks' Return on Equity and Working Capital Management. Also, the P-value of 0.0067 indicates that the banks' Current Ratio has a significant effect on the banks' Return on Equity, 0.9996 shows that the banks' Liquid Asset Ratio has no any significant effect on the banks' Return on Equity, 0.0099 shows that the banks' Loan to Deposit has a significant effect on the banks' Return on Equity, and 0.0004 indicates that the banks' Cash to Deposit has a significant effect on the banks' Return on Equity.

Finally, the P-value (Probability F-statistic) is 0.000735, less than 0.05. We therefore, reject the null hypothesis and conclude that Working Capital Management has a significant effect on Return on Equity (ROE) of selected Deposit Money Banks in Nigeria.

5.0 DISCUSSION OF FINDINGS

This section discussed the major findings of the study.

5.1 **Working Capital Management and Earnings per Share (EPS):** The study established that only 43% changes in the banks' Earnings per Share are explained by the changes in the bank's Working Capital Management; also, that there is a weak relationship between the banks' Earnings per Share and Working Capital Management. Besides, the study revealed that Nigerian Deposit Money Banks' Current Ratio and Cash to Deposit have significant effects on the banks' Earnings per Share, while the banks' Liquid Asset Ratio and Loan to Deposit have no any significant effect on the banks' Earnings per Share. However, Guaranty Trust Bank has the highest Earnings per Share while Union Bank of

Nigeria has the least. Finally, the study established that Working Capital Management has no any significant effect on Earnings per Share (EPS) of the Nigerian Deposit Money Banks.

However, these results are consistent to the study conducted by Daniel and Ambrose (2018) who investigated the impact of working capital management on Earnings per Share (EPS). Empirical Evidence from Deposit Money Banks listed on the Nairobi Securities Exchange, Kenya. The study employed a balanced panel data of five Deposit Money Banks which are listed on the Nairobi Securities Exchange (NSE). Pearson's correlation and ordinary least squares regression models were used. The study covers a period of 10 years that is 2009 –2018. The study finds out that a negative relationship exists between Working Capital Management and Earnings per Share. According to the study, current ratio has no any significant effect on the Deposit Money Banks' Earnings per Shares.

Besides, the results are inconsistent to the study conducted by Uremadu (2011) who carried out a study on the effect of Capital Structure and Liquidity on the Earnings per Share of selected Nigerians banks. Time series data for the 1980 to 2006 period was used for the study. The data was analyzed using descriptive statistics and regressive distributed lag (ARDL) model. The empirical results indicated a positive and significant relationship between cash reserve ratio, liquidity ratio, corporate income tax and banks' Earnings per Share.

5.2 **Working Capital Management and Return on Asset (ROA):** This study revealed that 88% changes in the banks' Return on Asset are explained by the changes in Working Capital Management of the banks; also, that there is a strong relationship between the banks' Return on Asset and Working Capital Management. Besides, the study established that Nigerian Deposit Money Banks' Current Ratio, Cash to Deposit, and Loan to Deposit have significant effects on the banks' Return on Asset. But however, the banks' Liquid Asset Ratio has no any significant effect on the banks' Return on Asset. Consequently, Guaranty Trust Bank has the highest Return on Asset, while United Bank of Africa has the least Return on Asset. Finally, the study established that Working Capital Management has a significant effect on Return on Asset (ROA) of the Nigerian Deposit Money Banks.

Furthermore, these results are inconsistent to the study conducted by Kehinde (2017) who carried out a study on working capital management and financial performance of manufacturing sectors in Nigeria. The major purpose was to investigate the relationship between Working Capital Management and Financial Performance of listed Manufacturing Firms in Nigeria. The study covered a six years' period between 2012-2017. Return on assets was used as a performance measure whereas Cash Conversion Cycle, Current Assets to Total Asset and Current Liabilities to Total Assets were used as working capital management measures. The study employed correlation and regression analysis models for analysis and the result of the analysis revealed that there is no significant relationship between Cash Conversion Cycle and Return on Asset.

In the same vein, the finding is also consistent to Javaid and Kamal (2014) who analyzed the determinants of top ten banks' profitability in Pakistan over the period 2009 to 2014. They focused on the internal factors only. They used the Pooled Ordinary Least Square (POLS) method to investigate the impact of assets, loans, equity, and deposits on one of the major profitability indicators of banks which is Return on Asset (ROA). The empirical results found strong evidence that these variables have a strong influence on profitability (Return on Asset).

5.3 **Working Capital Management and Return on Equity (ROE):** This study established that 94% changes in the banks' Return on Equity are explained by the changes in Working Capital Management of the banks; also, that there is a strong relationship between the banks' Return on Equity and Working Capital Management. Besides, the study established that Nigerian Deposit Money Banks' Current Ratio, Loan to Deposit, and Cash to Deposit have significant effects on the banks' Return on Equity. But however, the banks' Liquid Asset Ratio has no any significant effect on the banks' Return on Asset. However, Guaranty Trust Bank has the highest Return on Equity, while Union Bank of Nigeria has the least Return on Equity. Finally, the study established that Working Capital Management has a significant effect on Return on Equity (ROE) of the Nigerian Deposit Money Banks.

These findings corroborate the findings of Lartey and Boadi (2018) in the research titled the relationship between Liquidity and the Return on Equity of banks listed on the Ghanaian Stock Exchange. The study was carried out on seven of the nine listed banks. The researchers made use of the longitudinal time dimension model. Specifically, the panel method time series analysis and return on equity were computed from the annual financial reports of the seven banks. The trend in Liquidity and Return on Equity were determined by the use Student 'T' Test of time series analysis. The main Liquidity ratio was regressed on the Return on Equity. The result revealed that there was a positive and statistically significant relationship between Liquidity and Return on Equity of the listed banks.

In the same vein, the finding is also consistent to Imad et al. (2011) who studied a balanced panel data set of Jordanian banks for the purpose of investigating the nature of the relationship between the working capital management of banks and their liquidity level for ten banks over the period 2001 to 2010. Using two measures of bank's profitability: the rate of Return on Assets (ROA) and the rate of Return on Equity (ROE)**;** the results showed that the Jordanian bank's liquidity explain a significant part of the variation in banks' profitability. High Jordanian bank profitability tends to be associated with well-capitalized banks, high lending activities, low credit risk, and the efficiency of credit management.

6.0 SUMMARY, CONCLUSION AND RECOMMENDATION

6.1 Summary

The major findings made from conducting the study are outlined below:

i) the R-square value of the first model is 0.43; it means that the model has not been able to successfully predict the variables. This implies that only 43% changes in the bank's Earnings per share are explained by the changes in working Capital Management of the banks, the values of 44% of the adjusted R-square value indicates that there is a weak relationship between the banks' Earnings per share and working capital management. Also, the P-value of 0.0254 indicates that the banks Current Ratio has a significant effect on the banks Earnings per share 0.9067 implies that the banks Liquid Asset Ratio has no significant effect on the banks Earnings per share 0.3160 shows that the banks' Loan to Deposit has no significant effect on the banks Earnings per share and 0.0028 indicates that the banks Cash to Deposit has a significant effect on the banks Earnings per share. However, the P-value (Probability F-statistics), Working Capital has no any significant effect on Earnings per share (EPS) of selected Deposit Money Bank in Nigeria.

ii) the R-square value of the second model is 0.88 it means that the model has successfully predicted the variables. This implies that 88% changes in the banks Return on Asset are explained by the changes in Working Capital Management of the banks. The value of 88% of the Adjusted R-square value indicates that there is a strong relationship between the banks Current Return on Asset and Working Capital Management. Also the P-value 0.0036 indicates that the banks' Loan to Deposit has no any significant effect on the banks Return on Asset, 0.0219 implies that the Liquid Asset Ratio has a significant effect on the banks Return on, 0.9869 shows that the banks' Loan to Deposit has no significant effect on the banks Return on Asset and 0.0001 indicates that the banks Cash to Deposit has a significant effect on the banks Return on Asset. However, the P-value (Probability F-statistics) is 0.000720 less than 0.05. We therefore reject the null hypothesis and conclude that Working Capital Management has a significant effect on the Return on Asset (ROA) of selected Deposit Money Banks in Nigeria.

iii) the R-square value of third model is 0.94; it means that the model has successfully predicted the variables. This implies that 94% changes in the banks Return on Equity are explained by the changes in Working Capital Management of the banks. The value of 94% of the Adjusted R-square value indicates that there is a strong relationship between the banks Return on Equity and Working Capital Management. Also the P-value 0.0067 indicates that the banks Current Ratio has a significant effect on the banks Return on Equity and 0.9996 shows that the banks Liquid Asset

Ratio has no any significant effect on the banks Return on Equity 0.0099 shows that the bank's Loan to Deposit has a significant effect on the banks Return on Equity and 0.0004 indicates that the banks Cash to Deposit has a significant effect on the banks Return on Equity. However, the P-value (Probability F-statistics) is 0.0000735, less than 0.05. We therefore reject the null hypothesis (ROE) of selected Deposit Money Banks in Nigeria.

6.2 Conclusion

Effective bank working capital management entails delicate balancing of the liquidity and profitability trade-off. This is because excessive liquidity reduces profitability while excessive liquidity risks exposure. In pursuit of maximum profitability could lead to the insolvency of a bank. This study was carried out to empirically examine the relationship between liquidity and profitability of five banks in Nigeria. The empirical results indicated that there is a statistical significant relationship between financial performance and working capital management when earnings per share, return on assets, and return on equity are used as a measure of financial performance. The study also concludes that working capital management has no significant effect on Earnings per share (EPS) of selected Deposit Money Banks in Nigeria.

It was also shown from the analysis that the return on asset (ROA) and return on equity (ROE) are better measures of performance. This paper has shown that there is a significant relationship between working capital management and bank performance from the afore-shown analysis. Therefore, this implies that Working Capital Management has a significant effect on Return on Asset (ROA) and on Return on Employed (ROE) of selected Deposit Money banks in Nigeria.

6.3 Recommendations

i) Instead of keeping excessive liquidity as a provision for unexpected withdrawal of the customer, the deposit money banks should find it reasonable to adopts other measures of meeting such requirements which can include borrowing and discounting bills. In addition, the surplus funds of the Nigerian deposit money bank should be seasonally invested in short-term instruments of the money market. Banks should use sweep account that transfer funds into higher interest rate accounts when they are needed, and back to readily accessible accounts when necessary. Paying off liabilities also quickly improves the liquidity ratio, as well as cutting back on short- term overhead expenses such as rent, labuor, and marketing. Besides, banks should build ads for each deposit service. They should focus on individual deposit services and choose target keywords that deliver those ads for relevant searches. The ads should always align with the keywords they are targeting. Also, banks should have decrease in the total count of shares so as to increase EPS. This is because each bank has a certain number of outstanding shares. The count of the shares may always change throughout the lifespan of a company. Since EPS represents the earnings share, a decrease in the total amount of shares results in a higher EPS.

ii) Nigerian deposit money banks should use thoughtful geo-targeting: Specific targeting is the key to driving qualified traffic and conversions. This is because if the banks targeting area is too broad, then they may wind up with a rapidly-diminishing budget that is wasted by users who are not part of your target audience. Since the survival of deposit money banks depend on working capital management and profitability, they should not solely concentrate on the profit maximization concepts but also adopts measures that ensure effective, liquidity management. The measures will help to maximize or avoid cases of excessive and deficient liquidity as their effects are negative. Banks should increase their net income, decrease total assets, and improve the efficiency of current Assets, improve the efficiency of fixed assets to improve their return on Assets.

iii) The liquidity management of Nigerian banks should be more proactive than reactive as it is presently practiced. The current conservative approach than reactive as it is presently practiced. The conservative approach of keeping to a tight liquidity, management, although producing good profitability in terms of return on equity, but only produces modest profitability in terms of return on asset. Banks should use more financial leverage to improve their ROE. They should finance themselves with debt and equity capital. By increasing the amount of debt capital relative with debt and equity capital, a company can increase is return on equity. Similarly, banks should distribute idle cash in order to improve their ROE. This is becoming a common problem among corporate giants, particularly those in the technology industry: idle cash in excess of what the business needs to continue operations reduces the apparent profitability of the company when measured by return on equity.

7.0 CONTRIBUTION TO KNOWLEDGE

This study has contributed to knowledge in the following ways:

7.1 **To Literature:** The research study provides a valuable collection of ideas, facts and figures that can be of importance to other researchers, entrepreneurs, lecturers, and students in comprehending the effect of working capital management on financial performance of selected deposit money banks in Nigeria. And this study can be used as reference from by others.

7.2 **To Empiric:** The empirical review into the relevant research on effect of working capital management on financial performance of selected deposit money banks in Nigeria showed that Working Capital Management is very significant to financial performance (Return on Asset). Most of these Studies conducted in various nations around the globe all posited that working capital is essential in improving financial performances of banks. This study therefore provides a basis for research works and findings in these nations to be applied in banks, businesses, other financial institutions, and organizations alike in Nigeria.

7.3 **To Policy:** Government, banks, businesses, other financial institutions, and organizations can use the results, conclusion, and recommendations of this study in the formulation of their policies. According to the panel regression model, Working Capital policy recorded a positive effect on Return on Asset and Return on Equity.

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APPENDICES

Appendix I: Banks EPS (K)

Year	UBA	FBN	Zenith	GTB	UBN	AEPS(k)
2007	164	381	168	135	22	174
2008	15	308	136	110	28	119.4
2009	186	269	191	145	39	166
2010	241	156	229	163	41	166
2011	305	184	192	188	43	182.4
2012	6.00	100	76	153	0.00	67
2013	8.00	95	106	136	0.00	69
2014	0.00	14	132	177	-12	62.2
2015	0.50	233	305	307	19	172.9
2016	5.00	24	266	317	30	128.4
2017	156	17	295	341	121	186
2018	136	44	315	351	84	186
2019	131	53	380	467	92	224.6

Source: Banks Annual Report 2007-2019

Appendix II: Banks Returns on Assets (%)

Year	UBA	FBN	Zenith	GTB	UBN	AROA
2007	2.00	2.99	2.69	3.08	4.68	3.088
2008	2.13	2.81	2.17	2.93	4.08	2.824
2009	1.31	2.80	1.88	2.71	6.62	3.064
2010	1.80	2.30	1.98	2.89	4.21	2.636
2011	2.46	2.40	2.77	2.88	5.86	3.274
2012	0.15	0.60	1.17	2.34	3.24	1.50
2013	0.04	1.30	2.11	3.51	1.02	1.596
2014	-0.59	1.60	2.29	3.69	0.23	1.444
2015	2.59	2.50	4.06	5.20	2.24	3.318
2016	1.87	2.90	3.29	4.67	1.14	2.774
2017	1.74	2.15	2.88	4.40	1.14	2.462
2018	2.13	0.06	2.72	4.04	1.40	2.07
2019	2.22	0.26	2.96	4.66	1.40	2.30

Source: Banks Annual Report 2007-2019

Appendix III: Banks Return on Equity (%)

Year	UBA	FBN	Zenith	GTB	UBN	AROE
2007	26.30	24.50	33.12	16.42	12.00	22.468
2008	25.50	26.40	18.5	18.28	14.60	20.656
2009	22.00	27.20	16.12	24.50	14.89	20.942
2010	19.80	24.70	16.42	26.40	12.61	19.986
2011	22.60	10.40	14.20	15.64	23.20	17.208
2012	20.20	3.70	6.10	12.32	0.00	8.464
2013	-2.00	9.60	10.70	18.19	0.00	7.298
2014	-5.00	13.00	12.00	22.05	5.38	9.486
2015	31.90	22.20	22.00	24.80	8.02	21.784
2016	19.20	21.30	19.60	29.32	2.86	18.456
2017	19.20	22.40	18.80	30.02	12.53	20.59
2018	20.00	2.80	18.40	31.00	22.40	18.92
2019	19.00	3.00	19.00	35.96	28.24	21.04

Source: Banks Annual Report 2007-2019

Appendix IV: Current Ratio

Year	UBA	FBN	Zenith	GTB	UBN	AROE
2007	0.86	1.04	1.10	1.07	0.77	0.968
2008	1.06	1.07	1.09	1.02	0.96	0.828
2009	1.01	1.13	1.11	0.93	1.04	1.044
2010	1.04	1.11	1.10	1.09	0.73	1.014
2011	1.10	1.15	1.12	0.91	0.83	1.022
2012	1.03	1.10	1.16	0.96	0.35	0.92
2013	1.08	1.14	1.17	0.95	0.52	0.972
2014	1.00	1.09	1.06	1.12	0.83	1.02
2015	0.97	1.12	1.14	1.03	1.02	1.056
2016	1.11	1.07	0.95	0.89	0.91	0.986
2017	1.18	1.17	1.13	1.11	0.97	1.112
2018	1.20	1.12	1.18	1.09	1.03	1.124
2019	1.17	1.18	1.14	1.13	1.01	1.126

Source: Banks Annual Report 2007-2019

Appendix V: Liquid to Asset Ratio

Year	UBA	FBN	Zenith	GTB	UBN	AROE
2007	0.61	0.83	0.79	0.71	0.73	0.734
2008	0.73	0.81	0.97	0.74	0.71	0.792
2009	0.69	0.96	1.04	0.69	0.64	0.804
2010	093	0.94	0.91	0.89	0.69	19.286
2011	0.95	1.00	0.93	0.78	0.66	0.864
2012	0.82	0.94	0.95	0.80	0.69	0.84
2013	0.85	1.07	1.02	0.87	0.73	0.908
2014	0.73	1.02	0.94	0.91	0.88	0.896
2015	1.03	0.92	0.86	0.84	0.82	0.894
2016	0.96	0.84	1.00	0.82	0.74	0.872
2017	0.88	1.00	0.98	0.93	0.69	0.896
2018	0.92	0.81	1.06	0.90	0.83	0.904
2019	0.97	0.98	1.01	0.92	0.81	0.938

Source: Banks Annual Report 2007-2019

Appendix VI: Loan to Deposit

Year	UBA	FBN	Zenith	GTB	UBN	AROE
2007	0.51	0.83	0.60	0.49	0.31	0.548
2008	0.57	0.81	0.59	0.57	0.29	0.566
2009	0.43	0.92	0.57	0.66	0.30	0.576
2010	0.48	1.09	0.64	0.78	0.27	0.652
2011	0.44	0.80	0.68	0.67	0.36	0.59
2012	0.57	0.78	0.61	0.67	0.28	0.582
2013	0.50	0.83	0.73	0.64	0.44	0.628
2014	0.64	0.88	0.69	0.73	0.41	0.67
2015	0.71	1,03	0.81	0.71	0.39	0.524
2016	0.88	1.01	0.77	0.84	0.41	0.782
2017	0.82	0.89	0.79	0.75	0.43	0.736
2018	0.85	0.88	0.83	0.78	0.48	0.764
2019	0.79	1.04	0.81	0.82	0.42	0.776

Source: Banks Annual Report 2007-2019

Appendix VII: Cash to Deposit

Year	UBA	FBN	Zenith	GTB	UBN	AROE
2007	0.39	0.08	0.16	0.26	0.08	0.194
2008	0.40	0.07	0.11	0.31	0.19	0.216
2009	0.37	0.10	0.14	0.29	0.20	0.22
2010	0.31	0.05	0.12	0.35	0.08	0.182
2011	0.30	0.08	0.13	0.35	0.21	0.214
2012	0.40	0.12	0.17	0.28	0.29	0.252
2013	0.43	0.15	0.19	0.32	0.28	0.274
2014	0.49	0.07	0.16	0.31	0.31	0.268
2015	0.36	0.11	0.21	0.36	0.27	0.262
2016	0.51	0.09	0.32	0.33	0.31	0.312
2017	0.53	0.13	0.24	0.29	0.37	0.312
2018	0.49	0.26	0.26	0.38	0.41	0.36
2019	0.50	0.31	0.25	0.42	0.45	0.386

Source: Banks Annual Report 2007-2019