Retail Banking and Bank Performance: Evidence from Nigeria

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Abstract

This is a correlational research design that intended to examine the nexus between retail banking and financial performance of banks in Nigeria. The Panel Least Squares regression results aided the study in ascertaining the coefficient, standard error, t-statistic and probability. The tabulated ratios were exported to EViews 9.0 to run the panel regression. Data were collected and analyzed based on the annual reports available on the website of 16 banks listed on the Nigerian Stock Exchange as at 31st December 2018 out of the approved 22 commercial banks in Nigeria. The result of findings revealed that Size and Competition significantly impacted on bank performance with a probability of 0.0071 and 0.0178 respectively which is less than 5% degree of significance; and Loans and deposits relationships were all not significantly impacting on bank performance, as the probabilities for all variables were more than the acceptable 5% degree of significance. Based on the outcome of findings the following conclusions were drawn that; Size which is the natural logarithm of Total Assets and Competition which is the natural logarithm of Total Deposit is significantly responsible for bank performance in Nigeria. The study therefore recommended that professional bankers should continually focus on growth and expansion drive that will increase the size of the bank and enable the banks to compete nationally and internationally in order to drive profitability. Banks that want to experience optimum performance should focus more on policies that will attract huge retail deposit to the bank given that the savings component of the total deposit of banks in Nigeria comes at a ridiculously cheap rate to the banks and banks loaned out these deposits at high margin.

Keywords: Cash Reserve Ratio (CRR), deposit mobilization, bank lending, bank led mobile banking

1. Introduction

Financial development is driven by banks, and financial institutions in conjunction with a pool of entrepreneurial talents are pre-requisite for achieving economic development at least in a capitalist economy (Raco, 2013). Deposit is the life of the financial system and through the financial system, individual savings are channeled to the business sector/firms and investment funds are efficiently allocated among firms (Olowe, 2017). There are regulations across the world that ensures that the savers are protected which is the reason there is Cash Reserve Ratio (CRR) and Liquidity Ratio as well as Capital Adequacy Ratio. Global, African and Nigerian view of the financial system is important to the research.

Retail banking is crucial to the growth and financial performance of commercial banks in Nigeria. This is important for research investigation as deposits are used to create loans and investments by commercial banks (Pollard, 2003). Banks provide three (3) key functions – financial intermediation, payment mechanism and promoting entrepreneurs (Mallick and Marjit, 2008). The importance of retail banking and payments is also likely to revive against the background of the current ongoing financial market turmoil. At a time when other sources of income for banks are more volatile, payment services will contribute to banks' business as banks can count on the reliable and regular revenues generated by payment services.

Recently, retail banking has become a key area of strategic emphasis in the United States of America (U.S) banking industry, as evidenced by rising trends in retail loans and deposit shares on commercial bank balance sheets and a continuing increase in the number of bank branches (Clark, Dick, Hirtle, Stiroh, and Williams, 2007). The U.S. banking industry is experiencing renewed interest in retail banking. These activities broadly

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defined as the range of products and services provided to consumers and small businesses have become increasingly relevant over the past years. Retail-related positions now account for larger shares of commercial bank balance sheets, and the number of bank branches continue to grow. In Europe, based on the country-level retail payment service data from across 27 EU markets, evidences confirm that banks perform better in countries with more developed retail payment services, as measured by accounting ratios and profit and cost efficiency scores (Hasan, Schmiedel and Song, 2012).

In Nigeria, there is Cash Reserve Ratio (CRR) which ensures that all deposit does not end in loans. This reduces what eventually ends up as loanable deposit. There is therefore the need to increase the deposit knowing that CRR will impact on the deposit that will be disbursed as loans to the deficit economic agents (Adegbie and Dada, 2018). Deposit Money Banks in Nigeria has continually expanded their deposit drive and in the last 10 years, there has been significant drive towards retail banking in order to source cheap deposit which in turn will be used by the banks to create loans and carry out their investments in fixed income securities such as bonds and treasury bills. In order to carry out their core banking function which is in loans and advances, there is now more focus on retail deposit.

Studies on retail banking performance have been conducted in the USA, UK, and some other African countries (Hasan, Schmiedel and Song, 2012; Clark, Dick, Hirtle, Stiroh, and Williams, 2007; Mlachila, Dykes, Zajc, Aithnard, Beck, et al. 2013). Yet, not so much work has been done on the impact of Size and Competition on the return on assets and bank performance. However, to add to the body of knowledge the current study sought to compare return on assets across banks in Nigeria and to log total deposit and total assets across the banks in Nigeria. Hence an empirical investigation of the nexus between retail banking and bank performance in Nigeria.

2. Literature Review

2.1 Theoretical Framework

The theoretical underpinning of this study is drawn on the concept of profitability and the bank led theory. Profit is the disparity between expenses and income over a period of time, usually annually. A business is organic- it survives and grows; therefore, it is important that a bank earns profit for its long-term survival and growth Ogundipe, Akintola and Olaoye, 2020). It is also necessary that enough profit be earned to maintain the activities of the business to be able to obtain funds for expansion and growth of the bank. Agbada and Osuji (2013) argued that corporate profit planning remains one of the most difficult and time-consuming aspects of bank management because of the many variables involved in the decision, which are outside the control of the bank.

The bank led theory is a banking platform employed by financial institutions like bank to deliver financial services through a retail agent (Mwando, 2013). It is a viable avenue for mobilizing deposits by commercial banks, and a relatively novel model that banks use to raise the level of financial inclusion and facilitate transactions between their customers mostly in locations where there is no bank branch. The bank-led model encourages financial institutions to increase their deposits and thereby guarantees performance of banks.

2.2 Bank Performance

Performance refers to the ability of an object, individual, organization, etc. to function or carry out a task in an effective and efficient way to achieve result. Performance has been measured using indicators such as profitability, market share and sales volume (Ogbuji & Zorbari-Nwitambu, 2017; Zorbari-Nwitambu, 2017). Otekunrin et al. (2019) and Molyneux and Thornton (1992) in separate studies have maintained that the most viable measures of bank performance include return on assets (ROA) and return on equity (ROE). A study conducted by Flamini, McDonald, and Schumacher (2009) revealed that bank profits are high in Sub-Saharan Africa compared to other regions.

Anbar and Alper (2011) analyzed how bank characteristics and the overall banking environment affect both interest rate margins and bank returns. Results suggest that macroeconomic and regulatory conditions have a great impact on margins and profitability. Adegbite, Ayadi, and Ayadi (2008) have demonstrated that lending in the form of external debt could be used to finance capital formations for optimum performance. Lower market concentration ratios lead to lower margins and profits, while the effect of foreign banks have higher margins and profits compared to domestic banks in developing countries, while the opposite holds in developed countries.

Profitability indices vary substantially over time and from one banking market to another (Rose, 2001). Abaenewe, Ogbulu, and Ndugbu, (2013) posit that the amount of net income earned in relation to total assets is an indicator of how efficiently a company uses its economic resources. They further stressed that when the ROE is higher than the ROA, the company has favourable financial leverage. Ordinarily, stock prices and its behavior are deemed to reflect the performance of a firm. This is a market indicator and may not be reliable always.

However, the size of the bank, the volume of deposit and profitability are some of the most popularly adopted performance indices (Abaenewe, Ogbulu, & Ndugbu, 2013). In 2004, CBN embarked on major reform in the Nigerian banking sector with a 13-point agenda and this marked the commencement of the consolidation era. The objective of the reform was to consolidate the Nigerian banks and increase their capital (Owolabi & Ogunlalu, 2013).

As part of the reform, the minimum capital for Nigerian banks was reviewed from N2 billion to N25 billion in July 2004 with effect from 31 December 2005. Prior to the consolidation era, 89 commercial banks were operating in Nigeria. The grave conditions in the Nigerian banking sector under the crisis provoked the post consolidation reform tagged "The Project Alpha Initiative" in 2009 (Sanusi, 2011). In line with the above development, CBN carried out special examination into operation of Nigerian banks with specific reference to the liquidity, capital adequacy and corporate governance in 2008 and from all indications it was evidenced that 10 of the 24 banks were in critical state. In a bid to salvage the banking industry, CBN relieved chief executive officers and directors of 8 banks replacing them with more competent hands and bailed out 9 banks with N620billion public money (Sanusi, 2011). In Similar vein, CBN established the Assets Management Corporation of Nigeria (AMCON) aimed at reducing the problem of liquidity in the banking sector. Subsequently, the number of deposit money banks (DMBs) operating in Nigeria reduced to 20 with 5,810 branches at the end of the fiscal year 2011 (Alabede, 2012).

Consequently, this study considered Nigeria to be a veritable case for investigating the relationship between bank lending and economic growth, for at least two reasons. First, since the reform measures are meant to strengthen the banking system to adequately play its intermediary role between the surplus and deficit unit, there is need to assess the efficacy of the measures in raising the lending ability of banks. Second, since the aim of developments/reforms in the banking sector is to boost economic activities, there is need to determine the level of impact of bank lending on economic growth.

2.3 Retail Banking

Recently, most retail banks have made a push into investment services such as wealth management, brokerage accounts, private banking and retirement planning (Tiwari, Rajnish, & Buse, 2006). Whilst some of these ancillary services are outsourced to third parties (often for regulatory reasons), they often intertwine with core retail banking accounts like checking and savings to allow for easier transfers and maintenance. Retail banking refers to the consumer-oriented services offered by commercial banks which include checking and savings accounts, mortgages and various types of loans and investment services relating to retirement and educational planning (Tiwari, Rajnish, & Buse, 2006). It is the one-stop shop for as many financial services as possible on behalf of retail clients.

Retail banking includes a variety of financial products like, residential mortgage loans, consumer durables loans, auto finance, deposit products, etc. (Manoj, 2003). However, of these varying products consumer and housing loans occupy accounts for more than 80% of the total retail credit of almost all the banks. This is because these loans are comparatively safer; these are supported by mortgage of the property financed and the default rate on an average is less than 1%, annualized. Further, housing represents one of the primary requisites of life unlike in the case of most of the other products. Other most common retail products include vehicle (auto) loans, consumer loans, credit cards etc.

Generally, the development of banking activities in Nigeria can be classified as free banking era, regulated banking era, deregulated banking era, consolidated banking era and post consolidated banking era (Somoye, 2013). A detailed literature review revealed that studies have been carried out on retail banking performance in the USA, Europe, Africa and Nigeria. More so, empirical evidence shows that firm size and financial leverage are prominent indicators for explaining returns in stock and bonds (Oke, 2013). However there appears to be paucity of literature as regards the extent of performance of most deposit money banks in Nigeria. Drawing therefore on the concept of profitability and bank led theory, this study intends to investigate the nexus between retail banking and bank performance in Nigeria, using Loan administration, Deposit mobilization, and Bank led mobile banking represented in this study as Retail Deposit to Total Deposit (RTTD), Loan to Deposit (LD), Total Deposit to Total Liabilities (LDTL), Size and Competition.

2.4 Loan Administration

Loan administration is a viable tool for managing organization's progress towards the attainment of set goals, defining key indicators of organizational performance and customer satisfaction. It implies issuance of loan to customers for the advancement of their business operations. Basically, loan portfolio is termed the largest asset and predominantly the major source of revenue for deposit money banks, and as such poses a tremendous impact

on the survival and otherwise of banks (Imeokpararia, 2013). The entry on the books of the company at the time the money is received in advance is a debit to Cash and a credit to Customers' deposits.

Kazi (2012) opined that customer deposit is used to attract more cash from customers which will be used by banks for more loan disbursements and to increase the revenue base of the banks since the essence of the banking sector to accept deposits and give loans to their customers.

The lending ability of banks is determined by the size of deposit, and banks can only achieve self-sufficiency by generating high revenue through improved customer deposit and lending activities (Adegbite & Azeez, 2018). Bank lending refers to funds granted to individuals and organizations to meet their temporary or long-term deficit operations (Mamman & Hashim 2014). Non-performing loans can equally be devastating to the financial position of banks (Adebisi & Matthew, 2015). Bank lending includes Short, Medium- and Long-Term Loans and Advances.

Beck, Demirguc-Kunt, and Levine (2006) maintain that lending to the private sector make more impact on economic growth than the one to the public sector. Based on this undisputable fact, the study will concentrate on the impact of bank lending to the private sector. There are many indicators of economic growth which include; money supply (M2), Consumer Price Index (CPI), Producer Price Index (PPI), Consumer Confidence Survey (CCS), Current Employment Statistics (CES) and Real GDP (www.aimr.org). Though any or combination of the indicators can be used in measuring the economic growth of a country, this study uses the Real GDP indicator.

2.5 Deposit Mobilization

Retail deposit comes as savings, time deposit and demand deposit to the deposit money banks. In the last 10 years, there has been increase in the quest by banks to have more of the deposit from the retail segment and this essentially has continued to support their performance in terms of profit, return on asset, deposit base and loan size. It is also evidenced that banks are growing in size and using deposit to increase their competitive abilities for large syndicated financing. This research intends to validate the impact of increased retail banking deposit on the performance of banks in Nigeria.

Aside the traditional form of mobilizing savings where customers walk to the bank to save, there are other ways through which the bank mobilizes savings (Adegbite & Azeez, 2018). In addition, the bank moves from shop to shop to collect deposits. This mode of mobilizing customers' deposits is done through special arrangement with the customer. Customers who qualify must have a high sales turnover.

Banks are able to mobilize more deposits by introducing to their clients variety of savings products that empowers the customers to choose between immediately accessible, liquid products, or semi-liquid accounts or time deposits with accordingly higher interest rates (Laura, Alfred, & Sylvia, 2009). The simplicity in designing the saving products offered by financial institutions encourages more customer deposits as they (customers) can always choose the products that best satisfy their needs.

Jacob, Ishaya, and Innocent (2019) have argued that one of the most important ways of attaining financial performance in the banking sector is the effective use of deposit mobilized extended to customers as generation of interest. Deposits mobilization is a new model of approaching savers through marketing and financial inclusion which has sprung up new techniques that were not used by traditional banking, it is perceived and communicated through channels and the social system facilitates its adoption. In mobilization of deposits, innovation must be applied and made convincing for the savers to make deposits.

2.6 Bank Led Mobile Banking

The Bank led theory avails the customer a banking platform different from the traditional branch-based banking whereby customers are able to carry out financial transactions via retail agents order than going to the bank branch. Bank-led banking allows a retail agent to interface between the bank and its customers in the sense that each agent is electronically empowered to make face-to-face cash transaction with the customer in relation to all deposits and withdrawals in nearby vicinity instead of going all the way to visit the bank (Adegbite & Azeez, 2018).

The electronic point-of-sale (POS) terminal that reads cards or mobile phone, barcode scanner, PCs, etc. are the main facilities used to provide financial services with the bank led banking system (Aduda, Kiragu, & Ndwiga, 2013). When financial transaction is made, a record of the transaction is electronically routed directly from the retail agent to the bank or by a payment processing agent who further reconciles the transaction between the customer's and the agent's account also referred to as the payee (Ivatury & Mas, 2008). The bank-led banking platform due to its proximity to the customers and convenience encourages the customers to make more cash

deposits and withdrawals thereby allowing for greater efficiency and performance in the banking sector.

Giving the foregone, this study intends to investigate the nexus between retail banking and bank performance in Nigeria, based on ample literature reviewed and available data on Loan administration, Deposit mobilization, and Bank led mobile banking represented in this study as Retail Deposit to Total Deposit (RTTD), Loan to Deposit (LD), Total Deposit to Total Liabilities (LDTL), Size and Competition. In order to achieve the aim of this study the following null hypotheses were stated in their null form and further tested:

Ho₁: There is no significant relationship between return on asset and bank performance in Nigeria.

Ho2: There is no significant relationship between the Size and Competition and bank performance in Nigeria.

3. Methodology

This study adopted a correlation research design to determine the nexus between retail banking and financial performance of banks in Nigeria. The correlation research design is the appropriate research design to use where a study intends to investigate the relationship that exists between one variable and other variables. The Panel Least Squares regression results helped us to ascertain the coefficient, standard error, t-statistic and probability. The tabulated ratios were exported to EViews 9.0 to run the panel regression.

The source of data for this study was predominately the annual financial statement of the 22 registered commercial banks in Nigeria as contained in the CBN bulletin. In addition, annual reports were available on the website of 16 banks listed on the Nigerian Stock Exchange as at 31st December 2018 out of the approved 22 commercial banks in Nigeria. However, data were collected and analyzed, and this was believed to be a fair representation of the Nigerian banking sector as all top performing banks in the country were represented in the chosen sample and data required for the study for a 10 years period. Therefore, N in this study is 160 (i.e. we studied a total of 16 banks over a period of 10 years). The research instrument was validated using content and face validity from the academia and experts in the banking sector in Nigeria. Also, the CBN being the custodian and regulator of banking activities in Nigeria is believed to release only valid and useful information both in its bulletin and website.

Table 1. List of commercial bank with published audited financial statement

Name of the bank	Year of Incorporation	Year listed in the exchange
Zenith Bank	1990	2004
First Bank	1894	1971
Guaranty Trust Bank	1990	1996
Eco Bank	1985	2006
Access Bank	1989	1998
United Bank of Africa	1948	1970
Stanbic IBTC Bank	1989	2005
Diamond Bank	1990	2005
Wema Bank	1945	2004
Citi Bank	1984	Not Listed
Union Bank	1917	1997
Unity Bank	2006	2005
Sterling Bank	1960	2009
Fidelity Bank	1988	2008
FCMB	1982	2006
Standard Chartered Bank	1999	Not Listed

Source: Official website of 16 banks listed on the Nigerian Stock Exchange as at 31st December 2018.

4. Analysis and Discussion

4.1 Summary Statistics of the Variables of the Study

Statistical data are presented below for the study variables. Prominent among the statistical tool are the measures of central tendencies – mean and median, standard deviation, etc.

Table 2. Summary statistics of the variable of the study

	ROA	RTTD	SIZE	TDTL	LD	COMP
Mean	0.0190	0.4999	21.1431	0.7954	0.6532	20.7200
Median	0.0168	0.5000	20.9132	0.8132	0.6687	20.4651
Maximum	0.0910	0.5611	26.9503	1.0717	1.7144	25.6706
Minimum	-0.1068	0.4568	18.8324	0.0198	0.1589	18.3594
Std. Dev.	0.0250	0.0070	1.5356	0.1294	0.2146	1.3884
Skewness	-0.9220	2.8988	1.8671	-2.4813	0.8724	1.7189
Kurtosis	8.6915	50.5083	7.4122	15.0444	7.2154	7.1405
Jarque-Bera	238.6266	15271.0400	222.7427	1131.2930	138.7602	193.0819
Probability	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Sum	3.0395	79.9915	3382.9010	127.2674	104.5158	3315.2020
Sum Sq. Dev.	0.0993	0.0078	374.9281	2.6629	7.3240	306.5025
Observations	160	160	160	160	160	160

Source: Statistical data with Eviews 9.0., December, 2018.

In Table 2, the results showed the cross-section analysis of 16 banks over a period of 10 years and considered key statistics such as mean, median, standard deviation, skewness and kurtosis. Across the dependent and independent variables, the return on assets showed a negative relationship under skewness and minimum and other statistics were positive related in the cross-section regression. Jarque-Bera a goodness-of-fit test of the sample data have the skewness and kurtosis matching a normal distribution and it is always nonnegative as found in the result summary in the above table.

4.2 Summary of Regression Tests for Independent and Dependent Variables

The following null hypotheses were tested to examine the relationship that exists between the independent and dependent variables of the study.

Ho₁: There is no significant relationship between return on asset and bank performance in Nigeria.

Ho2: There is no significant relationship between the Size and Competition and bank performance in Nigeria.

Table 3. Pool regression results

Dependent Variable: ROA Method: Panel Least Squares Date: 12/28/19 Time: 15:07 Sample (adjusted): 2010 2018 Periods included: 9

Cross-sections included: 16

Total panel (balanced) observations: 144

Variable Coefficient Std. Error t-Statistic Prob. -0.03704 0.129208 -0.286667 0.7748 ROA(-1) 0.197971 0.071756 2.758942 0.0066 RTTD 0.146557 0.24091 0.608348 0.544 LD 0.011945 0.010634 1.123309 0.2633 **TDTL** 0.001157 0.025197 0.0459080.9635 SIZE -0.016881 0.012454 -1.355449 0.1775 COMP 0.015827 0.0126951.246706 0.2146 Mean dependent var 0.020381 R-squared 0.115888 Adjusted R-squared 0.077167 S.D. dependent var 0.022008 S.E. of regression 0.021142 Akaike info criterion -4.827749 Sum squared resid 0.061235 Schwarz criterion -4.683383 Log likelihood 354.5979 Hannan-Quinn criter. -4.769087 F-statistic 2.992944 Durbin-Watson stat 1.792814 Prob(F-statistic)

Source: Panel regression data with Eviews 9.0., December, 2018.

From Table 3, R-squared and Adjusted R-squared are generally low in the result and the Akaike information is

negatively related for the variables under study. The Durbin-Watson stat was low at 1.792814 which is less that the acceptable threshold of 2.00000. The focus of the research is to check for the significant relationship between the independent variables (deposits, loans, size and competition) and dependent variable (return on asset) at 5% degree of significance. In the pool regression results as reported in Table 3, all variables are not significant except the lagged return on assets. Therefore, the research needs to improve the Durbin-Watson stat by carrying out fixed and random model effects.

Table 4. Fixed effect model results

Dependent Variable: ROA Method: Panel Least Squares Date: 12/28/19 Time: 15:08 Sample (adjusted): 2010 2018

Periods included: 9 Cross-sections included: 16

Total panel (balanced) observations: 144

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.028981	0.121314	-0.238892	0.8116
ROA(-1)	-0.184325	0.068513	-2.690362	0.0081
RTTD	0.295909	0.200629	1.474904	0.1428
LD	0.013887	0.010109	1.373731	0.172
TDTL	-0.024519	0.026076	-0.9403	0.3489
SIZE	-0.030202	0.011037	-2.736505	0.0071
COMP	0.026676	0.011108	2.401469	0.0178
	TICC . CC			

	Effects Specification		
Cross-section fixed (dummy variables)			
R-squared	0.522841	Mean dependent var	0.020381
Adjusted R-squared	0.440707	S.D. dependent var	0.022008
S.E. of regression	0.016459	Akaike info criterion	-5.23615
Sum squared resid	0.033049	Schwarz criterion	-4.782429
Log likelihood	399.0028	Hannan-Quinn criter.	-5.051783
F-statistic	6.365711	Durbin-Watson stat	2.100761
Prob(F-statistic)	0		

Source: Panel regression data with Eviews 9.0., December, 2018.

In Table 4, the fixed effect model was done to improve the reliability of the result obtained in pool regression in Table 3. There was improvement in R-squared and Adjusted R-squared results, with the Akaike information still negatively impacting performance. The result showed an improved Durbin-Watson stat that was above the threshold of 2 and with focus on the purpose of the study which is checking the effect of retail deposit on bank performance and to check for the impact of Size and Competition on bank performance. Based on this objective, the result showed that lagged return on asset, Size and Competition were all significant to bank performance and they all reported probabilities below 5% degree of significance.

Table 5. Random effect results

Dependent Variable: ROA

Method: Panel EGLS (Cross-section random effects)

Date: 01/06/20 Time: 17:17 Sample (adjusted): 2010 2018 Periods included: 9

Cross-sections included: 16

Total panel (balanced) observations: 144

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.03704	0.100588	-0.36823	0.7133
ROA(-1)	0.197971	0.055862	3.543924	0.0005
RTTD	0.146557	0.187548	0.781437	0.4359

LD	0.011945	0.008279	1.442916	0.1513
TDTL	0.001157	0.019616	0.05897	0.9531
SIZE	-0.016881	0.009696	-1.741106	0.0839
COMP	0.015827	0.009883	1.601422	0.1116
	Effects Specification		S.D.	Rho
Cross-section random			0	0
Idiosyncratic random			0.016459	1
	Weighted Statistics			
R-squared	0.115888	Mean dependent var		0.020381
Adjusted R-squared	0.077167	S.D. dependent var		0.022008
S.E. of regression	0.021142	Sum squared resid		0.061235
F-statistic	2.992944	Durbin-Watson stat		1.792814
Prob(F-statistic)	0.008863			
	Unweighted Statistics			
R-squared	0.115888	Mean dependent var		0.020381
Sum squared resid	0.061235	Durbin-Watson stat		1.792814

Source: Panel regression data with Eviews 9.0., December, 2018.

In Table 5, the R-squared and Adjusted R-squared results were like what was obtained in the initial pool regression result and the Durbin-Watson stat had dropped further to 1.792814 below the acceptable threshold of 2.00000. The research continues to focus on its purpose and in the result, on lagged return on asset reported probabilities within the 5% degree of significance. There was the need to subject both the fixed and random effects model to further empirical analysis, and Hausman test was deemed ideal for that purpose.

Table 6. Hausman test results – compare fixed & random

Correlated Random Effects - Hausman Test	i			
Equation: Untitled				
Test cross-section random effects				
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	100.975076	6	0	
** WARNING: estimated cross-section ran	dom effects variance is zero.			

Source: Panel regression data with Eviews 9.0., December, 2018.

In Table 6, the research compared the results of fixed and random effect model in order to provide the basis for using fixed effect model. The cross-section random showed a zero probability and furthermore the variables tested under the random effects had no significant relationship with bank performance. The research therefore accepted the fixed effect model and the results thereto were used for the summary of findings and making conclusions about the research project.

5. Summary of Findings, Conclusions and Recommendations

5.1 Summary of Findings

This study investigated the Retail Banking and Bank Performance: Evidence from Nigeria. From the analyses of data, the following findings were made:

In order to improve the Durbin-Watson stat, the research carried out fixed effect specification model on the variables of study as reported in Table 4, we find that the lagged return on assets, Size and Competition all had probabilities less than 5% degree of significance showing that these variables significantly influence bank performance. This time, the Durbin-Watson stat was 2.100761 which was an improvement of the earlier pool regression result and better that the acceptable threshold of 2.

The research also changed in effect, by considering the Random effect model as reported in Table 5 and finds only the lagged return on asset with probability less than 5% degree of significance and the other variables were not significant since they are all higher than 0.05. In the random effect, the Durbin-Watson stat was less than the accepted level of 2 and Table 5 reported 1.792814. The results of the fixed and random effect models were validated by Hausman Test as reported in Table 6 and the probability was 0 at 100% chi-square statistic cross-section random. This provided the basis for the acceptance of the fixed effect model.

Specifically, the study found out that:

- 1). Size significantly impacted on bank performance. The probability in Table 3 was 0.0071 for Size which is less than 5% degree of significance.
- 2). Competition significantly impacted on bank performance. The probability in Table 3 was 0.0178 for Competition which is less than acceptable 5% degree of significance.
- 3). Loans and deposits relationships were all not significantly impacting on bank performance, as the probabilities in Table 3 for all variables were more than the acceptable 5% degree of significance.

This study has provided evidence that it was not retail banking deposit, loans and total deposit that were responsible for the improved returns on the asset of Nigeria banks rather Size and Competition played significant role and are positively related to the improved returns on assets (ROA) based on the panel regression results. This is consistent with the latest move by Access Bank Plc., when it acquired Diamond Bank Plc. to increase the Size of the Bank and improved its Competitive abilities in the Nigerian banking landscape.

Based on the foregone, the earlier stated null hypotheses are rejected and stated hereunder in their alternate form.

Ha1: There is a significant relationship between return on asset and bank performance in Nigeria. Imeokpararia (2013) and Jacob, Ishaya and Innocent (2019) corroborate the above findings.

Ha2: There is a significant relationship between the Size and Competition and bank performance in Nigeria. This is in concordance with Allen, Carletti and Marquiz (2011); Oke (2003); Boyd and Runkle (1993).

5.2 Conclusions

Based on the findings from the result of our analysis the study draws the following conclusions:

- 1). Size which is the natural logarithm of Total Assets and Competition which is the natural logarithm of Total Deposit is significantly responsible for bank performance in Nigeria and not retail deposit of the banks.
- 2). More so, loans to deposit, retail deposit to total deposit and total deposit to total liabilities had probabilities that were more than the 5% degree of significance showing that these variables do not significantly affect bank performance as reported in Table 4 under the fixed effect model.
- 3). And lastly, whilst return on asset had impact on bank performance, they were not as significant as Size and Competition.

5.3 Recommendations

- 1). To professional bankers, we recommend that they continue to focus on growth and expansion drive that will increase the size of the bank and enable the banks to compete nationally and internationally in order to drive profitability.
- 2). Given that the savings component of the total deposit banks in Nigeria come at ridiculously cheap rate to the banks and banks loaned out these deposits at high margin, we recommend that banks that want to enjoy lasting performance should focus more on policies that will attract more retail deposit to the bank.

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