

## Basel 2 Accord and Deposit Money Bank Performance in Nigeria

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### **Abstract**

*Deposit Money Banks recapitalization has remained a major tool for stabilizing the Nigerian banking industry in the face of increasing level of risk in the banks. This study examines the Basel 2 accord and bank performance in Nigeria. The objectives were to find out the extent shareholders' capital, total loans and advances, asset quality (non-performing loans/total loans) and capital safety (non-performing loans/shareholders' capital) impacts on their return on assets. Exposit facto design was adopted. Data were collected through CBN and NDIC Statistical Bulletins. Analysis was carried out using descriptive and multiple regression methods. Findings indicated that shareholders' capital, Total loans and advances and capital safety (non-performing loans/shareholders' capital) have no significant impact on deposit money banks' return on assets while asset quality (non-performing loans/total loans and advances) has significant impact on return on assets. The study recommended that monetary and banking authorities should continue to enforce Basel Accord on banks as it ensures their stability even though it negates their financial performance.*

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**Keywords:** *Basel Core Principles, Shareholders Capital, Total loans and advances, Nonperforming loans, Assets, Basel 2 accord,*

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### **1.0 Introduction**

Banks are recognized as the jugular nerve linking the haves and the have not's. The efficient and effective performance of the banking industry over time is an index of financial stability in any nation (Kolapo, Ayeni & Oke, 2012) and the extent to which a bank is able to extend credit to the public (Isa, Rahaman, Romli, & Romli (2023) for productive activities and economic growth depends on their financial or capital base (Joseph & Adelegan, 2023). Babalola and Adegbite (2002) opined that capital provides the impetus for the effective and efficient combination of factors of production to ensure sustainable growth. For an economy to achieve its potential growth, mechanisms must exist to effectively allocate capital (scarce resources) to the best possible uses (Njogo, Ayanwale & Nwankwo, 2016). Recognizing the importance of capital adequacy to banks performance, the Central Bank of Nigeria (CBN) has over the years mandated banks to follow The Basel Accords which has been reinforced by the Basel Committee on Banking Supervision (BCBS) through its release of periodic regulatory capital standard.

In a bid to ensure capital adequacy of banks that operate internationally, the Bank of International Settlements (BIS) established a framework necessary for measuring bank capital

adequacy for banks in the Group of Ten industrialized countries at a meeting in the city of Basle in Switzerland. The Committee comprises representatives of the Central Banks and Supervisory authorities of the Group of Ten (G10) countries of Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, Switzerland, United Kingdom, United States, and Luxembourg. This has come to be referred to as the Basle Capital Accord, on Capital Adequacy Standards (Ezike & Oke, 2013). Basel Committee on Banking Supervision (BCBS) initiated Basel I norm in 1988, which was seen as the first move towards risk weighted capital adequacy norms. In 1996 Basel Committee on Banking Supervision amended the Basel I norms and by 1999 it had initiated a completed revision of the Basel I framework, to be known as base II. On June 26, 2004, The Basel Committee on Banking Supervision released “International Convergence of Capital Measurement and Capital Standards: A revised Framework”, which is commonly known as Basel II Accord. Basel I initially had Credit Risk and afterwards included Market Risk. In Basel II, apart from Credit & Market Risk; *Operational Risk* was considered in Capital Adequacy Ratio calculation. Basel III guidelines were released in December 2010. The financial crisis of 2008 was the main reason behind the introduction of these norms. A need was felt to further strengthen the system as banks in the developed economies were under-capitalized, over-leveraged and had a greater reliance on short term funding. Again, the quantity and quality of capital under Basel II were deemed insufficient to contain any further risk. These norms aim at making most banking activities such as their trading book activities more capital intensive. The purpose is to promote a more resilient banking system by focusing on four vital banking parameters viz. Capital, Leverage, Funding and Liquidity (BSBC, 2010; Kyari, Adamu & Ali, 2023).

However, the focus of this present study is on BASEL 2 core principles. Although operationally effective since 1998, the risk-based, Basle Capital Accord 1 was generally criticized by practitioners and scholars for the “arbitrary” nature of its provisions – one of such criticisms relates to the unchanging 8 percent minimum capital assigned to risk weighted assets and of being a one-size-fits-all model because it neither keeps pace with innovations of risk in the banking industry nor differentiates between different levels of risk that create opportunities for regulatory arbitrage (Olatunde, 2015). Ezike and Oke (2013) noted that this and other such criticisms led to the adoption of an amended Basle II accord which addressed most of the areas of concern. The Basel 2 Accord is the framework laid in 1999 by the Central Banks of G10 countries to regulate the management of risks in large internationally active banks in their domain and in the Organization for Economic Cooperation and Development (OECD) member countries (Akinyooye, 2008 & Sarkar & Sarkar, 2018).

According to Basel Core principles, it requires higher capital buffer for banks to accommodate credit as well as operational and market risks in the business of financial intermediation. Its objectives among others include eliminating regulatory arbitrage by getting risk weights right and align regulation with best practices in risk management. It provides banks with incentives to enhance risk measurement and management capabilities and seeks to align regulatory capital of banks with economic risk. It sets regulatory benchmark of capital for three categories of risks, which are credit, operational and market risks; and unlike its predecessor called Basel I, the capital charges of the Basel II standard are based on asset quality rather than on asset type. With a broader objective of halting the erosion of capital standards in the international banking system, Basel II was released as a substitute for the first Capital Accord of 1988.

The need to adopt the Basel principles by bank regulatory authorities in Nigeria may be attributed to the continued liquidity problem and poor capital base of banks operating in Nigeria including commercial bank, merchant banks, microfinance banks and specialized banks. However, commercial banks are the most dominant banks in Nigeria accounting for more than 90% of the total deposits mobilized and loans created in Nigeria. To this end, most government policies have targeted commercial banks in Nigeria as their performance influences the growth of the Nigeria economy while poor performance adversely affects the various sectors of the economy both the private and public sectors (Adegbaju & Olokoyo, 2008; Eniola, Adewunmi, & Akinselure, 2017; Onaolapo & Adebayo, 2012; Solomon, 2016; Kyari, Adamu & Ali, 2023). Deposit Money Banks performance are measured by their returns and long term survival. Studies have shown that that capital adequacy of banks determines profitability (Pastory, Marobhe & Kaaya, 2013; Isa et al., 2023) while some other studies shows that adequate bank capital determines their ability to create credit (Kolapo, Ayeni & Oke, 2012; Joseph and Adelegan, 2023). Onyeka-Iheme and Akintoye (2023) noted that Deposit Money Banks have increasingly faced competition from non-bank financial intermediaries while Non-bank financial intermediaries have developed, in part, due to restrictions on commercial bank activities; competition from capital markets have further necessitated regulatory authorities to find out ways to keep the banks safe hence, the emphasis of bank capital adequacy (Igwenwanne et al., 2023).

Deposit Money Banks recapitalization has remained a major tool for stabilizing the Nigerian banking industry. Thus, the banking industry has witnessed series of bank recapitalization from 1969 when it was first set for ₦1.5million for foreign banks and ₦600,000 for indigenous commercial banks (CBN, 2005). From this period onward bank minimum capital base has risen tremendously and stands at ₦25billion as at 2015 while overall capital base of the banks operating in Nigeria as at 2017 was ₦3.357 trillion. The effect of these capital adequacy policies has shown remarkable changes in the number banks now in operation, ownership structure and depth and breadth of banking operations in Nigeria. More so, banks credit creation has risen to well over ₦15.740 trillion in 2017 as against ₦7.856 billion and ₦9.357 trillion created in 1980 and 2009 respectively. Banks investments have also grown from an average ₦510.0 billion in 2005 to ₦1.553 trillion in 2017. CBN report also shows that banks profitability witnessed a 400% increase from 2004 to 2021 (CBN, 2021). This study therefore takes more indepth look at bank capital improvement under the Basel principles and its effect on bank performance in Nigeria.

### **Objectives of the Study**

The main objective of this study is to assess Basel Core principles and bank performance in Nigeria. Given the above, the specific objectives are:

1. To determine the extent shareholders' capital impacts on deposit money banks' return on assets.
2. To find out the impact of total loans and advances on deposit money banks' return on assets.
3. To assess the relationship between asset quality (nonperforming loans/total loans and advances) and return on assets.
4. To determine whether there is any significant relationship between capital safety (nonperforming loans/ shareholders' capital) and return on assets.

### **Research Hypotheses**

For the purpose of this study, the researcher offers the following hypotheses in their null

form:

- H<sub>01</sub>: Shareholders' capital has no significant impact on deposit money banks' return on assets
- H<sub>02</sub>: Total loans and advances has no significant impact on deposit money banks' return on assets
- H<sub>03</sub>: There is no significant relationship asset quality (non-performing loans/total loans and advances) and return on assets
- H<sub>04</sub>: There is no significant relationship between capital safety (non-performing loans/shareholders' capital) and return on assets.

## 2.0 Review of Related Literature

### Bank Capital and Banks Performance

Various measures of profit and of capital employed may be used in calculating this ratio. The ultimate goal of banking business is to maximize profit; and considering the fact that the issue of capital adequacy has reechoed often times in banking literatures in Nigeria with most recent banking reforms aimed at increasing the capital base of banks for efficient performance. The basic desire of a bank's management is to make profit, as the essential requirement for conducting any business (Bobáková, 2003). The adequacy of capital is a dynamic concept and it is influenced by the prevailing and expected economic conditions of the entire economy. Financing decision in commercial banks is not very similar to other business firms due to the nature of operations of these financial institutions. Although commercial banks are able to raise finance using equity and debts, the fact that they mobilize deposits which can act as source of finance, make their capital structure unique as compared to other business firm (Kipsha & Moshi, 2014). The nexus between capitalization and profitability is particularly pronounced given the significance of business profit as a tool for risk mitigation, business survival and a sign of successful product development (Onaolapo & Adebayo, 2012). At the centre of every capitalization attempt made by a bank is the need to ensure a balance between sustainable product developments, profitability and risk mitigation. For instance, a sound banking system is built on profitability and adequacy of capital. Profitability is a revealing indicator of the efficiency of bank competitiveness in the markets and the quality of its managements. Both the level of capitalization and profitability are used as indicators of bank risk management efficiency and the extent of 'cushion' available in case the 'unexpected' arises. Profitability in form of retained earnings is typically one of the likely sources of capital generation (Onaolapo & Adebayo, 2012). Bobáková (2003), agreeing that capital influences bank profitability, argues that in the arithmetical sense the yield on own capital grows, *ceteris paribus*, as the capital proportion declines, since a given volume of capital supports a higher volume of assets. Banking business thrives on public confidence. To win and retain such public confidence, a bank must be able to convince the public of its stability and display its readiness to repay customers' deposits and accommodate genuine credit needs of Customers. Improved capital helps to accomplish this. A bank with adequate capital will surely gain more public confidence than a poorly capitalized bank. This is why Janson cited in Kanu and Isu (2013) emphasizes that a financial institution needs to hold capital to attract depositors and also be ready to pay interest on deposit and dividend on shares.

Insufficient capital might cause enlightened depositors to restrain from placing their deposits in the bank; and enlightened investors may also refrain from investing in it. This has adverse effects on the bank's profitability. Based on the foregoing arguments, it is widely believed

that overall bank returns would be enhanced by increased capital position. The positive correlation between returns and capital has also been demonstrated by Kwan and Eisenbeis (2005). Bank regulators increase banks' minimum capital requirements in order to increase profitability and minimize risk of distress in the banking sector. However, contrary to the foregoing arguments of a positive correlation between returns and capital, some studies actually discovered that higher levels of capital are associated with higher variable costs. It has also been argued that whether more capital decreases the risk of bankruptcy depends on what happens to the asset portfolio when new capital is introduced. Adegbaju and Olokoyo (2008) argue that some capital resulted in increased profitability, and for most, the effect was neutral. Some had negative effects in operational efficiency, profitability improvement and resources maximization. On his part, Asedionlen (2004) argued that contrary to views, recapitalization may raise liquidity in short term but will not guarantee a conducive macroeconomic environment required to ensure high asset quality and good profitability.

### **Theoretical Framework**

This study adopts the *Buffer Theory of Capital Adequacy* of Calem and Rob (1996). According to the theory, banks may prefer to hold a buffer of excess capital to reduce the probability of falling under the legal capital requirements, especially if their capital adequacy ratio is very volatile. This theory is of the view that regulation of bank capital has a cyclical effect on banks activities. Capital is more reliable, dependable and can be used for long term planning. Ability of banks to mobilize enough deposits obviates the capital base from being eroded. The Buffer theory holds that the higher the shareholders fund the better is bank liquidity and capital adequacy. The buffer theory of Calem and Rob (1996) predicts that a bank approaching the regulatory minimum capital ratio may have an incentive to boost capital and reduce risk in order to avoid the regulatory costs triggered by a breach of the capital requirements. However, poorly capitalized banks may also be tempted to take more risks in the hope that higher expected returns will help them to increase their capital. This is one of the ways risks relating to lower capital adequacy affects banking operations. In the event of bankruptcy of a bank, the risks are absorbed by the bank, customers and Nigeria Deposit Insurance Corporation (NDIC). At present NDIC pays a maximum of N200,000 to a customer in the event of bank failure. Hence, customers are concerned about capital position of banks at all times. Banks are expected to insure and pay 15/16 of customers deposit liabilities multiplied by 1% to NDIC to enable their customers benefit from the scheme. The above practice of NDIC in Nigeria is applicable to other countries but varies in amount (Ikpefan, 2007).

Capital requirements constitute the main banking supervisory instrument in Nigeria. The Central Bank of Nigeria (CBN) intervenes little in banks activities but does directly conduct on-site examination and at times delegating this task to external auditors. By contrast, a breach of the capital requirements is considered a major infringement of banking legislation and is not tolerated by the Central Bank of Nigeria (CBN). Banks remaining undercapitalized for prolonged periods are closed down. The withdrawal of some banking licenses at the expiration of the recent recapitalization of banks in Nigeria in 2005 is a pointer to this fact. Banks will require more capital if deposits are not fully mobilized from the public. Where bank loans and advances are given out to customers without due process it might affect capital and liquidity position of a bank in the long run.

### **Empirical Review**

Kanu and Isu (2013) in their study identified long run positive relationship between capitalization and profitability. The result of Granger Causality indicates that the significant relationship between capitalization and profitability is by-directional, implying that increase in capital leads to increase in profitability and vice versa of Commercial banks in Nigeria. Ezike and Oke (2013) investigated the impact of the adoption of the Capital Adequacy Standards on the performance of Nigerian banks. The study made use of ordinary least squares (OLS) estimation technique. The results showed that capital adequacy standards, exert a major influence on bank performance. Ogboi and Unuafé (2013) using a time series and cross sectional data from 2004-2009 obtained from selected banks annual reports and accounts in Nigeria, examined the impact of credit risk management and capital adequacy on banks financial performance in Nigeria. Panel data model was used and results showed that sound credit risk management and capital adequacy impacted positively on banks' financial performance with the exception of loans and advances which was found to have a negative impact on banks' profitability in the period under study. In Ethiopia, Birru (2016) investigated the impact of capital structure on financial performance of selected commercial banks in Ethiopia over a five (5) year period from 2011 to 2015 using secondary data collected from financial statements of the commercial banks. Data was then analysed on quantitative approach using multiple regression models. The results indicate that financial performance, which is measured by ROA is significantly and negatively associated with capital structure proxies such as DER, SIZE and TANG whereas DR have negative impact. Siddik, Kabiraj and Joghee (2017) in their study using the panel data of 22 banks for the period of 2005–2014, sought to determine the impacts of capital structure on the performance of Bangladeshi banks assessed by return on equity, return on assets and earnings per share. The results of the pooled ordinary least square analysis showed that capital structure inversely affects bank performance. Eniola, Adewunmi, and Akinselure (2017) focused on capital structure and profitability of selected quoted banks in Nigeria. The study was based on secondary data obtained from annual report of the selected financial firms found on the internet covering a period of 2004 -2015. The study adopted an ex-post facto research design. The data obtained were analysed using descriptive statistics (i.e. mean and standard deviation) and inferential statistic (i.e. Pearson correlation coefficient). The result of the analysis revealed that there is significant relationship between capital structure and profitability because their proxy bank performance and debt finance showed a positive correlation which implies that there is statistical significance between profitability and capital structure of the selected quoted banks. Singh and Milan (2018) analyzed the impact of capital adequacy and its combination on banks' financial performance. The regression models are applied to test the significance and for analysis the data used ranged from 2012-13 to 2016-17. The study revealed that private sector banks' performance is perfectly correlated with capital adequacy, its significant impact on banks performance. In other hand public sector banks performance is moderately correlated with capital adequacy but its impact on banks performance is not effective.

Isa, Rahaman, Romli, and Romli (2023) sought identify the factors that influence the profitability of commercial banks in Malaysia by examining recent data from 2010 to 2020. The research collects data on ROA, capital adequacy, credit risk, management efficiency, and liquidity risk from Bursa Malaysia and company websites. Additionally, secondary data sources are utilized to gather information and provide evidence for the analysis. Multiple Linear Regression was employed. The study found that capital adequacy and management efficiency have a significant relationship with return on asset, while credit risk and liquidity

risk have an insignificant relationship with return on asset.

### 3.0 Methodology

The research design used in this study is ex post facto. This is used because the study intends to investigate the strength of relationship between two or more economic factors using time series data. The data were sourced from Central Bank of Nigeria (CBN) Statistical Bulletin and Federal inland Revenue Service from 1995-2021.

The model looks thus:

$$Y = F(X_1, X_2, X_3, X_4)$$

Return on assets = f (Shareholders' capital, Total loans and advances, asset quality, capital safety)

$$ROA = b_0 + b_1SHF + b_2TLA + b_3NPL/AST + b_4NPL/SHF + \mu$$

Where:

ROA= Return on assets

SHF= Shareholders capital

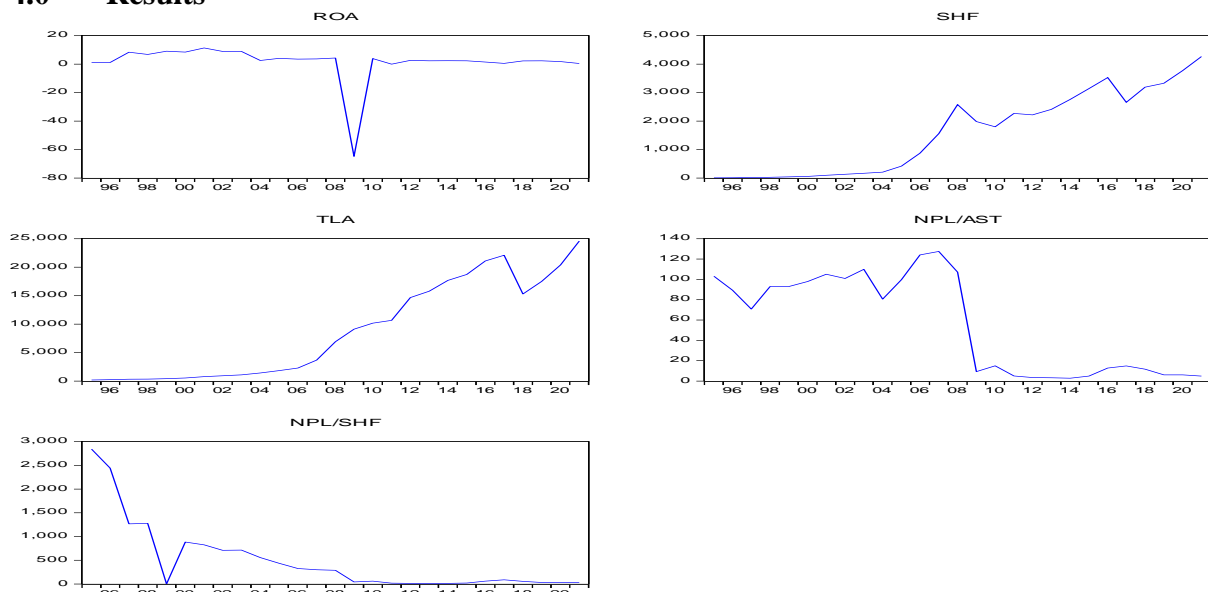
TLA= Total loans and advances

NPL/AST= Ratio of nonperforming loans to total assets

NPL/SHF= Ratio of nonperforming loans to total assets

Descriptive and multiple regression analysis were adopted for the study.

### 4.0 Results



**Figure 1: Graphical representation of the variables**

The graph shows that SHF and TLA have an upward trend for the period under review while NPL/AST and NPL/SHF showed a downward trend which indicates a gradual reduction in exposure of banks assets and shareholders fund to non-performing loans.

**Table 1: Descriptive Statistics**

Date:  
 06/29/23  
 Time: 14:51  
 Sample: 1995 2021

ROA	SHF	TLA	NPL_AST	NPL_SHF
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Mean	1.469630	1610.936	8838.348	55.61630	494.2170
Median	2.580000	1798.940	6920.500	70.74000	88.02000
Maximum	11.31000	4262.790	24571.00	127.4700	2841.930
Minimum	-64.72000	6.530000	180.0000	2.810000	0.940000
Std. Dev.	13.60152	1436.621	8512.152	48.34177	732.6489
Skewness	-4.468553	0.191287	0.404252	0.057445	1.991865
Kurtosis	22.42737	1.575141	1.596381	1.197200	6.400310
Jarque-Bera	514.4565	2.448660	2.951803	3.671197	30.86124
Probability	0.000000	0.293955	0.228573	0.159518	0.000000
Sum	39.68000	43495.27	238635.4	1501.640	13343.86
Sum Sq.					
Dev.	4810.033	53660913	1.88E+09	60760.08	13956136
Observations	27	27	27	27	27

**Source:** Authors computation

The descriptive statistics as shown table 4.2 shows that ROA averaged 1.47%, SHF averaged ₦1,610.936 billion, TLA averaged ₦8,838.348 billion, NPL\_AST averaged 55.6% while NPL\_SHF averaged 494.2%. This implies that shareholders' capital is more expose to nonperforming loans for the period under review.

**Table 2: Correlation matrix**

	ROA	SHF	TLA	NPL_AST	NPL_SHF
ROA	1.000000	-0.203018	-0.157296	0.322651	0.154768
SHF	-0.203018	1.000000	0.952157	-0.797233	-0.653943
TLA	-0.157296	0.952157	1.000000	-0.872796	-0.615723
NPL_AST	0.322651	-0.797233	-0.872796	1.000000	0.546403
NPL_SHF	0.154768	-0.653943	-0.615723	0.546403	1.000000

**Source:** Authors computation

Table 2 shows the collinearity relationship between the independent variables. SHF has positive relationship with TLA (0.952157), NPL\_AST(-0.797233)

**Table 3: Summary of Analysis**

Dependent Variable: ROA

Method: Least Squares

Date: 06/29/23 Time: 14:52

Sample: 1995 2021

Included observations: 27

Variable	Coefficien	t	Std. Error	t-Statistic	Prob.
C	-19.72622	11.92420	-1.654301	0.1123	
SHF	-0.008644	0.006183	-1.398029	0.1760	
TLA	0.002385	0.001238	1.927462	0.0669	
NPL_AST	0.255586	0.110442	2.314217	0.0304	

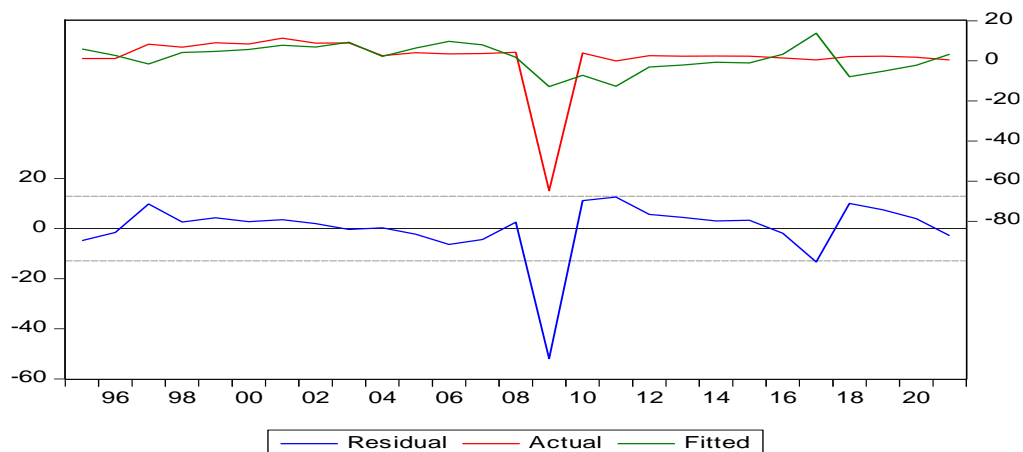


NPL_SHF	-0.000360	0.004581	-0.078640	0.9380
		Mean dependent	1.46963	
R-squared	0.240615	var	0	
Adjusted R-squared	0.102545	S.D. dependent var	2	
S.E. of regression	12.88528	Akaike info criterion	4	
Sum squared resid	3652.668	Schwarz criterion	4	
Log likelihood	-104.5609	Hannan-Quinn criter.	9	
F-statistic	1.742701	Durbin-Watson stat	0	
Prob(F-statistic)	0.176600			

**Source:** Authors computation

The model from the result is given as:

$ROA = -19.7262178142 - 0.00864383234119 \cdot SHF + 0.00238548974606 \cdot TLA + 0.255586270029 \cdot NPL\_AST - 0.000360252863441 \cdot NPL\_SHF$ . The coefficient of determination  $R^2$  is 61.01%, indicating that the variables are strongly fitted. The adjusted coefficient of determination is 55.70% implying that 55.70 percent of the total variation found in ROA is explained by the presence of asset, capital and total deposit liabilities while the remaining 44.30% is the presence of the unexplained variable. The F-Statistics shows a prob. value of 0.176600 which shows that the model is statistically insignificant.



**Figure 4.2: Residual graph**

The result shows that SHF has a regression coefficient of -0.008644 which implies a negative relationship, that is, the lower the shareholders capital, the higher the return on assets. This is contrary to expectation. The t-statistics shows a prob value of 0.1760 which is statistically insignificant at 0.05 level of confidence. Therefore the null hypothesis is accepted that Shareholders' capital has no significant impact on deposit money banks' return on assets.

The result shows that TLA has a regression coefficient of 0.002385 which implies a positive relationship, that is, the higher the total loans, the higher the return on assets. This is contrary to expectation. The t-statistics shows a prob value of 0.1760 which is statistically

insignificant at 0.05 level of confidence. Therefore the null hypothesis is accepted that shareholders' capital has no significant impact on deposit money banks' return on assets.

The result shows that NPL\_AST has a regression coefficient of 0.255586 which implies that the higher the asset quality, the higher the return on assets. This conforms to expectation. The t-statistics shows a prob value of 0.0304 which is statistically significant at 0.05 level of confidence. Therefore the null hypothesis is rejected and we accept the alternative hypothesis that there is significant relationship asset quality (non-performing loans/total loans and advances) and return on assets.

The result shows that NPL\_SHF has a regression coefficient of -0.000360 which implies a negative relationship, that is, the higher the capital safety, the lower the return on assets. The t-statistics shows a prob value of 0.9380 which is statistically insignificant at 0.05 level of confidence. Therefore the null hypothesis is accepted that there is no significant relationship between capital safety (non-performing loans/ shareholders' capital) and return on assets.

## Discussion of Findings

The result shows that bank shareholders capital has negative relationship with ROA which suggests that the higher the bank capital the lower the return on assets which does not conform to expectation. Adequate capital is expected to exert major influence on bank performance and enable banks to take more risks, diversify their investment portfolio and increase their profitability. The negative relationship between bank capital and return on assets implies that the capital base of the banks is too weak to bring returns. This finding supports the earlier revelation made by Olatunde (2015) that capital adequacy ratio negatively influences return on assets (ROA). It also supports the claim made by Adesina, Nwidobie and Adesina (2015) that the management of quoted banks in Nigeria consistently used debt capital in financing to improve their earnings. Asset quality (Non-performing loans/total asset) has positive relationship with ROA, that is, the higher the asset quality, the higher the returns on asset which conforms to expectation suggesting that lowering nonperforming loans reduces the risk of exposure and improves the quality of the banks' assets. Capital safety have negative relationship ROA, which suggests that the lower the bank capital the lower the return on equity which does not conform to expectation. It is also a sign of ineffective use of working capital to enhance shareholders wealth. This shows that the adoption of BASEL ACCORD principles is yet to have meaningful impact on banks return on assets. The findings suggest that capital adequacy ratio is bound to have a substantial negative impact on banks' profitability and will restrict banks' ability to do maturity transformation, which is the core function of banks as advanced in the extant literature by Olatunde (2015). This supports the earlier study of Nwude, Itiri, Agbadua, and Udeh (2016) which found that most Nigerian banks capital are too small to impact on their returns. The policy implication of this to bank management is the need to review their capital base and see more productive sectors to invest while also ensuring it doesn't constrain them from meeting the needs of their depositors.

## 5.0 Conclusion

Bank capital under the Basel Accord 2 in Nigeria has witnessed significant improvement. The adoption of Basel 2 was aimed to reduce banking risk, increase the capital base and ensure effective supervision of banking activities by CBN and NDIC which has brought some level

of sanity in the banks. The recapitalization policy of 2005 was further to strengthen capital adequacy in Nigerian banks. Before now, Nigerian banks were faced with high level of distress owing to mismanagement and poor capital base. This study has shown that for the period under review, commercial banks capital has indirect relationship with their returns on assets and returns on equity. In conclusion, it can be deduced that increment in capital adequacy under Basel Accord 2 reduces commercial banks risk in the face of higher profitability as they are deterred from engaging in risky investments which provides higher returns. It was revealed that bank capital has positive and significant relationship with their profitability (Profit before tax, return on assets) but a negative and significant relationship with their return on equity. This goes to stress the importance and impact of working capital on firm's profitability and the fact that capital is at the heart of all businesses.

## 6. Recommendations

Based on the findings, the study recommends as follows:

1. Monetary and banking authorities should continue to enforce Basel Accords on banks as it ensures their stability even though it negates their financial performance.
2. There is need for CBN to enforce the latest Basel Accord III while also working with Basel Accord II to ensure that banks don't engage in unnecessary risk.
3. Bank management must seek means to putting into proper use their finances on investments with low risk and high yields. Going to partnership with small and medium scale industries rather than outright loans is one of the means on increasing their returns.
4. Bank management should ensure that deposits are efficiently mobilized to productive sectors of the economy as this will increase their returns.

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