# Privatization and Financial Performance (Return on Capital Employed) on Selected Deposit Money Banks in Nigeria (1980-2015)

# R.W. Oladiran

PhD Student of Department of Business Administration and Marketing, Babcock University, Nigeria

Abstract:-The performance of these public dominated enterprises had not achieved the desired impact in the economy as a result of government inefficiencies. Economic reforms that facilitate efficient macroeconomic economic management such as privatization, commercialization and liberalization had been mentioned to address this issue. Hence, this study investigated the impact of privatization on financial performance (return on capital employed) of selected deposit money banks in Nigeria 1980-2015. The study employed ex-post facto research design. Three banks were chosen from the target population of nine privatized deposit money banks, namely, FBN Plc, UBA Plc and UBN Plc. Secondary data were used and were subjected to pre and post diagnostic tests. Data were analyzed using descriptive statistics and panel regression analysis. The findings revealed that privatization components have significant impact on financial performance (return on capital employed) (ROCE) (Adj.  $R^2 = 0.463$ , F= 7.048, p<0.05 of selected deposit money banks in Nigeria after privatization. The study recommended that the current privatization programme should be pursued with robustness and zeal it deserves. For further studies the researcher suggested extending the research to other sectors of the economy and /or the state-owned privatized money deposit banks.

# I. INTRODUCTION

The ultimate goal of any credible and legitimate government is to ensure sustained improvement in the standard of living of the citizenry. In line with this objective, government usually prepares development plans that facilitate effective and efficient mobilization, optimal allocation and management of national resources to boost performance. These are examples of the direct or indirect involvement of government in an economy to correct externalities; ensure equitable distribution of income as well as allocation of goods and services (Ajibola, 2008; Asaolu, 2015; Dornigie, 2012; Duru, 2000; Megginson & Netter, 2001). Drawing on the successful experience of most developed economies, many African countries at independence adopted a statist approach to economic development, with government being the major player. It is estimated that about three thousand enterprises are fully or partially controlled by governments in Africa. from colonial economy Nigerian history through independence and up till today has been characterized by huge government investment in public enterprises thus making

government a major shareholder (Dornigie, 2012; Duru, 2000).

Available evidences suggest that this public dominated process has not achieved the desired impact in most African countries coupled with the development in the globalized world (El-Rufai, 2000; Usman, 2000). These have precipitated the clamouring for comprehensive national economic reforms that will facilitate efficient macroeconomic management such as privatization, commercialization and liberalization with more emphasis on privatization (El-Rufai, 2000; Usman, 2000). In Nigeria, the performance of the public sector was not accompanied by sustainable economic growth rate anticipated by policy makers or planners. There have been slowdowns especially in economy coupled with worldwide economic recession (El-Rufai, 2000; Usman, 2000).

Privatization is the relieving of the government shareholding to the public and / or private sector so as to boost the performance of the organizations (Gonzalo, Pina & Torres, 2003). The modern idea of privatization as an economic policy was pursued for the first time by the Federal Republic of Germany in 1957, when the government eventually sold its majority stake in Volkswagen to private investors. The next big move in privatization came in the 1980s with Margret Thatcher's privatization of Britain Telecom and Chirac's privatization of government owned communication companies (Burton, 1987; Vogelsang, 1988; Wessel, 1991).

Privatization programme in Sub-Saharan Africa happened in successive waves, with some countries privatizing much earlier than others. The first group that started the programme between late 1970s to early 1980 composed of Francophone West African Countries (Benin, Guinea, Niger, Senegal, and Togo), but their progress was limited. The second group, that is, both Anglophone and Francophone countries (Ghana, Nigeria, Ivory Coast, Mali, Kenya, Malawi, Mozambique, Madagascar, and Uganda), started in late 1980s but no significant progress was witnessed except Nigeria in 1990. Lastly, the last group, the "late starters" commenced privatization programme in early to mid-1990s. The countries involved are Tanzania, Burkina Faso, Zambia, Cameroon, Ethiopia and Sierra Leone. While the first three countries have made a tremendous progress the last only recorded a minimal progress in the 1990s (Bennell 1997 as cited in Saul, & Adeline, 2018).

In Nigeria about  $\aleph$ 800billion (approx. US\$100 billion at the then exchange rate) was invested in the public enterprise sector over two decades (1975-1995) with a return of 0.5% earned per annum (El-Rufai, 2000; Etieyibo, 2011). As at the end of 2000, only 160 of these enterprises were engaged in economic activities. The poor performances of state owned enterprises (SOEs) often have great consequences on the finances of government. In other words, instead of SOEs to be generating revenue for the government and used for repayments of debts (external or internal), infrastructural development etcetera, it has constituted a drain on the government revenue (El-Rufai, 2000; Etieyibo, 2011).

Ajayi and Sosan (2017); Odekunle (2006); Omolumo (2005) stated that British Bank of West Africa now known as First Bank of Nigeria Plc. was established in 1894. In 1929, the Industrial and Commercial Bank became the first indigenous bank to be established in Nigeria, however, as a result of poor financial performance, mismanagement, accounting incompetence and embezzlement, the bank faced liquidation 15 months after its establishment. In 1990 also, UBA Plc's performance was poor, due to relatively inefficient, mediocre performance before privatization in 1992/1993. UBA Plc.'s return on capital employed (ROCE) were 25.49%, 26.86%, 22.92%, 26.20%, 3.68% and 4.01% for years 1987, 1988, 1889, 1990, 1991 and 1992 respectively, while ROCE of FBN Plc. were 30.99%, 30.69%, 33.64%, (49.16%) and (8.19%) in 1987, 1988, 1989, 1990 and 1991 respectively. And lastly, ROCE of UBN Plc were 25.49%, 26.86%, 30.31%, 20.70%, 12.08% and 17.41% in years 1987, 1988, 1989, 1990, 1991 and 1992 respectively. Investors generally would not count these returns as satisfactory considering the inconsistence in their ROCEs and coupled with the fact that the FBN Plc., UBA Plc., and UBN Plc. were incorporated on the following dates: 1894; 1961 and 1917 respectively (IBTCI Consortium, 2008; TCPC Final report II, 1993).

The scope of Nigeria's privatization programme covers several sectors: aviation, communication, banking and finance, oil and gas, media, manufacturing, transportation, water sector, refineries and petrol chemical plants, hospitality and tourism among others (Asaolu, 2015; El-Rufai, 2000). In view of this, the researcher will therefore assess the privatization and financial performance (return on capital employed) of selected deposit money banks in Nigeria (1980-2015) reviewing the pre and post-privatization period.

# **II. LITERATURE REVIEW**

This section covers the theoretical and empirical review of this study.

# 2.1 Theoretical Review

The underpinning theory for this study is shareholder theory.

Corplaw-Blog (2014) postulated that the shareholder theory was originally proposed by Milton Friedman in 1970. The theory states that the sole responsibility of business is to increase financial performance of that company, in other words, it is the maximization of shareholders wealth. It is based on this premise that directors are appointed as the agent of the shareholders to run the company for the shareholders' benefit, and therefore they are legally and morally obligated to serve their interests.

Friedman (1970); Olowe (2009); Pandey (2008) highlighted the following fundamental assumptions that lend support to the shareholder view of the firm: Human, social, and environmental costs of doing business should be internalized only to the extent required by law while all other costs should be externalized; The self-interest as the prime human motivator, people and organizations act rationally in their own self-interest to maximize efficiency and value for society; Firm is fundamentally a nexus of contracts with primacy going to those contracts that have the greatest impact on the profitability of the firm; A principal-agent relationship exists between the shareholders and management; and lastly, the objective of the firm is to create value (or wealth) for the shareholders in terms of higher ROCE, maximization of profit, etcetera.

According to Morris, Jean and David (2008) the following are the advantage shareholders theory: Shareholders wealth maximization is accepted by academic finances community and financial economists as the appropriate objective for financial decision making and also a fundamental building block of corporate financial theory. The shareholder provides the best framework in which to balance the computing interests of various shareholder (current and future stakeholder) when making business decisions. It provides a long term financial view on which the strategic decision is based. It provides a universal approach that is not subject to the particular accounting policies that are adopted. Therefore it is internationally applicable and use across sectors. Lastly, it forces the organization to focus on the future and its customers, in particular the value of future cash flows.

The dis-advantages are also enumerated below (Morris, Jean & David, 2008): It has been used for encouraging short-term managerial thinking, and also condoning unethical behavior through the exploitation of employees, customers, and other stakeholders. It encourages short term profit maximization at the expense of the long run. Development and implementation of the system can be long and complex.

The shareholder theory is now seen as the historic way of doing business with companies realizing that concentrating solely on the interests of shareholders has some disadvantages. A focus on short term strategy and greater risk taking are just two of the inherent dangers involved. The role of shareholder theory can be seen in the demise of corporations such as Enron and Worldcom where continuous pressure on managers to increase returns to shareholders led them to manipulate the company accounts (Morris, Jean & David, 2008).

# 2.2 Empirical Review

Eriki and Osifo (2015) examined the determinants of performance efficiency of 19 selected banks in Nigeria in 2009. Using three performance efficiency measures of constant returns to scale (CRS), variable returns to scale (VRS) and scale efficiency models are used by employing the Data Envelopment Analysis (DEA) approach. The estimation process was done using DEA frontier software. The findings revealed that bank size and bank age are positively related to bank performance efficiency, while board independence and board ownership structure are negatively related to bank performance efficiency in Nigeria. Additionally, Ikechukwu and Boniface (2016) examined the effect of bank age on retained earnings of Zenith Bank Nigeria Plc, from 2002 to 2013. Regression analysis was used to establish the nature, direction and magnitude of the effect and relationship between bank age and retained earnings in Zenith Bank Plc. The analysis indicated that bank/firm age had a positive and significant effect on retained earnings and this also improved the performance.

Similarly, Inyiama (2015) examined the effects, magnitude, strength, causalities and cointegration of the relationships between banks' financial performance indicators and share prices in Nigeria banking sector. The research made use of secondary data obtained from annual report and accounts of the First Bank Plc. Access Bank Plc. Zenith Bank Plc and United Bank for Africa Plc from 2004 to 2013. The outcome of statistical test revealed that Market Price of Shares of the banking industry was found to be positively and significantly influenced by earnings per share (EPS). However, return on assets and bank age exerts positive influence on market price of ordinary shares. So also, Eriki & Osifo, (2015) investigated the determinants of performance efficiency of 19 selected banks in Nigeria in 2009, using the following three measurement performance: efficiency measures of constant returns to scale (CRS); variable returns to scale (VRS) and scale efficiency models (SEM). The estimation process was done using data envelopment analysis (DEA) frontier software. The findings revealed that bank size and bank age are positively related to bank performance efficiency, while board independence and board ownership structure are negatively related to bank performance efficiency in Nigeria.

An empirical analysis of capital structure on firms' performance in Nigeria was carried out by Muritala (2012) using annual data of ten firms spanning a five-year period. The study hypothesized a negative relationship between capital structure and operational firm performance. The results from Panel Least Square (PLS) confirm that asset turnover, size, firm's age and firm's asset tangibility are positively related to firm's performance.

Conversely, Coad, Segarra, and Teruel (2013) in their study titled "Like milk or wine, does firm performance improve

with age?" made use of the Spanish Mercantile Register through the System of Analysis of Iberian Balance Sheets (SABI database) compiled by Bureau van Dijk. This database offered exhaustive information over financial position (formerly known as balance sheet) and financial sources for an insignificant number of firms. The sample comprised 73,891 manufacturing firms in 2006 year which represents 51.29% from the total population firms in manufacturing sectors. Outcome revealed that ageing firms experience rising levels of productivity, profits, larger size, lower debt ratios, and higher equity ratios. On the other hand, they also found evidence that firm performance deteriorates with age. Older firms have lower expected growth rates of sales, profits and productivity, they have lower profitability level.

Majumdar (1997) reviewed the impact of size and age on firm-level performance with evidence from India. Using contemporary data for an extensive sample of 1020 Indian firms, the data were obtained from the Center for Monitoring the Indian Economy and supplemented by Bombay Stock Exchange data. The principal independent variables were measured as follows: size is measured as the natural log of total sales, while age is the number of years since the inception of the firm. The data collected were subjected to regression analysis. Results showed that the coefficient for size is negative in the productivity equation, but positive in the profitability equation. Conversely, the coefficient for age is positive in the productivity equation, but negative in the profitability equation, meaning that in India, larger firms are less productive, in comparison to smaller firms, while the larger firms are more profitable.

Moreover, a study of the moderating effects of firm age at internationalization on firm survival and short-term growth by Carr, Haggard, Hmieleski, and Zahra (2010) subjected a longitudinal sample of 787 firms to regression analysis test. The outcome revealed that for post-internalization, younger firms experienced significantly higher rates of short-term growth than older firms.

Huergo and Jaumandreu (2004) focused on the relationships between the introduction of innovations and the growth of productivity. The study focused on the effects of innovation on total factor productivity growth, using (unbalanced) panel data on the age of more than 2300 Spanish manufacturing firms and their process innovations brought in during the period 1990 –1998. The findings revealed that young firms tend to show higher rates of productivity growth than the older ones. This finding is also in line with Coad, Segarra, and Teruel, (2016) in their examination of innovation and firm growth vis-à-vis firm's age using regression analysis. The outcome revealed that young firms engage in more radical innovation than mature firms because the returns to innovation are more skewed therefore there is a negative relationship between firm age and growth rates, with older age groups having lower growth rate

In addition, Jegede, Akinlabi and Soyebo (2013) in a study on corporate government efficiency and bank performance in Nigeria, variables that board size is statistically significant to bank performance while bank age and board committee have negative effect on bank performance. Wu, Chen and Shiu (2007) in their evaluation of the impact of financial development and bank characteristics on the operational performance of commercial banks in the Chinese transitional economy. The sample comprised a total of 14 Chinese banks, covering a period of 9 years, that is, 1996 - 2004. Fixed effects and random effects models are estimated. The findings revealed that empirical results exhibit higher levels of monetarization that can translate into better return on assets (ROA) performance for banks. The longer a bank has been in existence, the worse its ROA performance is found to be. Chinese banks' efforts to develop non-traditional banking business actually have a negative impact on the ROA. The ROA performance of larger Chinese banks (in terms of assets) is found to be inferior to that of the smaller shareholding commercial banks. This report is also in tandem with Staikouras, Mamatzakis, and Koutsomanoli- Filppaki (2007) in their study of operating performance of the banking industryempirical investigation of South Eastern European (SEE) Region, over the period 1998-2003. Findings revealed that operating performance is positively related to loan quality and the asset size, and negatively related to liquidity, the loan ratio and the bank's age. The negative relationship between operating performance and banks' age suggests that 'older', and mostly newly privatized, state-owned banks have inherited significant cost inefficiencies from the old regime. As such, there is a need to intensify reform efforts to improve.

Lastly, Kagecha (2014) in his assessment of the impact of bank size on commercial bank performance in Kenya used a panel data for the period of 2007-2014 and system generalized method of moment (GMM) estimation technique in order to overcome the endogeneity problem. The findings revealed that bank size, capital adequacy, liquidity, age and asset quality do not count in determining bank profitability. Also, previous period's profit, GDP growth, inflation and market concentration have a positive and statistically significant effect on bank profitability in Kenya

# III. METHODOLOGY

This segment handles the method that would be used in carrying out the study. The following items were discussed: Research design; Population of the study; Sampling and sampling technique; Method of data collection; Research instrumentation; And lastly, methods of data analysis.

# 3.1 Research Design

The *ex-post facto* research design will be used for this study. This design provides a robust framework for diagnosing the need for change and for the planning of privatization interventions in transition economies. Furthermore, it gives researcher the opportunity to look at whatever he is studying in so many various aspects and to provide a bigger overview as opposed to other forms of research.

# 3.2. Population of the study

The population of this research consists of all the privatized public companies right from the implementation of the privatization exercise in 1988. While the target population consists of all the nine (9) privatized federal government - owned deposit money bank (DMBs) (formerly known as commercial bank) (Bureau of Public Enterprises (May, 2017); FBN Plc Financial Statement 2016, UBA Financial Statement 2012 and TCPC Final Report Vol. II (1993)). The sample size is all the privatized banks that meet the following conditions:

- i. The privatized federal government- owned bank with going concern status.
- ii. Privatized federal government owned banks having their share traded at the floor of the Nigerian Stock Exchange (NSE).
- iii. The bank that has retained its brand name identity; for the purpose of clarity and consistency.
- iv. The bank with up to date financial records.
- v. The bank not involve in legal tussle (court issue).

In line with the aforementioned, this selection process has reduced the sample size to the following three privatized federal government owned deposit-money banks (DMBs):

- i. First Bank of Nigeria Plc. (FBN)
- ii. United Bank for Africa Plc. (UBA)
- **iii.** Union Bank of Nigeria Plc. (UBN)

# 3.3 Method of Data Collection and Analysis

Secondary data were used and these data were obtained from the following: Audited and published reports and accounts of relevant banks; The CBN's statistical bulletin and annual reports; Nigeria Deposit Insurance Corporation (NDIC), NSE Factbook and BPE, because these are the only sources where information concerned the privatized deposit money banks can be obtained.

Hypothesis was subjected to statistical tests and data using panel regression analyses to arrive at findings and conclusion. The panel regression analysis was chosen due to the following reasons: It simplifies computation and statistical inferences; it is used for constructing and testing more complicated hypotheses; it is used to examine the relationship between several independent variables and a dependent variable; and lastly, panel regression model facilitates the analyzes of the relative influences of these independent, or predictor, variables on the dependent, or criterion, variable, and making the research more robust (Hsiao & Yanan, 2006; Weedmark, 2017).

# 3.4 Operationalization of Variables

The operationalization of the research variables are presented below:

X= Independent Variable Y= Dependent Variable X= Independent Variable (Privatization) Y= Dependent Variable (Financial Performance) (Return on Capital Employed) Y= f(X)X= ( $\times_1, \times_2, \times_3, \times_4, \times_5$ ) Where:  $\times_1$  = percentage of shareholding = (SH)  $\times_2$  = Age of the bank = (AG)  $\times_3$ = No of directors = (ND)  $\times_4$  = Incremental asset size = (AZ)  $\times_5$  = Leverage = (LV)

 $\begin{array}{l} Y_{=}\left( _{y_{1}}\right) \\ _{y_{1}=} Return \ on \ Capital \ Employed \ (ROCE). \end{array}$ 

Functional relationship

ROCE = f (SH, AG, ND, AZ, LV) Equation 1 PERF = f (SH, AG, ND, AZ, LV) Equation 2 Model ROCE<sub>it =</sub>  $\beta o + \beta_1 SH_{it} + \beta_2 AG_{it} + \beta_3 ND_{it} + \beta_4 AZ_{it} + \beta_5 LV_{it}$ + o:

# IV. DATA ANALYSIS, RESULTS AND DISCUSSION OF FINDINGS

This segment discusses the data analysis, results and discussion of findings.

4.1 Panel Least Square (PLS) Before Privatization Policy

To determine the impact of privatization on return on capital employed (ROCE) in selected DMBs in Nigeria before privatization, the panel least square (PLS) method of estimation was used. Before the analysis, a series of diagnostic tests were carried out to ascertain the statistical soundness of the models and whether they could be used for forecasting (Gujurati, 2004). The statistics results obtained under the different tests show that we can proceeds for panel Co-integration test in order to determine the long effect among the variables.

Table 4.1: Panel Co-integration Result Before Privatization (H<sub>0</sub>)

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.672717	11.36091	4.467466	0.0000

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

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

#### Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.672717	11.36091	4.467466	0.0000

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

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

Results in Table 4.1 show that there is cointegration relationship between the dependent and independent variables in the model. Thus, with the null hypothesis which states that no co-integration against the alternative which state that common auto regression coefficient (within-dimension) and individual auto regression coefficient (between-dimension) -

we cannot reject the alternative hypothesis for both groups and the study concluded that there is long run relationship between ROCE and Privatization Components.

Panel Least Square (PLS) Before Privatization Policy for Hypothesis

Dependent Variable: D(ROCE)				
Method: Panel Least Squares				
Date: 01/12/19 Time: 12:22				
Sample (adjusted): 1983 1991				
Periods included: 9				
Cross-sections included: 3				
Total panel (balanced) observations: 27				
	Coefficient	Std. Error	t-Statistic	Prob.
C	0.412482	5.709070	-0.819261	0.4234
SH	3.406009	5.684643	0.599160	0.5565
AG	3.423832	7.453152	0.459380	0.6515
ND	0.704892	6.817532	0.103394	0.9188
AZ	-0.840500	6.390115	-0.131531	0.8968
LV	-3276.432	1851.345	-1.769758	0.0937
R-squared	0.619293	Mean dependent var		-2.634444
Adjusted R-squared	0.450089	S.D. dependent var		568.6355
S.E. of regression	421.6771	Akaike info criterion		15.18756
Sum squared resid	3200609.	Schwarz criterion	15.61950	
Log likelihood	-196.0320	Hannan-Quinn criter.		15.31600
F-statistic	3.660050	Durbin-Watson stat		2.077278
Prob(F-statistic)	0.110588			

Table 4.2: Panel Least Square Regression Before Privatization (H<sub>0</sub>)

Source: E-VIEW Output (2019)

The estimated regression equation from the analysis is stated below:

ROCEit =  $\beta o + \beta 1$ SHit +  $\beta 2$ AGit +  $\beta 3$ NDit +  $\beta 4$ AZit +  $\beta 5$ LVit + eit

 $\begin{array}{rcl} ROCEit &=& 0.412482 &+& 3.406009SH &+& 3.423832AG &-\\ 0.704892ND &-& 0.840500AZ &-& 3276.432LV \end{array}$ 

Table 4.2 illustrates the panel regression results on the impact of privatization on return on capital employed (ROCE) in selected deposit money bank in Nigeria before privatization. From Table 4.2 results show that percentage of shareholding (SH), number of director (ND), and age of the bank (AG) of banks positively affect ROCE, but are statistically insignificant. Also, the panel regression result shows that incremental assets size (AZ) and leverage (LV) showed negative and insignificant effect on ROCE. Furthermore, the value of adjusted  $R^2$  explained that 45% of the variation in the ROCE is explained by the independent variables used in the model. The F-statistics for the model indicated was statistically insignificant at 5% level of significance, therefore the model used for the variables in hypothesis is considered not to be fit since the Prob (F-statistic) is greater than 5% level of significance. However, the coefficients of privatization are not significant, meaning that the variables have no significant impact on return on capital employed. Also, the value Durbin Watson (DW) of 2.2 approximately to 2.0 for the model showed an evidence of no serial correlation. Based on this panel result in Table 4.9, the null hypothesis which states that before privatization policy of the government, privatization components such as SH, AZ, LV, ND and AG do not significantly impact on ROCE of selected DMBs before privatization in Nigeria was not rejected.

Before estimation of the model to determine impact of privatization on ROCE after privatization, a series of diagnostic tests were carried out to ascertain the statistical soundness. The statistics obtained under the different tests at 5% level of significance show that we can proceeds for panel Co-integration test in order to determine the long effect among the variables.

#### Panel Co-integration Result After Privatization

Table 4.3: Panel Co-integration Result After Privatization (H<sub>0</sub>)

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.138123	8.472624	3.841466	0.0036
Trace test indicates 1 cointegratin	ng eqn(s) at the 0.05 level			
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (19	999) p-values			
Unrestricted Cointegration Rank 7	Test (Maximum Eigenvalue)			
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.138123	8.472624	3.841466	0.0036
Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

Result in table 4.3 states that no co-integration against the alternative which state that common auto regression coefficient (within-dimension) and individual auto regression coefficient (between-dimension) - we cannot reject the alternative hypothesis for both groups and conclude that there

is long run relationship between ROCE and Privatization Components. Therefore we can go on and test for Panel regression method of analysis.

Panel Least Square (PLS) After Privatization Policy for Hypothesis

Table 4.4: Panel Least Square Regression After Privatization (H<sub>0</sub>)

Dependent Variable: D(ROCE)				
Method: Panel Least Squares				
Date: 01/12/19 Time: 12:51				
Sample (adjusted): 1997 2015				
Periods included: 19				
Cross-sections included: 3				
Total panel (balanced) observations: 57	1	1		
	Coefficient	Std. Error	t-Statistic	Prob.
С	-0.213514	0.210666	-1.013522	0.3159
SH	-0.440164	0.217968	-2.019392	0.0490
AG	-0.210355	0.174507	-1.205426	0.0039
ND	-0.149368	0.238912	-0.625202	0.0048
AZ	0.121459	0.161370	0.752673	0.4553
LV	-16.50167	15.77470	-1.046085	0.0008
R-squared	0.414303	Mean dependent var		-1.383509
Adjusted R-squared	0.316687	S.D. dependent var		25.76905
S.E. of regression	21.30140	Akaike info criterion		9.099362
Sum squared resid	21779.99	Schwarz criterion		9.421949
Log likelihood	-250.3318	Hannan-Quinn criter.		9.224730
F-statistic	4.244208	Durbin-Watson stat		2.022949
Prob(F-statistic)	0.000657			

Source: E-VIEW Output (2019)

The estimated regression equation from the analysis is stated below:

ROCEit =  $\beta o + \beta 1$ SHit +  $\beta 2$ AGit +  $\beta 3$ NDit +  $\beta 4$ AZit +  $\beta 5$ LVit + eit

 $\begin{array}{rcl} \text{ROCEit} &=& -0.213514 & - & 0.440164SH & - & 0.210355AG & - \\ 0.149368ND + AZ & -16.50167LV \end{array}$ 

Table 4.4 presents panel regression output on the impact of privatization on ROCE in selected DMBs in Nigeria after privatization. From Table 4.4, the result showed that SH, ND, AG, and LV negatively affect ROCE, but statistically significant. Also, the panel regression result further showed that AZ showed positive and insignificantly affects ROCE. Furthermore, the value of adjusted  $R^2$  explained that 31.67% of the variation in the ROCE is explained by the independent variables used in the model. The value of F-statistics for the model was statistically significant at 5% level of significance, therefore the model used for this study is considered to be fit since the Prob (F-statistic) is less than 5% level of significance. The results thus were sufficient to support

www.rsisinternational.org

impact of SH, AZ, LV, ND and AG on return on capital employed, implying that privatization had statistically significant impact on ROCE. Also, the value Durbin Watson (DW) of 2.02 approximately to 2.0 for the model showed an evidence of no serial correlation. Based on this panel result in Table 4.4, the null hypothesis ( $H_0$ ) which states that privatization components (SH, AG, LV, and ND) do not have significant impact on return on capital employed (ROCE) of selected deposit money banks (DMBs) after privatization in Nigeria is hereby rejected

#### Discussion

The objective two of this study was to evaluate the impact of privatization on return on capital employed in selected deposit money banks in Nigeria. The study revealed that privatization has impact on return on capital employed. This was supported by Ani, Ugwuta, Ezeudu and Ugwuayi (2012) showed a weak negative relationship with profitability (ROA) at -14.7%, while capital adequacy (ratio of total equity to total assets) disclosed a positive correlation with profitability (ROCE).

This is also buttressed by Coad, Segarra and Teruel (2013), they revealed that the age of firms experience rising levels of productivity, profit, larger size, lower debt ratios and higher equity ratios. But this view is not supported by Jegede, Akinlabi and Soyebo (2013) they concluded that bank age has no significant influence on bank performance. Similarly, Staikouras, Mamatzakis, and Koutsomanoli- Filppaki (2007) disclosed that Operating performance is positively related to loan quality and the asset size, and negatively related to liquidity, the loan ratio and the bank's age.

Theoretically, this finding was supported by property right theory.

Considering both the theory and empirical support for this finding, the study therefore rejected the null hypothesis  $(H_0)$  that privatization does not have significant impact on ROCE in selected deposit money banks in Nigeria.

# V. CONCLUSION AND RECOMMENDATION

This section provides the overall outcomes of my investigation in a brief and logical manner. This segment handles the conclusion, recommendation and suggestion for further studies.

# 5.1 Conclusion

The purpose of this study is to examine the impact of privatization and financial performance (ROCE) of selected deposit money banks in Nigeria (1980-2015). The results from the test of hypothesis, revealed that privatization has significant impact on financial performance (ROCE) in selected deposit money banks in Nigeria.

Furthermore, the benefits of privatization, however, depend on sound market institutions being in place in the country. The countries that manage to ensure property rights protection and the rule of law, impose hard budget constraints, increase competition, and improve corporate governance reap the largest benefits of privatization. However, if appropriate institutions are not in place, privatization often fails to improve performance at the firm level and for the economy as a whole.

In addition, government uses the following five basic techniques to privatize their SOEs: Public offer of equity shares for sale (Share Issue Privatization); Private placement of equity shares; Sale of assets; Management buy-outs and lastly, Deferred public offer. Furthermore, privatization programme through the large-scale share issue privatization (SIP) programmes have resulted to well-developed rapid growth of national stock market capitalization and trading volume. In other words, privatization programme leads to significant improvements in securities market regulation, information rules and other required components of modern financial system.

Lastly, research supports the proposition that privately owned firms are more efficient and more profitable than state-owned enterprises. Deregulation, commercialization, market liberalization and increased use of incentives, can improve the efficiency of SOEs, but it also seems that these reforms would be even more effective and efficient if coupled with privatization.

# 5.2 Recommendations

There should be a minimally corrupt economic environment. Government officials and their cronies do not employ privatization as a quick and efficient means of illegally enriching themselves, extracting corrupt or illegal political rents. The country's corruption level must be relatively low to enable the government record a huge success because part of the reason for the poor performance is due to widespread bureaucratic and lack of due diligence.

In addition, to create a competitive environment privatization must be accompanied or preceded by other forms of economic reforms, namely, deregulation and liberalization, both of which are aimed at opening up the market to competitive pressures. Given that it is possible to privatize without deregulating and liberalizing and to liberalize and deregulate without privatizing. So the reform should cover all the three aspects they go hand in hand.

Furthermore, it is apparent that SOEs have been criticized on the grounds of inefficiency. Privatization policies, therefore, have been considered as a panacea of inefficiency, however, the degree of improvements crucially depends upon the institutional framework of regulation in which the privatized enterprises operate. Therefore, it is essential to develop regulation into a concept of regulatory governance and to integrate it with the broad government agenda.

Lastly, while privatization may decline the financial burden to the loss-making SOEs, the social and economic costs of crime, disease, and other factors are not adequately taken into consideration. To tackle these, emphasis should be on designing of policies that assist the integration into work of those that are likely to fall into long-term employment.

# 5.3. Suggestion for further studies:

This study can be extended to other sectors of the economy and /or the state-owned privatized money deposit banks in Nigeria.

# REFERENCES

- [1]. Ajayi, T. L., & Sosan, M. (2017). *The evolution of Nigeria banking system, supervision and current challenges*. Retrieved on February 23, 2017 from www.academia.edu.
- [2]. Ajibola, R. (2008). *Public finance: Principle and practice*, Avi Publisher: Lagos, Nigeria.
- [3]. Ani, W. U., Ugwunta, D. O., Ezeudu, I. J., & Ugwuanyi, G.O. (2012). An empirical assessment of the determinants of bank profitability in Nigeria: Bank characteristics panel evidence. *Journal of Taxation*, 4(3), 38 – 43.
- [4]. Appiah-Kubi, K. (2001). State-owned enterprises and privatization in Ghana. *The Journal of Modern African Studies*, *39*(2), 197-229
- [5]. Asaolu, T. O. (2015). Privatization in Nigeria: Regulation, deregulation, corruption and the way forward. Being inaugural lecture delivered at Oduduwa Hall, Obaremi Awolowo University,

Ile-Ife on Tuesday, 27th October 2015. Retrieved on July 13, 2017 from

- [6]. Burton, J. (1987). Privatization: The Thatcher case. *Managerial* and Decision Economics. 8(1), 22-29.
- [7]. Carr, J. C., Haggard, K. S., Hmieleski, K. M. & Zahra, S. A. (2010). A study of the moderating effects of firm age at internationalization on firm survival and short-term growth. *Strategic Entrepreneurship Journal*, 4, 183-192.
- [8]. CBN. (2013). Bank intermediation in Nigeria: Growth, competition, and performance of the banking industry 1990 – 2010. Occasional paper No 48.
- [9]. Coad, A., Segarra, A., & Teruel, M. (2013). Like milk or wine: Does firm performance improve with age? *Change Economics Dynamism*, 24(C), 173-189.
- [10]. Coad, A., Segarra, A., & Teruel, M. (2016). Innovation and firm growth: Does firm age play a role. *Research Policy*, 45(2), 387-400.
- [11]. Corplaw Blog. 2017. Theory of corporate governance. Retrieved on January 22, 2017 from: http://www.corplaw.ie/blog/bid/317212/Shareholder-Stakeholder-Theories-Of-Corporate-Governance.
- [12]. Dornigie, P. O. (2012). Privatization and commercialization of public enterprises in Nigeria. Paper presented at the National Conference on Law and Economic Transformation in Nigeria University, Ile-Ife 2012.
- [13]. Duru, C. N. (2000). *The Legislature in the privatization process*. Being the paper delivered on the Fourth Pan-African Summit held at International Conference Centre, Abuja on 19 - 22 November, 2000
- [14]. El-Rufai, N. A. (2000). The Nigerian privatization programme An overview. Being the paper delivered on the Fourth Pan-African Summit held at International Conference Centre, Abuja on 19 - 22 November, 2000, for Judges Held on the 15<sup>th</sup> – 16<sup>th</sup> October, 2001 at the NICON Hilton Hotel, Abuja.
- [15]. Eriki, P. O., & Osifo, O. (2015). Determinants of performance efficiency in Nigerian banking industry: A dea approach. *International Journal of Economics, Commerce and Management, III* (2), 1-13.
- [16]. Etieyibo, E. (2011). The ethics of government privatization in Nigeria. Thought and Practice: A Journal of the Philosophical Association of Kenya (PAK), 3(1), 87-112.
- [17]. Friedman, M. (1970). The social responsibility of business is to increase its profits. *N.Y. Times*, 6(30), 126-127.
- [18]. Gonzalo, J. A., Pina, V., & Torres, L. (2003). Objectives, techniques and valuation of state-owned companies in privatization processes. *Public Management Review*, 5(2), 177-195.
- [19]. Gujarati, D. N. (2004). Basic econometrics (4<sup>th</sup> Edition). McGraw Hill: New York.
- [20]. Hsiao, C., &Yanan, W. (2006). Panel data analysis Advantages and challenges. IEPR Working Paper 06.49, 1-33
- [21]. Huergo, E., & Jaumandreu, J. (2004). Firms' age, process innovation and productivity growth. *International Journal of Industrial Organization*, 22(4), 541-559.
- [22]. Ikechukwu, I. O., & Boniface, U. U. (2016). Examination of the relationship between bank age and bank retention policy (A Study of Zenith Bank (Nig) Plc). *International Journal of Finance and Accounting*, 5(5), 233-239. Retrieved on January 2, 2018 from doi:10.5923/j.ijfa.20160505.03.
- [23]. International Business and Technical Consultants, Inc. Consortium (IBTCI) (2008). Performance assessment of privatized enterprises: A case study First Bank Nigeria Plc. Submitted to Bureau of Public Enterprises-BPE and Department for international Development – DFID, Abuja- Nigeria.
- [24]. Inyiama, O. I. (2015). Effect of banks' financial performance on share prices: evidence from Nigerian banking industry (2004 – 2013). European Journal of Research and Reflection in Management Sciences, 3(3), 69 – 79. Retrieved on January 2, 2018 from http://www.idpublications.org.

- [25]. Jegede, C. A. Akinlabi, B. H., & Soyebo, Y. A. (2013). Corporate governance efficiency and bank performance in Nigeria. *World Journal of Social Sciences*, 3(1), 178-192.
- [26]. Kagecha, P. K. (2014). Bank performance: Does bank size matter? Being research paper submitted to the School of Economics, University of Nairobi, in partial fulfillment of the requirement for the Degree of Master of Arts in Economics
- [27]. Majumdar, S. K. (1997). The impact of size and age on the firmlevel performance: Some evidence from India. *Review of Industrial Organization*, 12:231-241. Retrieved on February 10, 2017 from https://link.springer.com/article/10.1023/A:1007766324749
- [28]. Megginson, N. L., & Netter, J. M. (2001). From state to market: A survey of empirical studies on privatization. *Journal of Economic Literature*, 39(2), 321-389.
- [29]. Morris, G. D., Jean, L. H., & David, R. S. (2008). Shareholder theory – How opponents and proponents both get it wrong. SSRN Electronics Journal, 18(2), 62-66.
- [30]. Muritala, T. A. (2012). An empirical analysis of capital structure on firm's performance in Nigeria. *International Journal of Advances in Management and Economics*, 1(5), 116-124.
- [31]. Odekunle, T. (2006). *Essentials of banking and monetary system in Nigeria*. Jaytees Publisher: Lagos, Nigeria.
- [32]. Olowe, R. A. (2009). Financial management: Concepts, financial system and business finance. Brierly Jones Nigeria limited: Lagos, Nigeria
- [33]. Oloye, M., & Osuma, G. (2015), Impact of merger and acquisition on the performance of Nigerian banks (A case study of selected banks). *Pyrex Journal of Business and Finance*, 1(4), 023-040.
- [34]. Omolumo, I. G. (2005). Elements of banking in Nigeria 4<sup>th</sup> edition. Omolumo Consult: Lagos, Nigeria.
- [35]. Pandey, I. M. (2008). *Financial management*, ninth edition. Vikas Publishing: India.
- [36]. Saul, E., & Adeline, P. (2018). Privatization in developing countries: What are the lessons of recent experience? *The World Bank Research Observer*, 33(1), 65-102.
- [37]. Staikouras, C., Mamatzakis, E., & Koutsomanoli-Filippaki, A. (2007). Operating performance of the banking industry: An empirical investigation of South Eastern European Region. *Southern – Eastern European Journal of Economics*, 2, 205-266.
- [38]. Technical Committee on Privatizations & Commercialization Final Report (TCPC) Vol. II, June 1993. The Presidency, Abuja
- [39]. Usman, S. (2000). Creating enabling environment for private sector development in Africa. Paper delivered on the fourth Pan-African Privatizations summit held at International Conference Centre, Abuja on 19 - 22 November, 2000.
- [40]. Vogelsang, I. (1988). Deregulation and privatization in Germany. Journal of Public Policy. 8(2), 195-212.
- [41]. Weedmark, D. (2017). Advantages and disadvantages of a multiple regression model. Retrieved on March 12, 2018 from https://sciencing.com/advantages-disadvantages-multipleregression-model-12070171.html
- [42]. Wessel, H. R. (1991). Privatization in Africa. African Review of Money Finance and Banking, 2, 181-195
- [43]. Wu, H., Chen, C., & Shiu, F. (2007). The impact of financial development and bank characteristics on the operational performance of commercial banks in the Chinese transitional economy. *Journal of Economic Studies*, 34(5), 401-414, https://doi.org/10.1108/01443580710823211