



Determinants of Financial Performance of Five Big Deposit Money Banks in Nigeria

¹Surajudeen Tihamiyu

(isholsurajudeen26@gmail.com)

²Asimiyu Kola Agunbiade

(kagunbiade6@gmail.com)

¹ Abdelfattah Bolarinwa Jimoh

(abdelfattah.ahmادتidjjani@gmail.com)

¹Tajudeen Sunday Jubril

(jubrilade16@gmail.com)

Ojo Mathew Bamidele

(bamideleojomattew123@gmail.com)

¹Department of Banking and Finance, Federal Polytechnic, Offa, Kwara State.

²Department of Business Administration, Federal polytechnic, Offa

Abstract

This study examines bank-specific determinants of financial performance of top 5 listed Nigerian Deposit Money Banks drawn from the Nigeria Stock Exchange for the period spanning 2009-2018 based on the Central Bank of Nigeria 2019 classification. The banks are Access Bank, First Bank of Nigeria Plc, Guaranty Trusty Bank Plc, United Bank for Africa Plc and Zenith Bank Plc. The study employed ex-post facto research design with data from annual reports and financial statements of the sampled banks. Data were analysed using descriptive statistics, correlation and panel least squares (fixed effect) model techniques. Estimated panel results indicated positive and significant effect of capital adequacy ratio and Bank size while deposit ratio, loan to deposit ratio and off-balance sheet activities had positive but not significant on financial performance of five top Nigerian Deposit Money Banks. Based on these findings, the paper recommended among other things, that the regulatory authorities combine adequate capital requirements for banks with early corrective measures to prevent falling below specified levels. In addition, the study also recommended that Management of those Banks should engage in other activities to earn additional income for the decline of their earnings from traditional activities.

Keywords: Deposit, Capital Adequacy, Ratio, Bank Size, Financial Performance.

1. Introduction

Nigerian banks have been playing an important role in the development of Nigerian economy through allocation of resources. Banks generally channel funds from depositors with excess liquidity to those with deficits through a process commonly referred to as the financial intermediation. The process of financial intermediation become successful only when commercial banks realize profit. Financial performance or profitability as measured by return on assets, return on equity, net interest margin and so on are influenced by a number of internal or external factors (Rotich, 2019). The internal determinants influencing financial performance of commercial banks (deposit structure, capital adequacy, loans, off



balance sheet activities, and bank size) may emanate from efforts and control of management and strategic decisions of shareholders. Those internal factors were worked on by management and shareholders of commercial banks to produce the desired outcome.

Financial performance of the banking sector is crucial, as the safety of the sector is closely linked to the safety of the entire economy and stands as a cause for concern to policy makers and economic planners. The gains of the realistic sector of the economy depends on the efficiency of the banks in carrying out the function of financial intermediation (Ani, Ugwunta, Ezeudu & Ugwanyi, 2012). Several efforts were made in the past by the government in promoting sound financial system with the introduction of different economic policies. In spite of these efforts the Nigerian banking industry is still being plague by crises. This crisis further leads to introduction of new banking model which categorized banks license to operate as regional, national or international (Top) bank. Their minimum capital requirements were specified as N10 billion, N25 billion and N50 billion for regional, national and international respectively. A big bank is a bank that meet a minimum capital requirement of N50 billion and operate outside its home country by at least one branch or subsidiary (Takon, Obim & Atseye, 2019). The disappointment of some DMBs for their inability to meet up with anticipated financial performance after consolidation (Access bank/Diamond bank 2019) necessitates a rethink to evaluate their performance thus this study is designed to evaluate the financial performance of 5 top DMBs using determinant factors.

Deposit money banks thrive to maximize their performance by improving on profit with a view to enhancing shareholders' wealth and meeting obligations to other stakeholders in the industry. The determinants of banks financial performance showed positive effect like Saheed (2018), Irawati, Maksum, Sadalia and Muda (2019) while the study of Aspal, Dhawan and Nazneen (2019) revealed negative relationship of financial performance and profitability of commercial banks. Saheed (2018) suggested that additional variable (s) should be included in determining bank profitability. The additional variables have therefore, been incorporated in this paper. The incorporated variables are off balance sheet activities and bank size in addition to an existing variable (s) used by previous researchers.

Banks engage in off balance sheet activities (OBS) hoping to earn additional income to compensate for the decline of its earnings from traditional activities. Bank size also has been taken as a fundamental variable in explaining financial performance. Large bank size has greater access to large wholesale deposit and power to control cost of deposits which can be translated into good financial performance accompanied by cost efficiency (Ahmad, 2019). The influence of each internal factor on financial performance of commercial banks is varied and distinct.

In light of the above, the results from previous studies have not been consistent in all respect and findings were mixed in some cases. It is on this premise that this study is carried out in order to add to the existing body of knowledge by empirically examining the



extent to which deposit structure, capital adequacy, loans, off balance sheet activities and bank size determinants significantly affects financial performance of five top Deposit Money Banks in Nigeria. A 10-year scope of study employed in this work provides several time periods as well as data points for reliable results. This study therefore further attempt an investigation of selected bank-specific determinants of performance of top 5 banks in Nigeria during the period 2009-2018. The broad objective of the study is to examine the determinants of financial performance of deposit money banks listed in the Nigerian Stock Exchange. The specific objectives of this study are to assess the impact of deposits structure ratio on financial performance of 5 top deposit money banks in Nigeria. Determine the effect of capital adequacy ratio and the financial performance of 5 top deposit money banks in Nigeria. Find out the influence of loan to deposits ratio on financial performance of 5 top deposit money banks in Nigeria. Examine the relationship between off-balance sheet activities and the financial performance of 5 top deposit money banks in Nigeria. Investigates the effect of bank size on financial performance of 5 top deposit money banks in Nigeria. The findings of this study would contribute practically and theoretically to the various stakeholders as well as provide a basis for policy formulation. The study will assist stakeholders in the banking industry to ascertain the determinants influencing financial performance of Nigerian banks under the control and purview of management and shareholders. The result of the study will also assist the regulatory agencies like Central Bank of Nigeria (CBN) and Nigerian Deposit Insurance Corporation (NDIC) in formulating policies. Other researchers and academicians who will be pursuing disciplines related to the study will use the research finding as a framework for their research. This will add value to the existing pool of knowledge.

2. Literature Review

Deposits Structure

This comprises of mostly funds kept in banking institutions for various account holders (Current Account, Saving Account, Term Deposit Account) among others. The capacity to disburse loans to customers is based on the volume of deposit that has an affordable interest income and in due course financial performance. Deposit money banks hold excess of deposits over loans to absorb interest expense and opportunity costs to match their volume of deposits with volume of loans (Rotich, 2019). Dilrangi, Udayarathna, Pathiraja, Madhubhashini and Bandara (2018) show evidence that deposits improve banks profitability positively. Meanwhile, lack of loan demand or poor management of the bank's liquidity could lead to negative effect of deposit in terms of the required networking and remuneration (Tariq *et al*, 2014). This study used total deposit divided by total assets to measure deposit structure because it determines the liquidity position of the banks selected for the work.

Capital Adequacy

Capital adequacy is the volume of capital required for a bank as stipulated by the regulatory and supervisory authorities to achieve the banks financial health and soundness



(Saheed, 2018). It is the ratios of bank's primary capital to its assets as a measure of financial health (Aspal, Dhawan, & Nazneen, 2019). Banks with a high capital ratio have access to easy funds, more flexible in pursuing business advantage and ability to contain unexpected losses likewise insured against bankruptcy. The use of CAR as a measurement of determinant of financial performance is due to its adequacy as bank equity capital to cover unexpected circumstances. It describes the bank's aptitude to withstand losses or face financial risks (Syahyunan *et al.*, 2017). Capital adequacy ratio is measured by the ratio of total capital to total risk-weighted assets. The CAR limit is determined by the monetary authority of a country in which the bank operates thereby indicating the health status of the banking system. High CAR gives banks high power to deal with financial hazards. CBN stipulates that the Capital Adequacy Ratio at Commercial Bank is at least 8%.

Loans to Deposit Ratio

The effect of loans on profitability is expected to be positive, as the greater the number of loans, the higher the income for banks. In banking literature, Menicucci and Paolucci (2016) showed that loans contribute to banks' profitability. An increase in loans could escalate the costs of funds and could result to a negative correlation between profitability and loans. Additionally, banks' lending activities are sensitive to economic conditions and during slow periods more loans are expected to default which may lead to a negative impact on profitability. However, there are reasonable theoretical reasons to expect either a positive or negative effect on loans on profitability. Al-Harbi, (2019); Rekik and Kalai, (2018) found a negative relationship between loans and profitability. Therefore, there are rational theoretical motives to expect a negative effect for loans on profitability. This is measured by loan and advance divided by customer deposits.

Off-balance sheet activities

Banks engage in OBS activities which simply means wanting to earn additional income to compensate for the decline of its earnings from traditional activities. The empirical findings of Al-Harbi, (2019) and Petria, Capraru and Ihnatov, (2015) provide evidence for that. Conversely, banks that are heavily involved in nontraditional activities are subject to higher risks (market and macroeconomic) that may lead to lower profitability. This corroborated by the study of Rahman, Hamid, and Khan, (2015) and Saona's (2016) study. This study used other operating income to total assets as a proxy of off-balance sheet activities. The study predicts a positive relationship between OBS and profitability (return on assets (ROA) and measured by dividing other operating income with total assets.

Bank Size

Bank size is determined by its total asset. Total asset indicates how much money the bank has and how much money the bank invested in the things that could make more money (Irawati, Maksun, Sadalia, & Muda, 2019). Eyigege (2018) opined that bank size stands as the quantity, array of production capability, potential a firm possess plus diversity of services make available concurrently by bank clients. Larger banks expected to perform better because of the advantage of economy of scale (Irawati *et al.*, 2019) Mehrjardi (2012)



found that there was positive relationship between bank size and profitability of banks. This study is measured by log of Total assets of banks.

Financial Performance

Performance is the result of overall operations and organizational strategy. Measuring performance accurately is very important and become the center of attention for every organization. Banks measure their performance through profitability. ROA is an essential indicator normally employed in determining the performance of Banks profitability. The higher the ratio, the better the profitability of banks (Herry, 2015). The ratio is computed through dividing Profit after tax by total assets. ROA shows how banks are able to generate income from their assets which may be biased because of off- balance sheet activities, (Samuel 2015). However, the principally used measure for determining bank performance is the Return on Assets as not misrepresented by high equity multipliers. ROA is therefore a common indicator of bank profitability (Saheed, 2018). ROA will be used to proxy financial performance in this study.

Conceptual Framework

A conceptual framework is the diagrammatic expression highlighting the relationship between the dependent variable financial performance (ROA) and the independent variables (Deposits, Capital Adequacy, Loans, Off-Balance Sheet Activities and bank size) of five top Deposit Money Banks listed in Nigeria Stock Exchange. Their relationship was presented schematically in the conceptual framework;

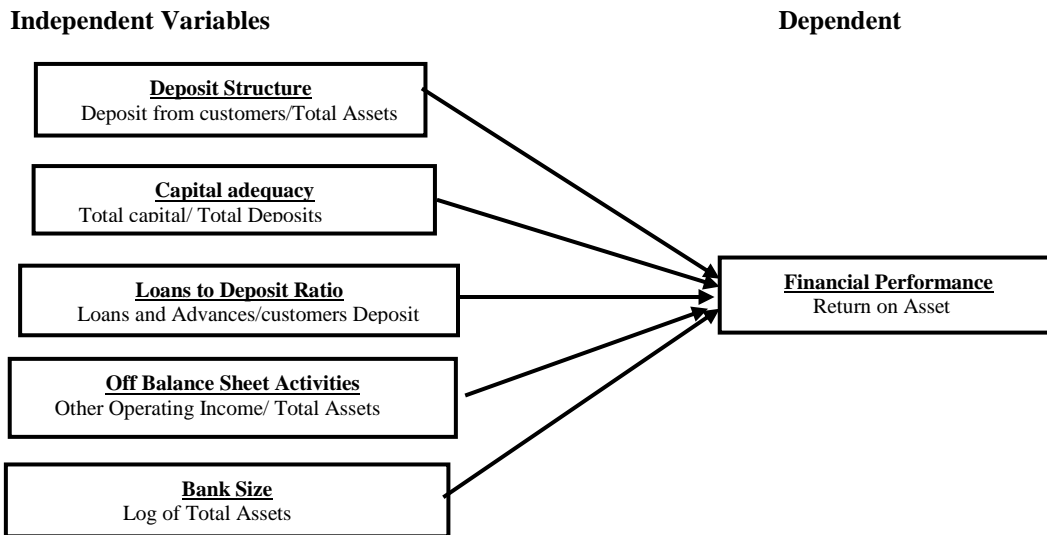


Figure 1: Conceptual Framework
Source: Researcher (2020)



Theoretical Review.

This theory was postulated by Gurley and Shaw (1955). The theory focused on information asymmetry and agency theories where financial intermediaries plays the role of middlemen between financial capital providers and the consumers of funds (Rotich, 2019). The theory assumed that there are few dominant players in the market where the major objective is market share expansion as opposed to profit maximization, and product offering is similar for all the financial intermediaries (Andries, 2009). The theory suggested that financial intermediaries facilitate risk transfer between market players and it act as agent in the complex financial systems that is characterized by uncertainties in the current financial markets (Bollen, 2016). Financial intermediaries influence the volume of deposits (deposit structure) and levels of liquidity (total Assets) while funding of net borrower's influences the volume of loans, traditional earnings (off balance sheet activities), and capital adequacy which are all having effect on the profit generation (return on assets) of deposit money banks. The theory was criticized based on the microeconomic tools used for analysis which was expected to be uniform rather than divergence. Olokoyo, Adetiloye and Ikpefan (2016) for instance described financial intermediaries as the use of loans as inputs to produce money while other scholars describe financial intermediaries as the use of deposits as inputs to avail money. Despite the criticism, the theory still determine the factors that induce financial performance (Rotich, 2019). Likewise, this study is attempting to bring out the important role of financial institutions in mobilizing deposits and funding net borrowers.

Empirical Review

Van-Thep and Day-Yang (2019) studied the determinants of financial soundness of commercial banks in Vietnam. Using logistic regression model for its data analysis with CAMELS and BMA approach for model selection. The study discover that overhead and deposit have a negative impact on the financial soundness of commercial banks. Also, Olaoye and Olarewaju (2015) examined the contribution of bank specific as well as macroeconomic factors to the variation in profitability across banks over time in Nigeria domestic economy and found that Deposits have negative impact among others, and a high significant relationship between deposits and profitability of commercial banks. The study concluded that deposit mobilization which is under the control of bank management can be harnessed to improve bank performance. Likewise, deposit mobilization should be a focus to enhance lending performance to ensure functional plans on profitability as reported in the work of Biwet (2018) who investigated the determinants of lending of deposit money banks in Nigeria for the period 1990 to 2014. The study employed Augmented Dickey fuller (ADF), Multiple regression analysis and Granger Causality test to test the effect of the volume of deposit on determinants of lending. The study revealed a positive relationship between volume of deposit and profitability of commercial banks. to test the effect of the volume of deposit on determinants of lending. The result revealed that there is a positive relationship between volume of deposit and profitability of commercial banks. Isiyaku (2017) in his study believed that off balance sheet items have positive and



significant relationship with liquidity risk, profitability, capital adequacy, and bank size except credit risk which had a negative and insignificant effect on off balance sheet activities. The study assessed the relationship between Bank Specific Attributes and Off-balance Sheet Activities of quoted deposit money banks in Nigeria for a period of 6 years (2009-2014). The study adopted Correlational research design and multiple regression technique of analysis. The study recommended that the policy makers should pay attention to these activities and monitor their use.

Recently Akinkunmi (2017) in his study of factors that influence the level of bank profitability after recapitalization, panel data set between 2001 and 2015. Ordinary least Square and GMM technique was adopted. The study revealed a positive effect of capital adequacy as one of the key determinants of banks profitability in the long run. In addition, Saheed (2018) examined internal factors affecting profitability of Deposit Money Banks in Nigeria from 2008 to 2016 using Feasible Generalized Least Square (FGLS). The study found that Capital Adequacy had a positive and significant relationship with bank profitability. Loans also influence financial performance of commercial banks because it is the major avenue of interest income which forms the major source of revenue for commercial banks in Nigeria. In furtherance to the work of Rotich (2019) the study examined the determinants influencing financial performance of commercial banks listed in Nairobi for a period of 2005-2017. The study employed multiple regression model. The study found a positive significant relationship between customers' deposits and ROA and ROE. More so, Al-Harbi (2019) suggests that off balance sheet items foster on bank profitability in their study of the effect of internal and external variables on the profitability of conventional banks operating on developing and underdeveloped countries of the Organization of Islamic Corporation (OIC) States from 1989 to 2008, the study employed Ordinary Least squares fixed effects model.

3. Methodology

The study adopted *ex-post facto* Research design. Ex post facto means drawing from what has been done before. The research design was employed because it is appropriate for the purpose of achieving the objectives of the work since the study also investigates the relationships among the relevant variables and the data input were mainly from secondary data. Another justification for adopting this method is because it involves the collection and evaluation of data related to past events that are used to described causes, effects and trends that may explain present or future events.

The population for this study comprises of 5 top deposit money banks listed on the floor of the Nigerian Stock Exchange as at 31st December 2019. The five deposit money banks were selected because they are listed on the Nigeria Stock Exchange and they have their data readily available at the Nigeria Stock Exchange. Purposive sampling technique was employed. The study used the panel data extracted from annual reports and financial statements of the sampled banks over the period of the study. The data of this study were collected through the instrument of documentation.



Table 1: Measurement of Variables

Variables	Measurement
<i>Dependent variable</i>	
Return on Assets (ROA)	Profit After tax/Total Assets
<i>Independent variables</i>	
Deposits Structure	Customer deposits/Total Assets
Capital Adequacy	Total Equity capital/Total customer deposits
Loan to deposit ratio	Loan and Advances/Total Deposits
Off Balance Sheet Activities	Other operating income/Total Assets
Bank Size	Log of Total Assets

The Panel Ordinary Least Square of Multiple Regression technique was applied as a tool for hypotheses tests, this owe to the fact that it is an appropriate parametric tool that estimates the impact of one or more variables on another, especially when that data is of parametric nature. The data was analysed by using either Fixed Effect or Random Effect Model. Hausman Test was applied to ascertain the best model for robustness and generalization of hypothesis ratio (s). Hausman test was conducted under the following hypothesis: H0 = random effect model result is accepted, and H1 = fixed effect model result is accepted.

A P-value of 0.05 or less would allow us to accept the result of fixed effect model; otherwise, random effect would be accepted. The appropriateness of either of the models was based on Hausman test recommendation because the Hausman specification test guides in selecting appropriate panel data model which could be either fixed effects method or Random effects model, (Susan 2014).

$$ROA=f(DER, CAR, LDR, OBSA, BS) \dots\dots\dots 1$$

$$ROA=\beta_0+\beta_1(DER)_{ij}+\beta_2(CAR)_{ij}+\beta_3(LDR)_{ij}+\beta_4(OBSA)_{ij}+\beta_5(BS)_{ij}+\epsilon_{ij} \dots\dots\dots 2$$

Where; ROA = Return on Assets., DER = Deposit. CAR = Capital Adequacy Ratio., LDR = Loans, OBSA = Off Balance Sheet Activities., BS = Bank Size, β_0 = Constant term; $\beta_1 - \beta_5$ = Coefficients of independent variables., i, j = Cross sectional and time series indication; ϵ_{ij} = error term,

4. Results

The result of data analysis and hypothesis testing is presented below. The outputs of descriptive statistics, correlation matrix table and subsequently, the summary of regression were also discussed. Necessary policy implications of the findings were made.



Descriptive Statistic

Table 2: Descriptive Statistic Result

Variables	Obs	Means	Minimum	Maximum	Std dev
ROA	50	0.022995	-0.009898	0.061537	0.014727
DER	50	0.670818	0.518820	0.821688	0.069404
CAR	50	0.234967	0.139797	0.444672	0.063998
LDR	50	0.675072	0.390597	0.942337	0.149732
OBSA	50	0.003874	0.000122	0.041543	0.006606
BS	50	14.67253	13.42227	15.53260	0.496400

Source: Author's Computation, 2021

Table 2 above indicate 50 observations for 5 top deposit money banks in Nigeria over the study period. The mean of the return on asset (ROA) is 0.022995. This showed that on average banks earned a profit after tax of 2.29% of the total assets. This revealed that there is efficient management of bank resources from all the institution, the higher the ROA the more efficient is the bank in utilizing its resources. The maximum value of ROA was 0.061537 and minimum value of -0.009898. This signifies that, the most profitable bank among the sampled 5 top banks earned 6.15% for single investment in the assets of the firm. Meanwhile, the least profitable bank of the sampled 5 top banks 1% loss for each of single investment in the assets of the firm. This loss may be due to improper expense management cum high operating cost from poor performance. Deposit ratio has a mean of 0.670818 with standard deviation of 0.0694, minimum and maximum value of 0.5188 and 0.8216 respectively. This implies that the 5 top banks are having large deposit to run the affairs of the banks. Capital adequacy ratio has a mean value of 0.2349 with a standard deviation of 0.0639, while the maximum and minimum value of 0.4446 and 0.1397 were recorded respectively. This implies that the capitalization of 5 top banks is 23.49% on average largely in accordance with international prudential regulation of 8% Basel II. Loan to deposit ratio has a mean value of 0.6751 with a standard deviation, maximum and minimum value of 0.1497, 0.9423 and 0.3905 respectively. This implies that the banks are holding high loan ratio of 67.51 which is very risky and, can result to non-performing loan. Off balance sheet activities has a mean value of 0.0038, maximum and minimum value of 0.0415 and 0.0001 respectively. This implies that off balance sheet activities have lesser effect on return on assets. Bank size which is measured by the natural logarithm of total assets (LTA) has a mean value of 14.6725 with a maximum and minimum value of 15.5326 and 13.422 respectively and the standard deviation of 0.4964. This implies that within the study period the sampled banks have a small variation in their total assets.

Correlation Coefficient

The table below presents the correlation values between the dependent variable and the independent variables and also the relationship between the independent variables themselves.



Table 3: Correlation Result

	ROA	DER	CAR2	LOAN	OBSA	BS
ROA	1					
DER	-0.2164	1				
CAR	0.4462	-0.5290	1			
LDR	0.2265	-0.7429	0.6749	1		
OBSA	0.4404	-0.0869	0.0755	0.0918	1	
BS	-0.0463	-0.1717	-0.5263	-0.1756	0.1368	1

Source: Author's Computation, 2021

From the Table 3 above, the matrix shows that the relationship between the independent variables does not reveal any presence of the problem of multicollinearity. Multicollinearity occurs as a problem when the correlation is greater than 0.80 as stated by Kennedy (2008). All correlation coefficients are less than 0.80, this implied that the independent variables: deposit ratio and Bank size had negative relationships with dependent variable (ROA) of listed Nigerian banks while capital adequacy, loan to deposit ratio and off-balance sheet activities had a positive relationship with ROA of Listed Nigerian banks.

Hausman Test Result

Table 4: Hausman Test Result

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	21.368096	5	0.0007

Source: Author's Computation, 2021

In analyzing the determinant of financial performance of Nigerian banks listed in the stock exchange using return on asset. The result in Table 4 accepts the null that the fixed effect model significantly performs well than the random effect and therefore use the fixed effects model, given the chi-square statistics to be 21.3680 with a p-value of 0.0007 which is less than 0.05 significance level and therefore significant.

Panel Least Square Regression ROA (Fixed Effect)

In analyzing the regression result of ROA on set of independent variables such as DER, CAR, LDR, OBSA BS, the regression results in Table 5 revealed that the value of R^2 was 0.85106 indicating that 85.11% of variance in financial performance (ROA) that was explained by the independent variables. This implied that the other 14.89% of the variance in the financial performance was explained by other factors that were not considered by the study. It was thus observed that the independent variables and the dependent variable were statistically related. The Durbin-Watson of 1.86 is near 2 indicating no presence of autocorrelation of the variables. The F-Statistic tested the overall significance of the variables considered in this study. The F –Statistic calculated for the study is 9.841 with Prob. of F – Statistic 0.000 is relatively high which implied that in aggregate, independent variables have significant impact on dependent variable.



Table 5: Regression Results

Variables	Coefficient	t-statistic	P-value
C	-0.078178	-1.567590	0.1271
DER	0.090117	1.597511	0.1203
CAR	0.063032	2.9999087	0.0053
LDR	0.037545	1.717453	0.0959
OBSA	0.160197	0.644625	0.5239
BS	0.023919	3.356216	0.0001
R-squared	0.851061	F-(Statistics) 9.841039	
Adj R-squared	0.764580	Prob F- (statistic) 0.0000***	
S.E. of regression	0.007145	Durbin-Watson stat 1.859	

Source: Author's Computation, 2021

Base on the regression result in Table 5, the coefficient of deposits structure was 0.090 with p-value 0.1203 > 0.05 level of significance. This implies a 1% increase in deposit ratio led to an increase of 9.01% on return on assets of the 5 top deposit money banks. Therefore, the study accepts the null hypothesis that deposit ratio has no significant influence on financial performance of 5 top deposit money banks in Nigeria. This study corroborates the work of Saona, 2016 and Menicucci & Paolucci, (2016). Meanwhile Rahman *et al*, (2015) is in contrary that deposit ratio positively on financial performance of deposit money banks in Nigeria. As expected, the effect of capital adequacy represented by total capital to total deposits showed a positive coefficient of 0.063032 and significant at 5% on ROA, a measure of financial performance. Basically, 1% change in equity fund obtained from shareholders leads to an increase in bank profitability by 6.30% while other factors are held constant. Therefore, the study rejects the null hypothesis that capital adequacy has no significant effect on the financial performance of 5 top deposit money banks in Nigerian. This implies that the banks under study can absorb losses and manage risk exposure with shareholders. This result is consistent with that of Mahmud & Datta (2018), Almasari & Alamiri (2017), Amahalu, Okoye, Chinyere and Okika (2017). As anticipated, the coefficient of loan to deposit ratio by loan and advance to customer's deposit (LDR) revealed a positive coefficient of 0.037545 and statistically insignificant at 5% level of significance on ROA of banks in Nigeria. 1% increase in loan to deposit ratio will lead to an increase in financial performance by 3.75% while other variables remain constant. However, the null hypothesis that Loan to deposit ratio has no significant impact on the financial performance of 5 top Deposit Money Banks in Nigeria is accepted. This result is consistent with findings of Ishmael, (2015), Melaku, (2016), Belguith & Bellouma (2017), and Rekik & Kalai, (2018).

The coefficient of off-balance sheet activities variables (0.160197, P-value 0.523>0.05) level of significant showed positive but no significant relationship with financial performance (ROA). This means 1% increase in off balance sheet activities will lead to



16.01% increase on return on assets of the 5 top deposit money banks. Therefore, the study accepts the null hypothesis that off balance sheet activities have no significant relationship with financial performance of 5 deposit money banks in Nigerian. As shown by our finding, the result of Saona, (2016) and Menicucci & Paolucci, (2016) supported a positive impact of off-balance sheet activities on financial performance. Meanwhile Rahman *et al*, (2015) is in contrary to it. Finally, the coefficient of bank size (0.23959, P-value 0.0001 < 0.05) level of significant showed a positive and significant influence on financial performance of 5 top deposit money banks in Nigeria. This means 1% increase in Bank size will lead to 23.95% in financial performance of banks. The study rejects the null hypothesis that Bank size has no significant effect on the financial performance of 5 top deposit money banks in Nigerian. This is supported by the study done by Chege (2017) in Kenya which is contrary to the finding of Kagecha (2014) that show bank size doesn't matter toward financial performance of bank.

5. Conclusion and Recommendations

Capital Adequacy Ratio and Banks Size Variable have positive and significantly influence on five top deposit money banks' financial performance, while other variables that is, deposit structure, loans, off balance sheet activities have positive but not significant influence on financial performance. The CAR that has positive influence on financial performance suggest that the bank with more capital equity should have more advantage in managing its operation in facing financial risk. The variable Bank Size being positively influence in financial performance suggest that an increase in bank size leads to an increase in bank profitability. The bigger the bank size the more the competitive advantage, because in facing the competition, the bank have relatively high capital to respond with. In addition, this research revealed that Loan has an influence on financial performance in positive way but insignificantly. It means that there is an improvement in the monitoring of loan repayment based on corporate governance across banks in the country, which have generated accurate and reliable credit information on bank borrowers as a way of assessing the repayment capabilities of the customers granted credit facilities. This will definitely reduce the incidents of non-performing or abandoned loans in the banks under study. This research further stipulated that off balance sheet activities which represent income from other traditional activities has greatly contributed to financial performance as monitored. The study recommended that the regulatory authorities should combine adequate capital requirements for banks with early corrective measures so as to prevent capital from falling below specified levels. Supervision and constant field examination of banks should also be intensified in the management of the banks. Likewise, management of those Banks should engage in other activities to earn additional income for the decline of their earnings from traditional activities.

Reference

Akinkunmi M. A., (2017). Determinants of banks' profitability in Nigeria: Does relative market power matter? *Journal of Finance and Bank Management* 5, (1), 42-53



- Al-Harbi (2019). The determinants of conventional banks profitability in developing and underdeveloped OIC countries *Journal of Economics, Finance and Administration Science* 24 (47):4-28
- Almasiri, A.A., & Alamiri, A.M. (2017). The effect of capital adequacy on profitability: A comparative study between Samba and Saab banks of Saudi Arabia. *International journal for economics, commerce and management.* (5) 11:86-102
- Amahalu, N., Okoye, E.I., Nweze, C., Chinere, O., & Okika, C. (2017). Effect of capital adequacy on financial performance of quoted deposit money banks in Nigeria. *International Conference on African Entrepreneurship and innovation for sustainable development.* Chapter 57:841-862.
- Amene T. B. & Alemu G.A. (2019) Determinants of financial performance in private banks: A case in Ethiopia. *African Journal of Business Management.* 13(9), 291- 308
- Andries, A.M. (2009). Theories regarding financial intermediation and financial intermediaries: A Survey. *Fascicle of the faculty of Economics and Public Administration.* (9) 2:254-261
- 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 Accounting and Taxation.* 4(3).
- Aspal P. K., Dhawan S. & Nazneen A. (2019). Significance of bank specific and macroeconomic determinants on performance of Indian private sector banks. *International Journal of Economics and Financial* 9(2), 168-174.
- Belguith, H., & Bellouma, M. (2017).The impact of loan portfolio diversification on Tunisian banks profitably. *International journal of emerging research in management and Technology.* (6) 6:35-45.
- Biwet M. I., (2018). An analysis of determinants of deposit money banks' lending in Nigeria, *Journal Perspektif Pembiayaan dan Pembangunan Daerah* 6. (3), 353-362
- Dilrangi, A., Udayarathna. R., Pathiraja. M., Madhubhashini. P., & Bandara, D. (2018). The effect of level of deposits on financial performance-A study on listed commercial banks in Sri Lanka. University of Sri Jayewardenepura. Sri Lanka.
- Eyigege, A. I, (2018). Influence of firm size on financial performance of deposit money banks quoted on the Nigeria Stock Exchange. *International Journal of Economics and Financial Research* 4(9), 297-302.
- Gurley, J.G., & Shaw, E.S. (1955). Financial aspects of economic development. *The American Economic Review*, 45(4), 515-538.
- Herry A. B., (2015). Banking profitability: How does the credit risk and operational efficiency effect?
- Irawati, Maksum, Sadalia & Muda (2019). Financial performance of Indonesian's banking industry: The role of good corporate governance. capital adequacy ratio, Non-performing loan and size. *International Journal of Scientific and Technology Research* 8 (4): 2277-8616.



- Ishmael A. G. & Benjamin A, (2015). Determinants of bank profitability in Ghana. *International Journal of Accounting and Financial Reporting*. 5(1)
- Isiyaku H. (2017). Bank Specific Attributes and Balance Sheet Activities of Quoted Deposit Money Banks in Nigeria, Unpublished M. Sc in Accounting and Finance Thesis Ahmadu Bello University, Zaria
- Mahmud, A., & Datta, C.K. (2018). Impact of capital adequacy on profitability under Basel II accord: Evidence from commercial banks in Bangladesh. *European journal of business and management*. (10) 8:48-58
- Melaku, A. M., (2016). Determinants of bank profitability in Ethiopia: A case study of private deposit money banks. *Research Journal of Finance and Accounting* 7 (7).
- Menicucci, E. & Paolucci, G. (2016). Factors affecting bank profitability in Europe: an empirical investigation. *African Journal of Business Management*, 10 (17), 410-420.
- Olaoye, F. O. & Olarewaju, O. M. (2015). Determinants of deposit money banks' profitability in Nigeria. *Kuwait Chapter of Arabian Journal of Business and Management Review* 4, (9) 10-18
- Olokoyo, F.O., Adetiloye, K.A, & Ikpefan, O.A (2016). Banks intermediation role and industrial output in developing countries. *Medwell journals*. (11) 24:5838-5844.
- Petria, N., Capraru, B., & Ihnatov, I. (2015). Determinants of Banks' Profitability: Evidence from EU 27 Banking Systems. *Procedia Economics and Finance*, 20(15), 518-524.
- Power M. W, Adebisi J. A. & Temitope T.M. (2018). Efficiency ,Customers' Satisfaction and Deposit Money Bank' Performance in Nigeria (2018). *Journal of Economics and Management*. 31 (1): 134 -148.
- Rahman, M., Hamid, K. & Khan, A. (2015). "Determinants of bank profitability: empirical evidence from Bangladesh", *International Journal of Business and Management*, 2 (8), 135-150.
- Rekik, M. & Kalai, M. (2018). "Determinants of banks' profitability and efficiency: empirical evidence from a sample of banking systems", *Journal of Banking and Financial Economics*, 1, 5-23.
- Rotich Y. J., (2019) The determinants influencing financial performance of commercial banks listed in Nairobi Securities Exchange. *Journal of Business Management* 5, (9) 209-312.
- Saheed A. M. (2018). Determinants of Listed Deposit Money Banks' Profitability in Nigeria. *International Journal of Science, International Journal of Finance and Banking Research*. 4, (3), 40-56.
- Samuel Alemu. (2015). Master of Science (Accounting and Finance) Thesis, Addis Ababa University, Addis Ababa, Ethiopian.
- Saona, P. (2016). "Intra-and extra-bank determinants of Latin American banks' profitability", *Revista Mexicana de Economía y Finanzas*, 11 (1), 1-27.



- Syahyunan, M., I, Siregar, H.S, Sadalia, I. & Chandra, G. (2017). The Effect of Learner Index and Income Diversification on The General Bank Stability in Indonesia. *Banks and Bank Systems*. 12(4). 171-184.
- Takon, S. M., Obim, E. N., & Atseye, F. A., (2019). Bank – specific determinants of profitability: evidence from Nigerian mega banks *International Journal of Economics, Commerce and Management*, United Kingdom. VII, (11), 294-307.
- Tariq, W., Usman, M., Mir, H., Aman, I. & Ali, I. (2014), “Determinants of commercial banks profitability: empirical evidence from Pakistan”, *International Journal of Accounting and Financial Reporting*, 4(2), 1-22.
- Van-Thep, N. & Day-Yang, L., (2019). Determinants of financial soundness of commercial banks: Evidence from Vietnam. *Journal of Applied Finance & Banking*, 9(3), 35-63