

## **IMPACT OF LENDING MANAGEMENT ON THE PERFORMANCE OF DEPOSIT BANKS IN NIGERIA**

**Adeleye Simeon Kayode<sup>1</sup>,  
Ashiyanbi Haadi Babatunde<sup>2</sup> &  
Onipede Tunde Olusola<sup>3</sup>**

<sup>1</sup>Department of Finance, Ekiti State University, Ado-Ekiti, <sup>2</sup>Department of Finance, Ekiti State University, Ado-Ekiti, <sup>3</sup>Department of Finance, Ekiti State University, Ado-Ekiti.

**\*Corresponding author E-mail: [adeleyekayode2@gmail.com](mailto:adeleyekayode2@gmail.com)**

### **Abstract**

*The study investigated the impact of lending management on the performance of deposit money banks in Nigeria, using sectional data for 18 years from 2005 to 2022, the data used were non-performing loans ratio; loan to deposit ratio; loan loss provision ratio and bank lending rate (Independent) and profit after tax (Dependent) which was obtained from the financial statement of the sampled deposit money banks which includes: First Bank Plc; Wema Bank, Zenith Bank, GTB and UBA Plc. Pooled regression analysis of the ordinary least square (OLS) was used to estimate the determinants of the performance function. The result showed that the fixed effect results revealed that bank lending rate (BLR) and loan loss provision ratio (LLPR) have a negative insignificant impact on log of profit after tax (InPAT) going by the coefficient value of -0.059927 and -0.008279 and prob-value of 0.5925 and 0.8584 respectively. It was therefore concluded that banks should always ensure proper credit evaluation of potential borrowers before funds is allocated to prime borrowers. This should be done by collaborating with top quality credit rating firms. The study recommended that banks must put in place sound credit management process, strictly hold to know your customer (KYC) system, applying effective measures in measuring and monitoring of granted credit and ensure effective controls over credit risk.*

**Key Words:** *Profit after tax, non-performing loans ratio; loan to deposit ratio; loan loss provision ratio, bank lending rate.*

### **INTRODUCTION**

Deposit money banks (DMBs) make their earnings and contribute meaningfully to the economy by allocating mobilised funds for investment purposes. They also perform the role of financial intermediation. This role largely depends on the credit management put in place by the banks which should be considered as an input to reduce the default risk of the banks (Ali-Noor, Das & Banik, 2018). Most financial institutions around the world that engaged in deposit and lending businesses usually face the problem of making productive use of their funds, due to default culture, business failure, industrial sickness, unfavourable business climate and lack of good entrepreneurs among others. Besides, is the inability of

customers to operate in line with the credit agreement has invariably increased the rate of default in loans which resulted in the poor financial performance of banks (Kwadwo, 2020).

Deposit money banks are agents that intermediate financial resources from the abundant units of the economy to the needy areas. The dynamic structure of the economic environment and their intermediation role in the economy put the banks at the forefront of various risks such as nominal risk, credit risk, operational risk, strategic risk, liquidity risk, off-balance sheet risk, market risk, legal risks, foreign exchange risk among others. Although all these risk affects deposit money banks (DMBs) performance in several ways, Kwadwo (2020) and Kegninkeu (2018) argued that the extent of loss caused by credit risk compared to other risks will be sufficient to liquidate a bank. In this same direction, Abu-Alrop and Kokh (2020) noted that among all these risks, credit risk constitutes the most important because the core of any banking business revolved around credit which accounts for over 80% of bank's activities. This risk emanated from inappropriate credit policies, laxity of laws, the weak credit assessment, poor loan underwriting, volatile interest rate, directed lending, low capital and poor liquidity base, government influence, and weak control by the apex bank. To reduce the risk level, it is pertinent for the deposit money banks to have; well-capitalized banks that strengthen their risk management system, maintain a favourable interest rate and reduce the non-performing loans recorded (Yimka, Taofeekb, Abimbola & Olusegun, 2015). When a loan is granted, banks expect customers to repay both the principal and the interest on the due date. A loan facility is regarded as being performed when both the interest and the principal are fulfilled in line with the agreed repayment terms and conditions. The non-performing loans connote the credit extended which banks perceived as possible loss and can be classified into doubtful, standard or loss (Kolapo, Ayeni & Oke, 2012; Kodithuwakku, 2015). It is therefore important for any bank as a lender to frequently examine the borrower's ability to honour the debt in accordance with the agreed terms and conditions (Addae-korankye, 2014). When debt obligations are repaid, the level of non-performing loans diminishes and the profitability of banks increases. Credit management involves the use of appropriate strategies that helps to control and mitigate risks through available resources. Appropriate use of credit risk management can significantly improve the continuity and existence of banks. Management of credit risk is therefore vital and of main concern to banks because a greater portion of their returns emanated from loans extended to customers. Considering the results of previous studies, Abu-Alrop and Kokh (2020), Ali-Noor, Das, and Banik (2018), Kegninkeu (2018), Olusanmi, Uwuigbe and Uwuigbe (2015) concluded that though credit management impact on financial performance of deposit money banks; their impacts are uncertain and are of conflicting directions. While scholars such as Akinselure and Akinola (2019), Nwude and Okeke (2018), Isanzu (2017), Wachira (2017), Harcourt (2017), Singh (2015), Saeed and Zahid (2016), Li and Zou (2014) among others found a significant positive effect of lending management on financial performance of deposit money banks. Epure and Lafuente (2012) showed that the performance of deposit money banks is

influenced by changes in the regulation and not credit risk management while Kithinji (2010) discovered that credit risk management is influenced by macroeconomic variables such as interest rate, inflation rate, and exchange rate among others. This indicated that the empirical result on the topic under consideration produced mixed results thereby leaving the academia and future researcher to untangle the quandary. Furthermore, to carry out the effect of lending management on the performance of deposit money banks, this study will use quantitative research method involving sourcing data from the annual financial report of these banks. This is contrary to most empirical work like that of Nwude and Okeke

(2018), Ali-Noor, Das, and Banik (2018), Kegninkeu (2018), Isanzu (2017), Wachira (2017), Harcourt (2017), Singh (2015), Saeed and Zahid (2016) among others. It is on this view that this study examine the impact of lending management on performance of deposit money banks in Nigeria.

## **Objectives of the Study**

The broad objective of the study is to investigate the effect of lending management on the performance of deposit money banks in Nigeria. While specific objectives are to:

- i. examine the relationship between non-performing loans on liquidity and performance of Nigerian deposit money banks.
- ii. determine the influence of loan to deposit ratio on the performance of deposit money banks in Nigeria
- iii. investigates the effect of loan loss provision ratio on the performance of deposit money banks in Nigeria.
- iv. evaluate the effect of lending rate on the performance of deposit money bank in Nigeria

## **Research Hypotheses**

The following null hypotheses were formulated for this study:

- i. Non-performing loans has no significant effect on liquidity and performance of Nigerian deposit money banks.
- ii. Loan to deposit ratio has no significant effect on the performance of deposit money banks in Nigeria.
- iii. Loan loss provision ratio has no significant effect on the performance of deposit money banks in Nigeria.
- iv. Bank lending rate has no significant effect on the performance of deposit money banks in Nigeria.

## **Conceptual Review**

### **Credit Management**

The major motive of any bank in extending credit is to generate profit. In the process, assumed and accept risks (Kwadwo, 2020). The likely downside scenarios along with the effect on the borrowers' ability to service the loan should be taken into consideration when evaluating credit risk. Suresh and Paul (2018) noted two possible types of losses associated with borrowers. They are; the expected and unexpected losses. The expected losses can be estimated and provision made to offset the adverse effect on the profitability of a bank. This could emanate from the industrial operations of the borrower, its previous accomplishment records and the business risk common to the borrower. On the other hand, the unexpected losses cannot be predicted and can be mitigated through the holding of sufficient capital.

Wachira (2017) observed that deficiency in loan quality emanated from the information processing techniques which start from the loan application stage to the disbursement stage.

This poor loan quality increases when the guidelines for credit risk management are weak or do not exist. For deposit money banks to curtail the occurrence of loan losses, effective credit risk management processes must be developed. The existence of information asymmetric between the borrowers and the lenders exposed deposit money banks to adverse selection and moral hazards. This made it essential for banks to have a workable mechanism that cannot only assess default risk but can also minimize moral hazard.

One of the most vital aspects in any organisation that involve in the transmission of funds is the management of the flow of fund among different units. Credit management serves as the channel or the mechanisms put in place that ensure that payment are made for the services or product offered at the stipulated period. In the work of Myers and Brealey (2003), it comprises various strategies employed by an organisation to ensure that the best level of credit and its effective management are guaranteed.

Credit management according to Kwadwo (2020) denotes the identification, analysing, assessing, controlling, avoidance and preventing the unacceptable risks. To manage risk, an organisation uses risk assumption, risk retention, risk avoidance, risk transfer, or any other strategy or combination of strategies to prevent the occurrence of risk in the future. In line with this, Kalapodas and Thompson (2006) viewed credit risk management as curtailing or eliminating and preventing risks to avoid inevitable catastrophes on their performance. This denotes that when investment decisions are made by banks, they expose themself to some financial risks. The extent of these risks centers on the types of financial instruments. This financial risk might be in the form of recession, high inflation, bankruptcy and volatility in the capital market. So to reduce or possibly control the risks to such investment, investors and the fund managers must practice risk management.

## Banks' Performance

For the purpose of this study, banks' performance can be viewed from two angles: financial performance which addresses the earning capacity of banks and can be accessed through return on asset, return on equity, shareholders' funds, profit after tax and a host of other measurements. On the other hand is non-financial performance which can be known via increase in sales, shareholders' wealth and other non-quantitative methods. Since performance of banks is vital for the survival of the banks, it has allure the interest of many stakeholders such as banks' managements, government officials, investors and other interested parties. The term financial performance explained the ability or capacity of banks to generate profits. The aim of most businesses is to make profit. This is synonymous to their performance. Various measures of bank profitability exist and each of the profitability indices depends on the goals and objectives of the banks (Ajayi & Ajayi, 2017). The conditions for determining the financial performance of an organisation especially banks are known via operating profit which may be either sales volume, increase in asset turnover and financial ratios which can be through profit after tax, return on asset, return on equity, earning share, dividend per share and many others. These types of measurements are known as quantifiable financial indicators. It is worthy of note that the focus of this study will revolve around financial performance measurements that are both quantifiable (financial ratios or financial indicators) and non-quantifiable indicators which will be accessed via responses of the respondents to questions asked in that direction. The earnings ability of an entity is known in terms of its performance. Banks' profitability serves as an element of values created and wealth maximization of shareholders' funds. The importance of profitability in determining the continuity of an entity cannot be ignored. Profitability shows the extent of better financial soundness on bank risk-bearing capacity and on their ability to perform liquidity transformation (Awode, 2014). Studies have employed an array of measurements in the determination of financial performance of banks.

## Materials and Methods

The study assess the impact of bank lending management on the performance of deposit money banks in Nigeria. The cross sectional and secondary sources of data were employed in gathering data majorly from the financial statement of the selected banks and Central Bank of Nigeria Statistical Bulletin of 2023 for eighteen (18) years ranging from 2005 to 2022 data are engaged to explore the effect lending management to deposit money bank performance in Nigeria. Panel data regression analysis was employed to embrace the pooled effects model, the fixed effect model and the random effect model. The model which specifies that profit after tax is significant influenced by the non-performing loans ratio; loan to deposit ratio; loan loss provision ratio and bank lending rate are formulated as follows:

$$PAT = f(NPLR, LLPR, LDR, BLDR, )$$

Where:

PAT = Profit after Tax

NPLR = Non-performing Loans Ratio

LLPR = Loan Loss Provision Ratio

LDR = Loan to Deposit Ratio

BLDR = Bank Lending Rate

$\beta_0$  = Constant Parameter

$\beta_1, \beta_2, \beta_3, \beta_4$  = Co-efficient of Independent Variables.

$\mu$  = Error Term

### **Presentation, Interpretation and Discussion of Findings**

**Table 1: Descriptive Statistics**

	INPAT	LDR	LLPR	NPLR	BLR
Mean	14.16012	33.28133	6.308889	11.96122	16.23500
Maximum	18.41522	65.91000	64.81000	78.73000	19.33000
Minimum	7.988204	10.42000	0.230000	0.890000	11.48000
Std. Dev.	3.284663	12.42335	10.73135	17.38023	2.140094
Skewness	-0.539746	0.267581	3.417529	2.245901	-0.954673
Kurtosis	1.894656	2.352976	15.70622	7.544919	3.099058
Observations	90	90	90	90	90

**Source: Authors' Computation (2023)**

The study made use of five (5) variables ranging from 2005 to 2022 indicating 18 years' time lag as the mean values ranges from loan loss provision ratio (LLPR) 6.30 percent being the lowest to bank lending rate (BLR) 16.23 with the highest average value. Furthermore, the standard deviation which is a measure of variability of a variable away from its mean revealed that all the variables used in the study are clustered around their respective mean values except loan to deposit ratio (LDR) and non-performing loans ratios (NPLR). Notwithstanding, from the dataset it was obvious that loan to deposit ratio (LDR) has the highest maximum value of 65.91000 while loan loss provision ratio (LLPR) has

the lowest minimum value of 0.23. The skewness from the table below indicates that loan to deposit ratio (LDR) with 0.267581 have positive but slightly symmetrical indicative of the fact that their respective skewness values are slightly greater than zero whereas, loan loss provision ratio (LLPR) and non-performing loans ratios (NPLR) were positively skewed implying that their respective skewness values were considerably greater than zero. It is also important to note that log of profit after tax (InPAT) and bank lending rate (BLR) have a negative skewness value of 0.539746 and 0.954673 respectively, indicating the distribution being asymmetry. Furthermore, the study revealed all the variables used have positive kurtosis values which indicates the distribution is more peaked than normal (i.e., has heavier tails) except log of Profit after tax (InPAT) and loan to deposit ratio (LDR).

### Panel Unit Root Test

The unit root test is performed to determine the stationarity of the variables. The stationarity of the variables provides information on their order of integration. To carry out the co-integration test, the order of integration of variables is necessary. The test is conducted using the ADF-Fisher unit root test. The result is presented in table 2

**Table 2: ADF-Fisher Unit Test**

ADF-Fisher Unit Test			
Variables	P* Statistics	P-value	Order of Integration
PAT	16.0719*	0.0976	I(0)
BLR	35.2025***	0.0001	I(1)
LLPR	38.7603***	0.0000	I(1)
NPLR	16.1824*	0.0945	I(0)
LDR	39.6034***	0.0000	I(1)

**N.B:** \*\*\* p<0.1, \*\* p<0.05, \* p<0.10

**Source:** Author's Computation (2023)

In table 2, the result revealed that all the series are integrated of different orders. While profit after tax (PAT) and non-performing loans ratio (NPLR) are stationary at their levels, other variables are made stationary at first difference. Thus, panel data regression on the series cannot be spurious. The condition for panel co-integration is not met, therefore, there is need to proceed to pooled ordinary least square regression, fixed effect and random effect.

## Hausman Test

To know the estimated model that will produce the best result, the study will conduct Hausman test. The underline hypothesis for the model is that random effect estimate is better and therefore preferred to the alternative fixed effect result.

**Table 3: Hausman Test**

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	113.680040	4	0.0000

**Source: Authors' Computation (2023)**

The null hypothesis ( $H_0$ ) is that random effects are independent of explanatory variables which is tested against the alternative hypothesis that the random effect correlates with the explanatory variables. The result above depicts that the prob-value is highly significant which is less than 1% which implies that we reject the null hypothesis in favour of the alternative. This justifies that this study will use fixed effect estimation technique to estimate this model.

**Table 4: Redundant Fixed Effects Test (Likelihood Ratio)**

Effects Test	Statistic	d.f.	Prob.
Cross-section F	28.420010	(4,74)	0.0000
Cross-section Chi-square	77.245901	4	0.0000

**Source: Authors' Computation (2023)**

The likelihood ratio is perform to decide either to estimate the fixed effect or pooled OLS. However, the null hypothesis is that the pooled OLS is the appropriate estimate while the alternative hypothesis is that fixed effect is the appropriate estimation technique. Since the prob-value is less than 1% significant level then we accept the null hypothesis which state that the fixed effect is the appropriate estimation technique.

**Table 5: Fixed Effect**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BLR	-0.059927	0.111477	-0.537571	0.5925
LDR	0.104500	0.022369	4.671729	0.0000
LLPR	-0.008279	0.046232	-0.179087	0.8584
NPLR	0.033865	0.038011	0.890938	0.3758
C	11.44315	2.213355	5.170045	0.0000

**Source: Authors' Computation (2023)**

The fixed effect results shows that bank lending rate (BLR) and loan loss provision ratio (LLPR) have a negative insignificant impact on log of profit after tax (InPAT) going by the coefficient value of -0.059927 and -0.008279 and prob-value of 0.5925 and 0.8584

respectively. In the same vein, non-performing loans ratio (NPLR) has a positive insignificant effect on log of profit after tax (InPAT) as shown by the coefficient and Prob value of 0.033865 and 0.3758 respectively. However, loan to deposit ratio (LDR) exerts a positive and significant impact on log of profit after tax (InPAT) as depicts by the coefficient value of 0.104500 and prob-value of 0.0000 which is less than 1% significant level.

## **Discussion of Finding**

The study presents a descriptive analysis of variables, ADF-Fisher unit root test, Hausman test, likelihood test, fixed effect test. The descriptive statistics found the variables used in the study to be well-behaved. The descriptive statistics of the data were also performed to understand how the data behave if the data are normally distributed or subjected to fluctuation. In order to guide the choice of estimation technique to use and also prevent spurious regression, the unit root test was also performed using the ADF-Fisher unit root test. The result showed that the variables were integrated of different orders, while some were stationary after the first difference [i.e I (1)] and two stationary at levels. The combined order of integrations [i.e I(0) and I(1)] in the results justified the use of the pooled ordinary least square regression, fixed effect and random effect.

The interpretation of the result is based on the result of the fixed effect estimation which shows that the fixed effect results shows that bank lending rate (BLR) and loan loss provision ratio (LLPR) have a negative insignificant impact on log of profit after tax (InPAT) going by the coefficient value of -0.059927 and -0.008279 and prob-value of 0.5925 and 0.8584 respectively. This implies that increase in bank lending rate (BLR) will result in decrease in profit after tax. In the same vein, non-performing loans ratio (NPLR) has a positive insignificant effect on log of profit after tax (InPAT) as shown by the coefficient and prob value of 0.033865 and 0.3758 respectively, the implication is that non-performing loan ratio (NPLR) move in the same direction with profit after tax. Furthermore, loan to deposit ratio (LDR) exerts a positive and significant impact on log of profit after tax (InPAT) as depicts by the coefficient value of 0.104500 and prob-value of 0.0000 which is less than 1% significant level. However, the result of loan to deposit ratio reported in this study is reinforced by the findings of Kargi (2011) that the levels of loan loss provision ratio affected banks' performance significantly.

Other studies with similar findings include; Taiwo, *et al.* (2017); Onaolapo (2012) in which they all also reported that loan to deposit ratio have significant impact on financial soundness and performance of deposit money banks in Nigeria.

## **Conclusion and Recommendations**

Based on the findings of the study it is concluded that from all indications that sound and effective lending management will translate into reduction in rate of non-performance loan as well as increase liquidity which eventually engender sustainable and development of the banking system and thus should be given paramount attention by both bank managements and financial institutions regulator. All banks must continuously comply with relevant provisions of the banks and other financial institutions acts, both within and outside the country.

Based on the study findings, the following recommendations were made:

- i. Deposit money banks in Nigeria should put in place growth monitoring system, asset growth screen, and real estate stress test because of the volatility of the industries.
- ii. For Nigerian banks to achieve enhanced and sustained profitability from loans and advances, appropriate credit management should be instituted. Banks therefore need adequate and accurate information from both internal and external sources in order to access the multiplicity of credit risks they face when presented with loan proposals.
- iii. Deposit money banks in Nigeria should enhance their capacity in credit appraisal and analysis. Banks are to ensure that adequate and correct credit information is gathered from credit bureaus.
- iv. The deposit money banks should ensure guarantee of credits which would serve as a shield against credit loss of customer's fund.

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