

Credit Risk Management and Financial Performance of Deposit Money Banks in Nigeria

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ABSTRACT

This study investigates the effect of credit risk on the financial performance of selected deposit money banks in Nigeria over the period 2012–2024. Using panel data for five banks, the study applies the Fully Modified Ordinary Least Squares (FMOLS) technique to examine the long-run relationship between credit risk indicators and bank profitability. Financial performance is measured by return on assets (ROA), while credit risk is proxied by non-performing loans and loan loss provisions. The empirical results reveal that credit risk has a negative and statistically significant effect on bank performance, indicating that higher levels of loan default and provisioning reduce profitability in the Nigerian banking sector. In contrast, bank size and interest rate are found to exert a positive and significant influence on financial performance, while inflation rate adversely affects bank profitability. Based on these findings, the study recommends that deposit money banks strengthen their credit appraisal, loan monitoring, and recovery mechanisms to minimize non-performing loans, while adopting prudent provisioning practices that do not excessively erode earnings. Additionally, banks should leverage economies of scale and implement effective interest rate management strategies to enhance performance. The study further stresses the need for regulatory authorities and policymakers to pursue policies that curb inflationary pressures and promote macroeconomic stability, as these are crucial for improving the resilience and financial performance of Nigeria's banking sector.

Key Words: Credit Risk, Non-Performing Loans, Loan Loss Provisions, Bank Performance, Nigeria

INTRODUCTION

The banking sector plays a pivotal role in promoting economic growth and stability by mobilizing funds from surplus units and allocating them to deficit units through loans and advances (Orebiyi et al., 2025). In Nigeria, deposit money banks serve as the backbone of financial intermediation; however, their financial performance largely depends on the effectiveness of their credit risk management practices. Credit risk arises when borrowers fail to meet their contractual obligations, resulting in non-performing loans that adversely affect banks' profitability, liquidity, and solvency. This challenge is further intensified in Nigeria's volatile macroeconomic environment, characterized by persistent inflationary pressures, exchange rate fluctuations, and policy instability, which heighten banks' exposure to credit risk. Consequently, effective credit risk management has become critical to the sustainability, resilience, and financial performance of deposit money banks in Nigeria (Oladele & Akinwumi, 2024; Ogundele & Nzama, 2025).

The stability and profitability of deposit money banks are fundamental to the growth and sustainability of the Nigerian financial system. Among the various risks faced by banks, credit risk is the most prominent due to its direct association with lending activities, which represent the core function of banking operations. Credit risk occurs when borrowers or counterparties fail to fulfill their financial obligations, resulting in loan defaults and non-performing loans that weaken banks' capital base and reduce profitability (Feleke & Tafere, 2025). In Nigeria, where deposit money banks play a crucial role in mobilizing savings and channeling funds to productive investments, effective credit risk management is essential for protecting shareholders' wealth, maintaining liquidity, and sustaining public confidence in the financial system. Moreover, rising competition within the banking sector and ongoing regulatory reforms by the Central Bank of Nigeria (CBN) have intensified the need

for banks to establish robust credit risk monitoring and control frameworks in order to enhance financial performance and ensure long-term stability (Onigah, 2024; Ugwuanyi, 2024).

Over the years, the Nigerian banking industry has experienced episodes of systemic distress and bank failures, largely attributed to weak credit administration and ineffective risk management practices (Hamilton et al., 2021). In response, the Central Bank of Nigeria (CBN) and the Nigeria Deposit Insurance Corporation (NDIC) have implemented several regulatory measures, including capital adequacy requirements, enhanced credit risk provisioning, and stricter loan classification standards, to curb credit risk and strengthen the banking sector. Despite these interventions, deposit money banks continue to face rising levels of non-performing loans, which erode shareholders' funds, constrain lending capacity, and undermine investor confidence. These persistent challenges raise critical concerns regarding the effectiveness of existing credit risk management practices in improving financial performance and ensuring the long-term stability of the Nigerian banking system (Oranekwu & Eze, 2023; Fadun & Silwimba, 2023; Iqbal et al., 2025).

Despite the strategic importance of credit risk management, deposit money banks in Nigeria continue to face rising levels of non-performing loans, weak credit appraisal systems, and heightened exposure to volatile macroeconomic conditions that threaten their financial stability. The banking crisis of the late 2000s, which necessitated large-scale bailouts and the intervention of the Asset Management Corporation of Nigeria (AMCON), vividly demonstrated the severe consequences of poor credit risk management on bank performance. In recent years, challenges such as declining asset quality, policy inconsistencies, and external shocks—including oil price volatility and persistent inflationary pressures—have further intensified credit risk exposure within the banking sector. Although some banks have adopted modern risk management techniques, existing empirical evidence on the relationship between credit risk indicators and financial performance remains mixed and insufficiently explored in the Nigerian context (Hamisu et al., 2021; Kwashie et al., 2022; Animasaun et al., 2025). This unresolved empirical ambiguity stresses a clear research gap and justifies the need for an in-depth investigation into the effect of credit risk on the financial performance of selected deposit money banks in Nigeria.

Research Questions

- i. To what extent do non-performing loans affect the financial performance of deposit money banks in Nigeria?
- ii. How do loan loss provisions influence the financial performance of deposit money banks in Nigeria?

Objectives of the Study

- i. To examine the effect of non-performing loans on the financial performance of deposit money banks in Nigeria.
- ii. To investigate the impact of loan loss provisions on banks' financial performance.

Research Hypotheses

H_{01} : Non-performing loans have no significant effect on the financial performance of deposit money banks in Nigeria.

H_{02} : Loan loss provisions have no significant effect on the financial performance of deposit money banks in Nigeria.

LITERATURE REVIEW

Credit risk management refers to the set of techniques and practices adopted by financial institutions to identify, measure, monitor, and control the risk of loss arising from borrowers' inability or unwillingness to meet their loan repayment obligations (Ogundele & Nzama, 2025). It represents the most significant risk faced by banks, given that lending constitutes their core business activity and a major source of income. Key credit risk management practices include credit appraisal, risk-based lending, loan diversification, collateralization,

continuous loan monitoring, loan loss provisioning, and strict compliance with regulatory capital adequacy requirements. In Nigeria, the high incidence of non-performing loans has heightened banks' exposure to credit risk, often resulting in liquidity challenges and, in extreme cases, bank failures (Odanga et al., 2024). Credit risk, as defined by Scott et al. (2024), is the possibility that a borrower or counterparty will fail to fulfill agreed financial obligations, leading to losses in both principal and interest for lenders and investors. Such risk may arise from factors including borrowers' financial distress, adverse macroeconomic conditions, and weak credit management practices, making credit risk a central concern for banks and financial institutions due to its direct implications for profitability and solvency.

Financial performance refers to the ability of an organization to efficiently utilize its resources to generate income, create value for shareholders, and remain competitive in the marketplace (Okeke et al., 2024). In the banking sector, financial performance is commonly assessed through profitability measures such as return on assets (ROA), return on equity (ROE), and net interest margin (NIM) (Farooq et al., 2021). These indicators reflect not only a bank's operational efficiency but also its capacity to meet obligations, attract investors, and withstand adverse macroeconomic conditions. In Nigeria, banks' financial performance has been shaped by both internal factors, such as cost management and risk exposure, and external factors, including inflation, exchange rate volatility, and regulatory frameworks. As such, analyzing financial performance provides a comprehensive picture of banks' resilience, stability, and contribution to overall economic development.

Theoretical Framework

The theoretical framework for this study is anchored on the Asymmetric Information Theory propounded by George Akerlof (1970) in his seminal work "*The Market for Lemons*" and later expanded in the banking context by Joseph Stiglitz and Andrew Weiss (1981). The theory posits that in financial markets, particularly credit markets, borrowers usually possess more information about their ability and willingness to repay than lenders do. This information imbalance creates a situation of credit risk, as banks may inadvertently lend to high-risk borrowers while low-risk borrowers may opt out due to high interest rates, a problem referred to as adverse selection. Furthermore, once credit has been granted, borrowers may engage in riskier projects than disclosed, a situation described as moral hazard.

The strength of the theory lies in its ability to clearly explain the root causes of credit risk in financial intermediation. It provides a strong justification for why deposit money banks must adopt effective credit risk management strategies, such as credit appraisal, loan monitoring, collateral requirements, and portfolio diversification, to mitigate the potential adverse effects of information gaps. According to Taiwo and Mike (2021), by reducing adverse selection and moral hazard, banks can limit the incidence of non-performing loans, enhance asset quality, and improve overall financial performance. This makes the theory directly relevant to studies investigating the relationship between credit risk management practices and bank profitability, solvency, and efficiency.

Several scholars have employed this theory in related research to provide empirical backing for the link between credit risk management and financial outcomes. Ogunmokun et al (2023) applied it to explain credit rationing in markets where asymmetric information prevails. More recently, Ogundele and Nzama (2025) in their study on risk management and financial performance in Nigeria have relied on the theory to justify the importance of robust credit risk management practices. These applications show the relevance and adaptability of the theory to contemporary banking studies, making it the most appropriate framework for this study.

Empirical Review

Omidiji et al. (2025) examined the role of the internal audit (IA) function in reducing loan losses and enhancing financial performance in microfinance institutions (MFIs) within developing economies. Using panel data from 1,029 MFIs across 63 countries, the study employed fixed-effects regression models for empirical analysis. The findings reveal that the presence of an internal audit function is significantly associated with a reduction in loan losses, highlighting its effectiveness in strengthening governance and risk management practices. Furthermore, the study demonstrates that internal audit positively influences the financial performance of MFIs, as evidenced by its significant effect on institutional operational self-sufficiency.

Ele et al. (2025) examined the effect of credit risk management on the performance of commercial banks in Nigeria, with specific emphasis on non-performing loans, loan loss provisions, and the cash reserve ratio. The study adopted an ex post facto research design and utilized the ordinary least squares (OLS) regression technique for data analysis. The empirical results indicate that loan loss provisions and cash reserve requirements exert a positive and statistically significant effect on the performance of commercial banks, while non-performing loans were found to have a positive but statistically insignificant impact on bank performance.

Ugwu (2025) evaluated the effect of credit risk management on the financial performance of selected deposit money banks in Nigeria over the period 2000 to 2023, focusing specifically on the impact of non-performing loans, provision for bad debts, and loan loss provisions on return on assets (ROA). The study extracted data from the annual reports of Access Bank and employed pre-test estimations including descriptive statistics, unit root tests, and cointegration tests to ensure the dataset was stationary and suitable for analysis. The findings revealed that credit risk management tools, particularly loan loss provisions and provisions for bad debts, significantly influence the ROA of the selected banks, while non-performing loans also affected performance but with varying degrees of significance.

Osakwe et al. (2024) examined the impact of credit management on the financial performance of selected deposit money banks in Nigeria, focusing on the effect of capital adequacy ratio (CAR) and loan loss provisions (LLP) on return on assets (ROA) of Guaranty Trust Bank, United Bank for Africa, and Zenith Bank from 2007 to 2022. The study utilized secondary data from the Central Bank of Nigeria's 2022 statistics bulletin and applied panel least squares regression and Granger causality tests for analysis. The findings revealed that both the capital adequacy ratio and loan loss provisions have a detrimental effect on ROA, indicating that reductions in CAR and LLP positively influence the financial performance of the banks. Their findings revealed that there is relationship between regulatory credit management measures and bank profitability in the Nigerian banking sector.

Oladele and Akinwumi (2024) investigated the effect of reforms and credit management on the performance of deposit money banks in Nigeria, in the context of persistent challenges such as poor credit management and rising non-performing loans. The study covered all deposit money banks listed on the Nigeria Exchange Limited as of December 31, 2023, and utilized secondary data from audited bank reports and the Nigeria Exchange Limited factbook spanning 2010 to 2023. The analysis employed fixed and random effect regression models, and the findings revealed that all variables used to measure credit risk management significantly influence the financial performance of deposit money banks in Nigeria. Additionally, with respect to operational performance, all variables except LATD showed significant effects, while the study also highlighted that banking reforms serve as a significant driver of overall bank performance

Ohonba and Aigienohuwa (2023) examined the effect of credit management on the financial performance of deposit money banks in Nigeria, focusing specifically on the impact of non-performing loan ratio (NPLR) and capital adequacy ratio (CAR) on return on assets (ROA) of listed commercial banks. The study adopted an ex post facto research design and used a sample of ten banks out of thirteen, with data extracted from their annual accounts spanning 2012 to 2022. Ordinary least squares (OLS) regression analysis was employed to objectively assess the relationship between the independent variables and financial performance. The findings revealed that the non-performing loan ratio has a significant negative effect on ROA, indicating that higher credit risk reduces profitability, while the capital adequacy ratio was found to be insignificant in affecting ROA of the banks.

Fadun and Silwimba (2023) examined the impact of credit risk management on the financial performance of commercial banks in Nigeria, focusing on five first-tier deposit money banks (DMBs) listed on the Nigerian Stock Exchange. The study utilized fifteen years of panel data (2005–2019) extracted from the audited financial reports of the sampled banks. Non-performing loans (NPL) and expected credit loss impairment provisions (ECL) were used as proxies for credit risk management, while return on assets (ROA) served as the financial performance indicator. The long-run co-integration analysis revealed that NPL has a negative and significant effect on ROA, whereas ECL has a positive and substantial effect.

Ohonba and Aigienohuwa (2023) examined the relationship between credit risk management and return on equity (ROE) of Nigerian deposit money banks (DMBs) over a twelve-year period (2010–2021), following the

post-adoption of the common accounting year-end mandated by the Central Bank of Nigeria (CBN) in 2009. The data used were capital adequacy ratio (CAR), liquidity ratio (LQR), loan-to-deposit ratio (LDR), risk asset ratio (RAR), non-performing loans ratio (NPLR), loan loss provision ratio (LLP), bank size (SZ), and ROE was used as the dependent variable. Data collected were analysed using panel data regression analysis. The findings revealed that CAR, RAR, NPLR, and bank size are significant determinants of ROE. Also, that Nigerian DMBs increasingly relied on offshore borrowings via Eurobonds to create risk assets due to CBN restrictions on local deposit usage, and that shareholders of banks with international licenses were not significantly better compensated for their risk exposure compared to risk-free assets, such as treasury bills.

METHODOLOGY

The study adopted an ex post facto research design to examine the effect of credit risk management on the financial performance of listed deposit money banks in Nigeria. The population comprised all thirteen (13) deposit money banks listed on the Nigerian Exchange Group as of 2024. Using a purposive sampling technique, five banks—Access Bank, Ecobank, Stanbic IBTC, United Bank for Africa (UBA), and Union Bank—were selected based on the availability of complete and reliable data over the study period, which spans from 2012 to 2024. Return on assets (ROA) was employed as the measure of financial performance, while non-performing loans and loan loss provisions were used as proxies for credit risk management. Bank size, inflation rate, and interest rate were included as control variables, consistent with prior studies such as Ugwu (2025). This sampling and variable selection approach ensures a robust assessment of the relationship between credit risk management practices and the financial performance of Nigerian deposit money banks.

Model Specification

The objective of this study is to examine the effect of credit risk on the financial performance of selected deposit money banks in Nigeria. To achieve this, the study adapted the model developed by Ugwu (2025) with slight modifications. Financial performance is measured using return on assets (ROA), while credit risk is proxied by non-performing loans and loan loss provisions. The functional form of the model is expressed as follows:

$$ROA_{it} = f(NPL_{it}, LLP_{it}, BSZ_{it}, INTR_{it}, INFR_{it}) \quad 1$$

Where:

ROA_{it} = Return on asset of individual Bank i at period t

NPL_{it} = Non-performing loan of individual Bank i at period t

LLP_{it} = Loan loss provision of individual Bank i at period t

BSZ_{it} = Bank size of individual Bank i at period t

$INTR_{it}$ = Interest rate of individual Bank i at period t

$INFR_{it}$ = Inflation rate of individual Bank i at period t

Equation 1 is respecified in its econometric form as:

$$ROA_{it} = \beta_0 + \beta_1 NPL_{it} + \beta_2 LLP_{it} + \beta_3 BSZ_{it} + \beta_4 INTR_{it} + \beta_5 INFR_{it} + \varepsilon_{it} \quad 2$$

Where: β_0 represent the constant while $\beta_1 - \beta_5$ are coefficient of the independent variables and ε_{it} is the error term. Equation 2 is re-specified in logarithm form as

$$\ln ROA_{it} = \beta_0 + \beta_1 \ln NPL_{it} + \beta_2 \ln LLP_{it} + \beta_3 \ln BSZ_{it} + \beta_4 \ln INTR_{it} + \beta_5 \ln INFR_{it} + \varepsilon_{it} \quad 3$$

On a priori we expect $\beta_1 < 0$; $\beta_2 < 0$; $\beta_3 > 0$ $\beta_4 < 0$ and $\beta_5 < 0$.

RESULTS

Descriptive Statistics

The descriptive statistics reveal that the selected deposit money banks exhibit low average profitability, with a mean return on assets (ROA) of 0.309% and a standard deviation of 3.710%, indicating substantial fluctuations over the study period. The minimum ROA of -18.662% reflects periods of significant losses, while the maximum of 3.026% represents the peak performance recorded. Non-performing loans (NPL) averaged ₦182,203.20 thousand, with a standard deviation of ₦108,969.80 thousand, highlighting the persistent challenge of loan defaults, which ranged from ₦24,326.00 thousand to ₦623,423.00 thousand. Loan loss provisions (LLP) averaged ₦81,327.60 thousand, demonstrating that banks routinely allocate funds to cover potential credit losses. However, the wide variation—from -₦96,912.00 thousand to ₦447,589.00 thousand—suggests inconsistent provisioning practices, including occasional reversals. Bank size (BSZ), measured as the natural logarithm of total assets, averaged 6.270, with values spanning 2.128 to 9.725, indicating considerable disparities in scale among the banks. Macroeconomic indicators also varied considerably: the mean inflation rate (INFR) was 13.692% (SD = 4.581%), ranging from 8.047% to 24.660%, reflecting significant inflationary pressures that could affect banks' cost structures and profitability. Meanwhile, the average interest rate (INTR) stood at 6.144% with a standard deviation of 3.830%, fluctuating between 0.919% and 13.596%, suggesting substantial variation in lending conditions and borrowing costs, which likely influenced credit risk and overall bank performance.

Table 1: Descriptive Statistics

	ROA	NPL	LLP	BSZ	INFR	INTR
Mean	0.309	182203.200	81327.600	6.270	13.692	6.144
Median	1.236	145639.000	59514.000	5.844	12.224	5.791
Maximum	3.026	623423.000	447589.000	9.725	24.660	13.596
Minimum	-18.662	24326.000	-96912.000	2.128	8.047	0.919
Std. Dev.	3.710	108969.800	96246.090	3.063	4.581	3.830
Skewness	-3.631	1.364	1.304	-0.139	0.864	0.421
Kurtosis	16.473	5.483	5.483	1.340	3.189	2.359
Jarque-Bera	634.459	36.861	35.127	7.675	8.190	3.033
Probability	0.000	0.000	0.000	0.022	0.017	0.219

Source: Researcher, 2025

Correlation

Table 2 presents the correlation results of the variables used in the study. The result shows that Return on Assets (ROA) is negatively correlated with Non-Performing Loans (NPL), with a correlation coefficient of $r = -0.302$ at the 5% level of significance ($\rho < 0.05$). This implies that as the proportion of non-performing loans increases, the profitability of banks measured by ROA decreases, suggesting that higher credit risk adversely affects bank performance. ROA is also negatively and significantly correlated with Loan Loss Provisions (LLP) ($r = -0.312$, $\rho < 0.05$). This implies that higher provisioning for potential loan losses reduces the net earnings of banks, thereby weakening their overall profitability.

In terms of bank size, the result shows a positive but insignificant relationship between ROA and Bank Size (BSZ) ($r = 0.055$, $\rho > 0.05$). This indicates that larger bank size does not necessarily guarantee improved profitability among the sampled banks. The correlation between ROA and Inflation Rate (INFR) is negative but not statistically significant ($r = -0.178$, $\rho > 0.05$). This suggests that although inflationary pressures tend to reduce bank performance, the effect is weak and not conclusive in this case. Finally, ROA exhibits a positive but insignificant correlation with Interest Rate (INTR) ($r = 0.197$, $\rho > 0.05$). This implies that changes in interest rates have little direct influence on bank profitability within the study period.

Table 2. Correlations

		ROA	NPL	LLP	BSZ	INFR	INTR
ROA	Pearson Correlation	1.000					
	Sig. (2-tailed)						
NPL	Pearson Correlation	-0.302**	1.000				
	Sig. (2-tailed)	(0.013)					
LLP	Pearson Correlation	-.312**	0.198	1.000			
	Sig. (2-tailed)	(0.011)	(0.113)				
BSZ	Pearson Correlation	0.055	-0.056	-0.179	1.000		
	Sig. (2-tailed)	(0.661)	(0.657)	(0.154)			
INFR	Pearson Correlation	-0.178	0.004	-0.014	-0.006	1.000	
	Sig. (2-tailed)	(0.157)	(0.978)	(0.912)	(0.963)		
INTR	Pearson Correlation	0.197	-0.043	0.196	0.003	-.843**	1.000
	Sig. (2-tailed)	(0.115)	(0.732)	(0.118)	(0.983)	(0.000)	

Source: Researcher, 2025.

Unit Root Test

Table 3 presents the panel unit root result as proposed by Im, Pesaran and Shin. The test was carried out to examine the stationarity of the variables and to ensure that the regression results would not be spurious. The findings show that all variables Return on Assets (ROA), Non-Performing Loans (NPL), Loan Loss Provisions (LLP), Bank Size (BSZ), Inflation Rate (INFR), and Interest Rate (INTR) are non-stationary at levels I(0), but become stationary after first differencing, indicating that they are integrated of order one, I(1). This result justifies the application of cointegration techniques, and consequently the Fully Modified Ordinary Least Squares (FMOLS) estimator was employed to capture the long-run relationship among the variables, as it is well-suited for handling I(1) series while correcting for endogeneity and serial correlation.

Table 3: Im, Pesaran and Shin Unit Root Test

	Level	1st Diff
ROA	2.502 (0.994)	-2.987*** (0.001)
NPL	0.601 (0.726)	-2.480** (0.015)
LLP	1.006 (0.843)	-3.184*** (0.001)
BSZ	-1.197 (0.116)	-4.299*** (0.000)
INFR	1.087 (0.860)	-3.837*** (0.000)
INTR	2.295 (0.989)	-2.056** (0.019)

Source: Researchers, 2025

Empirical Result

Table 4 presents the regression results obtained using the Panel Fully Modified OLS estimation technique. The findings show that Non-Performing Loans (NPL) exert a significant negative impact on the financial performance of the selected deposit money banks, as measured by Return on Assets (ROA). This outcome aligns with the a priori expectation, as higher levels of loan defaults reduce bank profitability. Specifically, a 1% increase in NPL reduces ROA by 0.446%, highlighting the detrimental effect of credit risk on performance. The significance of this result indicates that NPL is a critical determinant of ROA in Nigerian banks, showing the

importance of effective credit risk management in sustaining profitability. This evidence is consistent with the findings of Ohonba and Aigienohuwa (2023) and Osakwe et al. (2024), who also documented the negative influence of loan defaults on bank performance.

Loan Loss Provision (LLP) is also negatively and significantly related to ROA, with the coefficient showing that a 1% increase in LLP reduces ROA by 0.383%. This result suggests that while provisioning is necessary for covering potential credit losses, it reduces short-term profitability since funds set aside cannot be used for income-generating activities. This conforms to the a priori expectation of a negative relationship and supports the findings of Ugwu (2025) and Hamisu et al., (2021), who reported that excessive provisioning adversely affects bank performance.

The coefficient of Bank Size (BSZ) is 0.328, which is positive and highly significant. This indicates that a 1% increase in bank size leads to a 0.328% increase in ROA. The result implies that larger banks tend to enjoy economies of scale, stronger asset capacity, and better risk diversification, which contribute positively to their profitability. This finding conforms with the a priori expectation of a positive relationship between size and performance and supports the studies of Le et al (2025) as well Ozili and Ndah, (2024), who also found that bigger banks are more profitable due to their stronger operational capacity.

Inflation Rate (INFR) carries a coefficient of -1.247%, showing that a 1% rise in inflation reduces ROA by 1.247%. Although the effect is statistically insignificant, the negative sign suggests that inflationary pressures increase costs and reduce profitability in Nigerian banks. This result aligns with the findings of Akarogbe et al., (2024), who reported that inflation undermines financial performance by eroding asset values and increasing operating expenses.

Interest Rate (INTR) has a positive coefficient of 0.197%, which implies that a 1% increase in interest rate leads to a 0.197% increase in ROA. However, the result is statistically insignificant, suggesting that variations in interest rates did not significantly influence profitability within the study period. This outcome aligns with the findings of Obadiaru and Ogunyemi (2024), who noted that interest rate changes have limited or mixed effects on bank profitability depending on the broader economic and policy environment

The overall model performance, as reflected by the R-squared and adjusted R-squared values, indicates that the explanatory variables jointly explain a significant proportion of the variation in bank profitability. Specifically, the R-squared of 62.2% suggests that more than half of the changes in Return on Assets (ROA) are accounted for by Non-Performing Loans, Loan Loss Provisions, Bank Size, Inflation Rate, and Interest Rate. The adjusted R-squared of 58.2% further confirms the explanatory power of the model after controlling for degrees of freedom, showing that the selected credit risk management variables and macroeconomic indicators provide a strong fit in explaining the financial performance of Nigerian deposit money banks.

Table 4: Regression Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NPL	-0.446**	0.196	-2.276	0.015
LLP	-0.383**	0.147	-2.614	0.012
BSZ	0.328***	0.091	3.617	0.001
INFR	-1.247	0.761	-1.639	0.108
INTR	0.197	0.275	0.715	0.478
R-squared	0.622	Mean dependent var		0.129
Adjusted R-squared	0.582	S.D. dependent var		0.437
S.E. of regression	0.335	Sum squared resid		5.616
Long-run variance	0.136			

Source: Author, 2025. Note: ** denotes significance at 5%

Test of Hypothesis

Hypothesis 1

H_{01} : Non-performing loans have no significant effect on the financial performance of deposit money banks in Nigeria.

H_{02} : Loan loss provisions have no significant effect on the financial performance of deposit money banks in Nigeria.

Table 5 shows the outcome of the test of hypotheses. From the first hypothesis, which was to examine whether non-performing loans have no significant effect on the financial performance of deposit money banks in Nigeria, the outcome shows that the coefficient of NPL is negative (-0.446) and statistically significant at the 5% level ($\rho < 0.05$). Hence, we reject the null hypothesis and conclude that non-performing loans exert a significant negative effect on bank profitability as measured by ROA.

For the second hypothesis, which was to test whether loan loss provisions have no significant effect on the financial performance of deposit money banks in Nigeria, the result shows a negative coefficient of -0.383 and also statistically significant with $\rho < 0.05$. This also leads to the rejection of the null hypothesis, thereby concluding that loan loss provisions significantly reduce the financial performance of Nigerian banks. These results confirm that higher levels of credit risk, whether in the form of non-performing loans or increased provisioning, undermine the profitability of deposit money banks in Nigeria.

Table 5: Test of Hypotheses

Hypotheses	Coefficient	t-Statistic	ρ -Value	Decision
H_{01} : Non-performing loans have no significant effect on the financial performance of deposit money banks in Nigeria.	-0.446	-2.276	0.015	Reject H_{01}
H_{02} : Loan loss provisions have no significant effect on the financial performance of deposit money banks in Nigeria.	-0.383	-2.614	0.012	Reject H_{02}

Source: Authour, 2025

CONCLUSION AND RECOMMENDATIONS

The study examined the effect of credit risk on the financial performance of five selected deposit money banks in Nigeria over the period 2012–2024, employing the panel Fully Modified Ordinary Least Squares (FMOLS) estimation technique. The results indicate that credit risk, proxied by non-performing loans and loan loss provisions, negatively affects bank profitability, as high levels of defaults and provisioning erode financial performance. Conversely, bank size and interest rate were found to enhance profitability, suggesting that larger banks with greater capacity and effective interest income generation are better positioned to perform well. Inflation, however, exerted a significant adverse effect on financial performance, highlighting banks' vulnerability to macroeconomic instability. These findings underscore the importance of both robust internal credit risk management practices and stable external macroeconomic conditions in determining bank performance in Nigeria.

In light of these results, the study recommends that banks strengthen their credit appraisal, loan monitoring, and recovery mechanisms to minimize non-performing loans, while adopting prudent and efficient provisioning policies. Bank management should also leverage economies of scale and implement sound interest rate strategies to optimize profitability. Additionally, regulators and policymakers should pursue measures to control inflation and ensure macroeconomic stability, thereby supporting the resilience and financial performance of the Nigerian banking sector.

REFERENCES

1. Akarogbe, C. A., Chukwunwike, O. D., & Ozor, C. D. (2024). Determinants of Banks Profitability: Evidence from Nigeria Banking Industry. *Journal of Business and Econometrics Studies*, 1(5), 1-10.
2. Animasaun, R. O., Omotunwase, O. M., Babayanju, A. G. A., & Bamgboye, A. A. (2025). Effect of credit risk management on financial performance of listed deposit money banks in Nigeria. *International Journal of Research in Social Science and Humanities* 6(1), 1-12.
3. Ele, L. E., Nwafor, I. N., & Ocheni, G. A. (2025) Credit Risk Management and the Performance of Commercial Banks in Nigeria. *Journal of Public Administration and Social Welfare Research*. 10(4), 85-98
4. Fadun, O. S., & Silwimba, P. (2023). Does credit risk management impact the financial performance of commercial banks? *International Journal of Business Ecosystem & Strategy* (2687-2293), 5(2), 55-66.
5. Farooq, M., Khan, S., Siddiqui, A. A., Khan, M. T., & Khan, M. K. (2021). Determinants of profitability: A case of commercial banks in Pakistan. *Humanities and Social Sciences Reviews*, 9(2), 1-13.
6. Feleke, T. M., & Tafere, H. T. (2025). Determinants of credit risk of commercial banks in Ethiopia. *Journal of Innovation and Entrepreneurship*, 14(1), 1-29.
7. Hamilton, S., Ogbeide, F. I., Adeboje, O. M., & Mande, B. T. (2021). Monetary policy and banking system distress in Nigeria. *NDIC Quarterly*, 35(1), 114-135.
8. Hamisu, M., Ibrahim, M. A., & Zango, A. G. (2021). Credit risk management and financial performance of selected banks in Nigeria. *Polac Economic Review (PER)*, 1(1), 1-12.
9. Iqbal, A., Iqbal, M. S., Fatima, A., Ghori, M. A., & Tahir, S. (2025). Optimizing resilience: Impact of credit risk management on financial performance in Islamic banking. *Zakariya Journal of Social Science*, 4(1), 01-16.
10. Kwashie, A. A., Baidoo, S. T., & Ayesu, E. K. (2022). Investigating the impact of credit risk on financial performance of commercial banks in Ghana. *Cogent Economics & Finance*, 10(1), 2109281.
11. Le, V. H., Nguyen, A. H., & Ngo, T. V. (2025). Financial intermediation and profitability of commercial banks in Vietnam: does bank size matter? *Journal of International Economics and Management*, 1-15.
12. Obadiaru, E. D., & Ogunyemi, A. E. (2024). The Effect of Interest and Non-Interest Income on the Profitability of Banks in Nigeria. *International Journal of Research Publication and Reviews*, 5(2), 317-322.
13. Odanga, W. A., Ndegwa, J. N., & Okello, G. (2024). Relationship between Financial Risk Exposure and Non-Performing Loans of Commercial Banks in Kenya. *African Journal of Empirical Research*, 5(3), 47-57.
14. Ogundele, O. S., & Nzama, L. (2025). Risk Management Practices and Financial Performance: Analysing Credit and Liquidity Risk Management and Disclosures by Nigerian Banks. *Journal of Risk and Financial Management*, 18(4), 1-15.
15. Ogunmokun, O. C., Mafimisebi, O. P., & Obembe, D. (2023). Prospect theory and bank credit risk decision-making behaviour: a systematic literature review and future research agenda. *SN Business & Economics*, 3(4), 90.
16. Ohonba, N., & Aigienohuwa, O. (2023). Credit management and financial performance of deposit money banks in Nigeria. *Journal of the Management Sciences*, 60(4), 209-223.
17. Okeke, N. I., Bakare, O. A., & Achumie, G. O. (2024). Forecasting financial stability in SMEs: A comprehensive analysis of strategic budgeting and revenue management. *Open Access Research Journal of Multidisciplinary Studies*, 8(1), 139-149.
18. Oladele, T. C., & Akinwumi, A. O. (2024). Assessing the impact of credit risk management on performance of deposit money banks in Nigeria. *UMYU Journal of Accounting and Finance Research*, 6(1), 33-43.
19. Omidiji, A., Ehalaiye, D., Gyapong, E., & Botica Redmayne, N. (2025). Internal audit, loan losses, and financial performance in microfinance institutions-a global evidence. *China Accounting and Finance Review*, 27(3), 364-396.
20. Onigah, P. O. (2024). The Combined Effect of Interest Rates on Commercial Banks Performance in Nigeria. *African Banking and Finance Review Journal*, 14(14), 77-92.
21. Oranekwu, D. C., & Eze, C. U. (2023). Restructuring of Nigerian banking system for greater efficiency and reliability. *African Banking and Finance Review Journal*, 1(1), 348-363.

22. Orebiyi, P., Effiong, U., Udofia, M., & Ukpe, U. (2025). The impact of financial depth and efficiency on savings mobilization in Nigeria. *Studies in Economics and Business Relations*, 6(1), 1-20.
23. Osakwe, C. I; Wisdom, O., Chigioke, A.V., Okoye, N.J., & Offiaeli, G. (2024). Effect of Credit Management on the Financial Performance of Selected Deposit Money Banks in Nigeria. *Academic Research*, 10(5), 58-70.
24. Ozili, P. K., & Ndah, H. (2024). Impact of financial development on bank profitability. *Journal of Economic and Administrative Sciences*, 40(2), 238-262.
25. Scott, A. O., Amajuoyi, P., & Adeusi, K. B. (2024). Effective credit risk mitigation strategies: Solutions for reducing exposure in financial institutions. *Magna Scientia Advanced Research and Reviews*, 11(1), 198-211.
26. Taiwo, I., & Mike, M. E. E. (2021). Empirical analysis of non-performing loans and liquidity of deposit money banks: Nigeria Experience. *Journal of International Business and Management*, 4(9), 01-14.
27. Ugwu, P.A. (2025). Effect of credit risk management on the financial performance of selected deposit money bank in Nigeria. *Journal of Management Science and Entrepreneurship*. 7(7), 108-131.
28. Ugwuanyi, W., Wade, J. W., & Okoh, J. (2024). Banking reforms in Nigeria: implications for employee job satisfaction and performance evaluation management. *African Banking and Finance Review Journal*, 8(8), 84-102.