Credit Risk Management and Financial Performance of Deposit Money Banks

Miracle Eseosa OBAZEE
MGS2104757

DEPARTMENT OF FINANCE
FACULTY OF MANAGEMENT SCIENCES
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BEING A PROJECT WORK SUBMITTED TO THE DEPARTMENT OF FINANCE, FACULTY OF MANAGEMENT SCIENCES, UNIVERSITY OF BENIN, BENIN CITY. IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE BACHELOR OF SCIENCE (B.Sc) DEGREE IN FINANCE

October, 2025

DECLARATION

I, Obazee Eseosa Miracle declare that this study is based on a study undertaken by me in the Department of Finance, Faculty of Management Sciences, University of Benin, Benin City, under the supervision of Dr. Uhunmwangho Monday. This work has not been submitted for the award of degree elsewhere. The Ideas and views are product of my personal research and where the view of others has been expressed, they have been duly acknowledged. Any liability arising from this work is to be wholly borne by me.

Obazee Eseosa Miracle **DATE**

CERTIFICATION

We the under signed certify that this research project was carried out by Obazee Eseosa Miracle in the Department of Finance, Faculty of Management Sciences, University of Benin, Benin City, Nigeria. It is adequate in scope and quality in partial fulfillment of the requirements for the award of Bachelor of Science (B.Sc.) degree in Finance.

Dr. Uhunmwangho Monday	**Date**
(Project Supervisor)	
Dr. Aigbovo Omoruyi	**Date**
(Project Coordinator)	
Dr. Andrew Izekor	**Date**
(Head of Department)	

DEDICATION

This project work is dedicated to God Almighty for His abundant grace in my life and for seeing me through my academic pursuit and aspirations. He is my source of strength and on His wings only I have soared. I also want to dedicate this project to my Family and friends for the love and encouragement they have shown towards me during the course of this program, all I can say is thank you and God bless you.

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My utmost thanks go to God Almighty, for His faithfulness and guidance throughout my academic performance of the University of Benin.

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ABSTRACT

This study considered the influence of credit risk management on the financial performance of deposit money banks in Nigeria. Data for the study was collected from investigated annual financial report spanning 2020 to 2024. The banks investigated includes First Bank, Access Bank, United Bank for Africa, Wema Bank, Unity Bank, First City Monument Bank, Zenith Bank and Fidelity Bank.

The fixed effects and random effects regression procedures were applied on panel data and the Hausman test diagnostic technique was applied on the random effect regression output to determine the most efficient estimate which was selected for analysis. The estimation was carried out using E-view 9.0 econometric software.

This study found that credit risk management negatively and significantly influence the financial performance of deposit money banks in Nigeria. Precisely, non-performing loan, loan loss provision among others negatively and signficantly impact the financial performance of deposit money banks. Based on these findings, this study recommends that bank manager should intensify action to minimize the rate of non-performing loan because of the risk it poses to financial performance and that banks should limit the amount set aside as loan loss provision because it diminishes the fund that would have been available for credit creation, thus depressing financial performance.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Deposit Money Banks are financial institutions that play a pivotal role in the economic development of Nigeria by acting as intermediaries between surplus and deficit units of the economy. They mobilize savings from individuals and institutions and channel these funds into productive ventures through loans and advances. This function not only supports investment and consumption activities but also contributes significantly to the nation's GDP. In 2023, the Nigerian banking sector accounted for about 30% of the financial services industry's contribution to GDP, highlighting its strategic importance to economic growth (Central Bank of Nigeria [CBN], 2023).

The role of Deposit Money Banks (DMBs) in Nigeria's financial system is critical to fostering economic growth and development. These banks serve as intermediaries, facilitating the flow of capital from savers to borrowers, which supports investment activities and drives overall economic advancement. In 2023, the Nigerian banking sector accounted for approximately 30% of the financial services industry's contribution to the country's GDP, highlighting its pivotal position in economic stability and development (Central Bank of Nigeria [CBN], 2023). However, this role comes with significant risks, particularly credit risk, which arises when borrowers fail to meet their debt obligations. Credit risk is a dominant challenge in banking, and when poorly managed, it leads to financial losses and can even result in bank insolvency.

In Nigeria, Deposit Money Banks (DMBs) have historically faced issues of high loan defaults, leading to an increase in non-performing loans (NPLs). For instance, the NPL ratio for Nigerian banks was reported at 5.3% in 2022, a slight improvement from 6.3% in 2021 but still higher than the regulatory benchmark of 5% set by the CBN (CBN, 2023). Despite efforts to reduce these ratios, economic instability, poor credit assessment practices, and an underdeveloped legal framework for loan recovery continue to exacerbate credit risk in Nigeria. Consequently, there is a pressing need for banks to adopt more effective credit risk management strategies to maintain financial stability and profitability.

Credit risk management is become essential for ensuring the financial health of banks, as it involves a series of measures aimed at mitigating potential losses that may arise from loan defaults. Effective credit risk management directly influences a bank's financial performance by reducing loan losses, maintaining liquidity, and safeguarding profitability (Ekanem & Akpan, 2022). A bank's ability to manage credit risk effectively is crucial, given that about 70% of banks' assets are typically tied to loans and advances, which makes these institutions highly vulnerable to credit defaults (Oladapo & Oyewole, 2022). Among the key tools used to manage credit risk are the Non-Performing Loan (NPL) Ratio, Loan Loss Provision, and the Collateralization Ratio. The NPL ratio measures the percentage of loans that are not being repaid as scheduled. A higher NPL ratio signifies poor loan performance and indicates the likelihood of significant financial losses for banks.. Another key variable is Loan Loss Provisioning, which represents the reserves that banks set aside to cover potential loan losses.

Nigerian banks have been increasing their loan loss provisions in recent years in response to growing concerns about loan defaults. In 2022, total loan loss provisions by Nigerian banks rose by 10%, reflecting the banks' proactive measures to cushion the impact of rising NPLs (PricewaterhouseCoopers Nigeria, 2023). Proper provisioning ensures that banks can absorb unexpected losses without jeopardizing their financial performance.

The Collateralization Ratio, which indicates the proportion of loans secured by collateral, is a vital component of credit risk management. Properly collateralized loans offer a form of risk mitigation, as the pledged assets can be liquidated to recover outstanding loan amounts in cases of default. In Nigeria, the use of collateral is widespread, especially in the corporate and real estate lending segments. However, the effectiveness of collateral as a risk control tool is often undermined by the country's weak legal and institutional frameworks, which hinder the timely enforcement of collateral claims (Uche & Umoh, 2021). Therefore, enhancing collateral adequacy alongside strengthening legal recovery mechanisms is essential for improving credit risk management.

Moreover, gaining insight into how credit risk indicators—such as the Non-Performing Loan (NPL) Ratio, Loan Loss Provisioning, and Collateralization Ratio—influence financial performance is critical for the long-term sustainability of Deposit Money Banks. These indicators directly affect key financial outcomes, including profitability and solvency. Empirical evidence suggests that banks maintaining lower NPL ratios and higher provisioning levels are

more financially resilient, with stronger performance in profitability and capital adequacy metrics (Ajayi, 2021). Such institutions are better equipped to absorb credit shocks and maintain stability during periods of economic volatility. As Nigerian banks intensify their lending operations, there is an urgent need to reinforce their credit risk management systems to minimize potential losses and enhance overall financial health.

1.2 STATEMENT OF THE PROBLEM

Despite the implementation of various credit risk management practices, Deposit Money Banks (DMBs) in Nigeria continue to struggle with high levels of loan defaults, which result in elevated Non-Performing Loan (NPL) ratios and reduced profitability. According to Adewumi (2021), although Nigerian banks have made efforts to improve their credit risk management frameworks, the overall impact on profitability remains limited due to the high percentage of loans that fall into non-performing categories. This is in line with Okafor (2020), who argued that weak enforcement mechanisms for collateral claims and the inadequate monitoring of borrowers contribute to the persistent rise in NPLs. Additionally, Bello (2022) highlighted that loan loss provisioning in Nigerian banks has often been insufficient to cover unexpected defaults, putting immense strain on their capital base and long-term sustainability.

However, a gap exists in these studies as they predominantly focus on the general causes of loan defaults and credit risk but do not provide an in-depth analysis of the effectiveness of specific credit risk management tools such as NPL Ratio, Loan Loss Provisioning, and the

Collateralization Ratio in protecting the financial performance of Deposit Money Banks. While Adewumi (2021) acknowledged the importance of improving credit risk practices, the analysis lacked detailed empirical evaluation of how individual credit risk metrics directly correlate with financial outcomes such as profitability and solvency. Similarly, Okafor (2020) focused more on regulatory aspects and did not explore the operational efficiency of provisioning policies in mitigating credit risk. Bello (2022) offered a valuable critique of loan loss provisioning but did not sufficiently consider the broader scope of collateralization and its enforcement.

This current research seeks to fill the identified gap by providing a comprehensive analysis of the effectiveness of NPL Ratio, Loan Loss Provisioning, and the Collateralization Ratio in improving the financial performance of Nigerian DMBs. Specifically, the study aims to investigate how these tools affect profitability, solvency, and overall financial health. By using recent data and employing a quantitative approach, this research will offer fresh insights into whether Nigerian banks' current credit risk management strategies are adequate and provide recommendations for improvement. The findings are expected to help bridge the gap between credit risk theory and practical risk management applications in the banking sector.

1.3 RESEARCH QUESTIONS

To guide the study, the following research questions will be addressed:

1.How does the Non-performing loan (NPL) Ratio affect the financial performance of deposit Money Banks in Nigeria?

2.What is the relationship between loan loss Provisioning and the financial performance of deposit Money Banks in Nigeria?

3.To what extent does the collateralization Ratio influence the financial performance of deposit Money Banks in Nigeria?

1.4 OBJECTIVES OF THE STUDY

The main objective of this study is to assess the impact of credit risk management on the financial performance of Deposit Money Banks in Nigeria. Specifically, the study aims to:

1.Evaluate the effect of the non-performing loan (NPL) Ratio on the financial performance of Deposit Money Banks in Nigeria.

2.Examine the impact of loan loss provisioning on the financial performance of Deposit Money Banks in Nigeria.

3.Analyze the influence of the collateralization Ratio on the financial performance of deposit money banks in Nigeria.

1.5 RESEARCH HYPOTHESIS

To further guide the analysis, the following null hypotheses will be tested:

H_1: There is no significant relationship between the Non-performing loan (NPL) Ratio and the financial performance of Deposit Money Banks in Nigeria.

H_2: Loan loss Provision does not have a significant impact on the financial performance of Deposit Money Banks in Nigeria.

H_3: The collateralization ratio does not significantly influence the financial performance of Deposit Money Banks in Nigeria.

1.6 SIGNIFICANCE OF THE STUDY

This study is important to both academic and practical spheres, particularly in deepening the understanding of credit risk management and its effects on the financial performance of Deposit Money Banks (DMBs) in Nigeria.specifically, this study will benefits the following group;

Academia : This study enriches existing literature by providing a detailed examination of specific credit risk management metrics—namely the Non-Performing Loan (NPL) Ratio, Loan Loss Provisioning, and the Collateralization Ratio—and their impact on financial performance indicators such as profitability and solvency. Given the persistent credit risk issues in the Nigerian banking sector, with NPLs reaching 5.3% in 2022 (CBN, 2023), this research offers current, data-driven insights into the effectiveness of these metrics. By addressing gaps in previous studies, it contributes to a clearer understanding of how these variables influence the financial health of banks.

Bank Managers: The findings of this study will provide actionable insights for bank managers in strengthening their credit risk management strategies. It will highlight how improvements in managing NPL ratios, optimizing loan loss provisioning, and enforcing collateral recovery can enhance financial resilience. For instance, the study may inform better loan screening and

monitoring practices or encourage revisions in collateral policies. These insights can help managers reduce exposure to default risk and improve overall performance.

Regulatory Bodies: Regulators, particularly the Central Bank of Nigeria (CBN), stand to benefit from this research through a better understanding of the real-world application of credit risk management tools. The study's outcomes can support the formulation and refinement of regulatory frameworks aimed at enhancing the financial stability of DMBs. For example, evidence from this research could inform stricter requirements on loan provisioning or the legal enforceability of collateral, thereby reducing credit risk across the banking sector.

Future Academic Research: Finally, this study serves as a valuable resource for scholars conducting further research on credit risk management, especially within the Nigerian or broader African context. By focusing on quantifiable metrics, it provides a solid empirical foundation for validating or challenging existing theoretical models. Additionally, the findings can serve as a reference point for comparative studies across regions or banking systems, thereby expanding the scope of financial risk management research.

1.7 SCOPE OF THE STUDY

The scope of this study is limited to 14 Deposit Money Banks operating in Nigeria. The study will examine the relationship between specific credit risk management practices—measured by the Non-Performing Loan (NPL) Ratio, Loan Loss Provisioning, and Collateralization Ratio—

and financial performance indicators, such as return on assets (ROA) and return on equity (ROE). The study will focus on the period from 2015 to 2023, using secondary data obtained from financial statements of selected banks and reports from the Central Bank of Nigeria.

1.9 LIMITATIONS OF THE STUDY

This study is subject to certain limitations that should be acknowledged. First, the timeframe of five years (2019–2023) may not fully capture long-term credit risk dynamics or the impact of economic cycles. Short-term macroeconomic shocks, such as inflation and exchange rate volatility, can significantly distort banking performance, thereby limiting the generalizability of the results (World Bank, 2022).

Second, the research focuses only on 14 Deposit Money Banks, excluding smaller commercial banks, microfinance institutions, and non-bank financial intermediaries. This restriction narrows the scope of the findings and may not reflect variations in credit risk management practices across the entire financial sector (Adeola & Evans, 2021).

Third, the study relies exclusively on secondary data obtained from annual reports of banks and publications of the Central Bank of Nigeria. While these sources are authoritative, reliance on secondary data carries the risk of inaccuracies, inconsistencies, or missing information, which may affect the robustness of the analysis (Adeleke, 2022).

Fourth, the study emphasizes quantitative indicators of credit risk such as Non-Performing Loan (NPL) ratios, Loan Loss Provisions, and Collateralization Ratios, but does not account for qualitative dimensions such as managerial efficiency, internal risk culture, or regulatory compliance. These non-financial factors often play a critical role in shaping banks' resilience to credit shocks (Ekanem & Akpan, 2022). Finally, broader macroeconomic variables such as interest rate volatility, inflation, and exchange rate instability, though highly relevant to credit risk and financial performance, are not explicitly controlled for in the analysis. Their exclusion may limit the comprehensiveness of the study's findings (Ajayi, 2021).

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter presents a review of relevant literature on credit risk management and its impact on the financial performance of Deposit Money Banks (DMBs) in Nigeria. The review begins with an exploration of the concepts of credit risk and credit risk management, followed by an examination of the relationship between credit risk metrics—specifically the Non-Performing Loan (NPL) Ratio, Loan Loss Provisioning, and the Collateralization Ratio—and the financial performance of banks. Additionally, the chapter discusses empirical studies that highlight the challenges faced by DMBs in Nigeria concerning credit risk management and concludes with a summary of the literature and identified research gaps.

2.2 CONCEPTUAL REVIEW

This section provides understanding of the concepts of credit risk and its management within the context of financial performance in Deposit Money Banks (DMBs). In the banking sector, credit risk is one of the most pressing concerns due to its direct impact on profitability, financial stability, and systemic risk. This section examines the concept of credit risk in detail, exploring its implications for banks, the metrics used to assess and manage it, and its relevance to the performance of financial institutions.

2.2.1 CREDIT RISK

Credit risk is defined as the likelihood that a borrower or counterparty will fail to meet its obligations as per the terms of a credit agreement. This failure could be in the form of delayed payments, partial repayments, or complete defaults. For DMBs, credit risk is particularly important due to the nature of their business, which involves significant lending activities and this can expose them to default by borrowers (Bessis, 2015). The consequences of credit risk are multi-faceted, impacting individual banks and the entire financial system. Increased credit risk can lead to financial losses, reduced profitability, and erosion of capital. This is because loan default do not generate expected interest income and may necessitate additional provisioning, which reduces net earnings (Ghosh, 2015). Furthermore, high levels of credit risk may diminish a bank's capital adequacy, thus impairing its ability to expand lending operations and depressed investments (Mian & Sufi, 2021).

Widespread credit risk in the banking sector can create broader economic consequences. High levels of loan defaults in the financial system can lead to credit crunch, because banks will become reluctant to extend credit to borrowers due to increased fear of defaults. This, in turn, can dampen economic growth as access to capital for businesses and individuals becomes limited (Khan & Ahmed, 2020). In economic downturn, credit risk tends to rise as borrowers face challenges in meeting their debt obligations due to declining income levels, increased unemployment or business closures. Thus, managing credit risk effectively is critical to maintaining economic stability and protecting the banking system from potential crises (World

Bank, 2022). The relevance of credit risk to DMBs is underscored by its influence on key performance metrics such as Return on Assets (ROA), Return on Equity (ROE), and capital adequacy ratios. When credit risk is poorly managed, it can erode profitability and increase the cost of capital due to heightened provisions for loan losses (Ajayi, 2021). Banks with effective credit risk management frameworks, on the other hand, can achieve better financial outcomes and attract higher investor confidence. This is because efficient management practices mitigate the likelihood of default, thereby stabilizing revenues from lending activities and reducing the need for excessive provisions.

In Nigeria, credit risk management has been particularly challenging due to influence of economic, regulatory, and operational factors. The volatility of the Nigerian economy, characterized by fluctuating oil prices, exchange rate instability, and inflation, often impacts borrowers' ability to service loans, thereby increasing credit risk (Adewumi, 2021). Additionally, weak enforcement of collateral claims and challenges in the legal system make it difficult for banks to recover loans in the event of borrower defaults, thus complicating credit risk management (Okafor, 2020). To manage credit risk effectively, DMBs in Nigeria and globally use a range of strategies and tools. These include credit screening processes, credit scoring models, collateral requirements, and loan diversification (Bello, 2022). By implementing these mechanisms, banks can reduce their exposure to high-risk borrowers and protect their loan portfolios from concentration risk, which occurs when too many loans are made to borrowers in the same industry or geographic area.

In conclusion, credit risk is a pivotal factor in the financial stability and performance of DMBs. Effective management of credit risk requires comprehensive assessment and mitigation strategies that address both borrower-specific and systemic factors. For Nigerian banks, enhancing credit risk management practices is essential to mitigate the adverse effects of economic volatility, improve profitability, and strengthen the resilience of the banking sector.

2.2.2 CREDIT RISK MANAGEMENT

Credit risk management encompasses the strategies, practices, and frameworks that banks implement to identify, assess, monitor, and mitigate potential credit risks (Bessis, 2015). Given the inherent uncertainty in lending, especially in volatile markets, credit risk management has become critical for the financial health of Deposit Money Banks (DMBs). Banks employ a range of tools to manage credit risk, including setting robust credit policies, conducting thorough credit assessments, and developing systematic monitoring frameworks. Effective credit risk management starts with a comprehensive credit policy. This policy sets the criteria for lending and guides the approval process by defining acceptable credit exposures, collateral requirements, and sector-specific risk limitations. Additionally, credit risk assessment involves evaluating the creditworthiness of potential borrowers through credit scoring, financial analysis, and due diligence processes (Ghosh, 2015).

Banks also apply various metrics, such as loan-to-value ratios, debt-service coverage ratios, and credit ratings, to assess the probability of default. Another critical aspect of credit risk management is the ongoing monitoring of loan portfolios to detect early warning signs of

potential defaults. This includes periodic reviews of borrower financials, sectoral risk analysis, and stress testing. Banks also establish provisions for non-performing loans (NPLs) and adopt risk mitigation techniques like loan syndication, credit derivatives, and credit insurance to limit their exposure (Adewumi, 2021). The primary objectives of credit risk management are to minimize loan defaults, safeguard the bank's capital, maintain overall financial stability, and support profitability. By reducing the likelihood and impact of loan losses, banks can sustain their capital adequacy ratios, which are critical for regulatory compliance and investor confidence (Khan & Ahmed, 2020). Moreover, well-executed credit risk management practices enhance the bank's risk-adjusted return on capital, enabling better alignment with strategic goals and sustained growth in the competitive banking sector.

2.2.3 CREDIT RISK METRICS

To gauge the effectiveness of credit risk management, banks utilize several key metrics. These metrics help assess asset quality, potential losses, and the robustness of credit risk mitigation practices. Among the most significant credit risk indicators are the non-performing Loan (NPL) ratio, loan loss provisioning, and collateralization Ratio.

2.2.3.1 NON-PERFORMING LOAN (NPL) RATIO

The non-performing loan (NPL) ratio is a crucial metric for assessing a bank's asset quality. It represents the proportion of loans that are either in default or at high risk of default, typically loans overdue by more than 90 days (Oladapo & Oyewole, 2022). A high NPL ratio signals increased credit risk, which can threaten a bank's profitability and capital adequacy due to

potential write-offs and provisioning requirements (Ajayi, 2021). Research indicates that banks with lower NPL ratios often exhibit stronger financial performance, as they are less impacted by losses from loan defaults (Central Bank of Nigeria, 2023).

In Nigeria, NPLs remain a challenge, exacerbated by economic volatility and sector-specific risks, especially in the oil and gas industry. For example, in 2022, the Central Bank of Nigeria reported an average NPL ratio of 5.3%, slightly above the regulatory benchmark of 5% (CBN, 2023). This threshold aims to maintain financial stability and ensure that banks are adequately cushioned against potential defaults (Adewumi et al., 2022). Studies have shown that maintaining NPL ratios within regulatory limits can contribute to healthier banking systems, as seen in Nigerian banks with NPL ratios below 5%, which tend to have stronger overall performance (PWC Nigeria, 2023).

2.2.3.2 LOAN LOSS PROVISIONING

Loan loss provisioning is a risk management practice in which banks allocate reserves to cover potential loan losses, serving as a buffer to absorb unexpected losses without compromising their financial health (Ekanem & Akpan, 2022). These provisions are crucial during economic downturns, when default rates may rise due to heightened credit risk. By maintaining adequate provisions, banks can sustain liquidity and minimize the impact on profitability, especially during economic shocks (Bello, 2022). In Nigeria, loan loss provisions have increased significantly in response to the rising NPL ratios, particularly due to challenges in sectors like oil and gas and manufacturing (PWC Nigeria, 2023). According to Ekanem and Akpan (2022), a

well-implemented loan loss provisioning policy not only stabilizes a bank's financial position but also builds investor and customer confidence. The increase in loan loss provisions in Nigerian banks by 10% in 2022 underscores proactive risk management measures in response to rising defaults (CBN, 2023).

2.2.3.3 COLLATERALIZATION RATIO

The collateralization ratio assesses the extent to which loans are secured by collateral, serving as a risk mitigation measure in case of borrower default (Uche & Umoh, 2021). Higher collateralization ratios provide a safety cushion, as banks can liquidate collateral assets to recover loan amounts if borrowers fail to repay (Johnson et al., 2022). However, in Nigeria, challenges related to weak legal frameworks and lengthy enforcement processes can limit the practical effectiveness of collateral as a risk management tool (Bello, 2022). Studies highlight the importance of enforceable collateral arrangements, especially in emerging markets like Nigeria where the legal system may struggle with enforcement efficiency. Despite these challenges, Nigerian banks continue to emphasize collateral requirements as a key part of credit risk management, with collateralization ratios being factored into credit decisions to mitigate potential losses (Uche & Umoh, 2021). The effectiveness of this approach, however, largely depends on improvements in the legal and regulatory frameworks for collateral enforcement.

2.2.2.4 Financial Performance of Deposit Money Banks

The financial performance of Deposit Money Banks (DMBs) is a critical area of focus for financial analysts, investors, and regulatory authorities, as it reflects the stability, profitability,

and growth potential of these institutions (Fadun & Adegbite, 2022). Financial performance is often measured by examining profitability ratios, liquidity levels, asset quality, and efficiency ratios, among other indicators. In Nigeria, where DMBs play a central role in financing economic activities, understanding their financial performance is essential for fostering economic growth and maintaining financial stability (Ogunbiyi & Akinola, 2023).

Key Indicators of Financial Performance

To analyze the financial performance of DMBs, a range of metrics is commonly used, each providing insights into different aspects of a bank's financial health. These metrics include Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), Cost-to-Income Ratio, and Capital Adequacy Ratio.

1. Return on Assets (ROA)

Return on Assets (ROA) is a measure of profermancethat indicates how efficiently a bank utilizes its assets to generate income. It is calculated by dividing net income by total assets. Higher ROA values reflect better performance, as they suggest that a bank is more capable of generating profit from its asset base (Ajayi & Ojo, 2022). For Nigerian DMBs, ROA is particularly important, given the challenges associated with asset quality and loan defaults. Studies indicate that banks with a robust credit risk management framework tend to have higher ROA, as lower non-performing loans (NPLs) directly reduce asset write-offs and loss provisions (Ekanem et al., 2022).

2. Return on Equity (ROE)

Return on Equity (ROE) is a fundamental profitability ratio that measures how effectively a bank generates earnings from shareholders' equity. It is calculated as net income divided by total equity and serves as an important indicator of financial performance for investors. Generally, higher ROE values are desirable, as they show that the bank is efficiently utilizing shareholders' funds to create income (Umeh & Odoh, 2023). In the Nigerian banking sector, ROE plays a central role because shareholders and potential investors use it to assess the financial strength and growth prospects of Deposit Money Banks (DMBs). Empirical studies indicate that banks with consistently strong ROEs are more attractive to investors and better positioned to sustain growth, improve competitiveness, and expand their market share (Adewuyi & Oseni, 2023).

3. Net Interest Margin (NIM)

Net Interest Margin (NIM) measures the difference between the income earned on interest-bearing assets such as loans and investments, and the expenses incurred in servicing interest-bearing liabilities like customer deposits. It is a vital indicator of bank performance because it highlights how efficiently a bank manages its interest-earning assets relative to its funding costs (Afolabi & Bamidele, 2022). In Nigeria, Deposit Money Banks (DMBs) operate in a highly competitive environment where fluctuations in lending rates and deposit mobilization often impact NIM. To mitigate pressure on interest margins and sustain profitability, many banks have increasingly diversified into non-interest income sources, particularly through service

charges, fees, and commissions (Okoye et al., 2023). A higher NIM is generally associated with stronger financial performance, as it reflects effective cost management and the ability to generate income efficiently from assets (Ojo & Hassan, 2022).

4. Cost-to-Income Ratio

The cost-to-income ratio is a measure of operational efficiency that compares operating costs to operating income. A lower ratio is preferable, as it indicates that the bank is generating higher income relative to its costs (Ogunlana & Adepoju, 2023). In Nigeria, the cost-to-income ratio is closely monitored, as high operating expenses can erode profitability, especially in challenging economic conditions. A high cost-to-income ratio is often a sign of inefficiency, which may necessitate restructuring or cost-control measures to improve profitability (Suleiman et al., 2022).

2.2.3 FACTORS INFLUENCING FINANCIAL PERFORMANCE OF DMBS IN NIGERIA

Several factors impact the financial performance of DMBs in Nigeria, including economic conditions, regulatory policies, market competition, and risk management practices.

1. Economic Conditions

Economic conditions, such as inflation, interest rates, and GDP growth, have a significant effect on the performance of Nigerian DMBs. Economic downturns often lead to higher NPLs as borrowers face difficulties in meeting loan obligations, affecting asset quality and profitability

(Nwoye & Onyeka, 2022). Conversely, positive economic growth can lead to increased loan demand, supporting income growth for banks.

2. Regulatory Policies

Regulatory policies play a vital role in shaping the performance of DMBs. The CBN enforces regulations on minimum capital requirements, liquidity ratios, and lending practices to ensure financial stability (Fapohunda & Adeniyi, 2023). Policies such as cash reserve requirements and capital adequacy thresholds directly affect a bank's profitability and its ability to lend (Olaniyan, 2022). For instance, strict capital requirements can limit a bank's lending capacity, but they also protect it from insolvency in times of financial stress.

3. Market Competition

The level of competition in the Nigerian banking sector impacts the financial performance of DMBs. Intense competition can squeeze profit margins, especially in terms of interest income. To remain competitive, Nigerian banks have increasingly diversified their services, offering digital banking, wealth management, and payment processing solutions (Adekunle & Bakare, 2022). Increased competition may lower profitability, but it also encourages innovation, which can attract customers and enhance service delivery.

4. Risk Management Practices

Effective risk management is critical for the financial performance of DMBs, particularly in emerging markets like Nigeria, where economic volatility is higher (Ekanem & Obasi, 2022). Sound credit risk management practices reduce NPLs, thereby minimizing losses and enhancing

profitability. Moreover, liquidity risk management helps banks avoid funding shortfalls, ensuring they can meet withdrawal demands and other obligations. Nigerian banks with robust risk management frameworks often exhibit more stable performance and are better able to navigate economic uncertainties (Suleiman et al., 2022).

Recent Trends in Financial Performance of Nigerian DMBs

The Nigerian banking sector has undergone significant changes in recent years, with digital transformation and regulatory reforms impacting the financial performance of DMBs. Digitalization has enabled banks to reduce operational costs, broaden their customer base, and increase income from digital services (Oluwaseun & Bello, 2023). The rise of fintech firms has also spurred innovation, pushing DMBs to adopt digital solutions to remain competitive (Ajibade & Ibrahim, 2022). Additionally, regulatory efforts aimed at promoting financial stability have led to improvements in capital adequacy and liquidity positions across the sector (CBN, 2023). Nonetheless, challenges remain, particularly in managing credit risks in sectors like oil and gas, which are prone to economic shocks. Future performance will likely depend on banks' ability to adapt to regulatory requirements, enhance risk management frameworks, and leverage technology for improved service delivery (Eze & Anyanwu, 2023).

2.2.4 IMPACT OF CREDIT RISK MANAGEMENT ON FINANCIAL PERFORMANCE

The impact of credit risk management on the financial performance of Deposit Money Banks (DMBs) is a critical area of concern within the financial sector. Credit risk management entails

the identification, assessment, and mitigation of risks associated with borrowers' inability to meet their financial obligations, and it plays a decisive role in maintaining the financial stability and profitability of banks (Bessis, 2015). Effective credit risk management practices are strongly linked to improved financial performance, as banks that adopt robust systems are able to minimize loan defaults, reduce credit losses, and enhance capital efficiency.

Financial performance in this context is often assessed through key indicators such as Return on Assets (ROA) and Return on Equity (ROE), which measure how effectively banks utilize their resources and shareholders' funds to generate income (Ekanem & Akpan, 2022; Ogunlana & Adepoju, 2023). Empirical studies have consistently highlighted that banks with effective credit risk management frameworks tend to report stronger profitability, improved liquidity, and reduced exposure to financial distress. For instance, Adegbie and Fapetu (2021) found that prudent credit appraisal processes significantly improved the profitability of Nigerian banks, while Ogbulu and Eze (2022) emphasized that non-performing loans have a direct negative effect on both ROA and ROE. Similarly, Okoye et al. (2023) demonstrated that DMBs that integrated credit risk monitoring with strategic loan recovery mechanisms were better positioned to sustain financial performance even during economic downturns.

Collectively, these studies reinforce the argument that efficient credit risk management is not only essential for mitigating default risks but also serves as a driver of long-term financial performance and competitiveness within the Nigerian banking sector.

Return on Assets (ROA) is a critical metric for assessing how efficiently a bank's assets generate profits. Studies have shown that banks with robust credit risk management frameworks often report higher ROA because they experience lower levels of loan defaults and require fewer loan loss provisions (Ekanem & Akpan, 2022). By implementing effective credit screening and assessment tools, banks can accurately determine borrowers' creditworthiness, thereby reducing exposure to high-risk clients and preserving asset quality (Ajayi & Ojo, 2022). Nigerian Deposit Money Banks (DMBs) with lower non-performing loan (NPL) ratios generally exhibit higher ROA levels, demonstrating stronger financial resilience and stability (CBN, 2023; Afolabi & Bamidele, 2022).

Return on Equity (ROE) is measured by dividing net income by total shareholders' equity, and it reflects how efficiently a bank utilizes shareholders' funds to generate profits (Owolabi & Ogbechi, 2021). As a critical financial performance indicator, ROE highlights the ability of banks to reward their investors through sustainable earnings. Banks that manage credit risk effectively are more likely to maintain higher ROE because they are less vulnerable to losses from loan defaults, which can significantly erode shareholder value (Uche & Nwafor, 2022). Ghosh (2015) further emphasized that banks with robust credit risk management frameworks tend to enjoy greater financial stability, leading to consistent shareholder returns. In addition,

sound credit risk practices enhance capital adequacy, which strengthens a bank's resilience during financial downturns and builds investor confidence.

Banks with well-structured credit risk practices experience long-term profitability due to fewer loan loss provisions, which positively impacts ROE and strengthens investor appeal (Suleiman et al., 2022). Capital adequacy is another fundamental component of a bank's financial performance, strongly linked to credit risk management. A well-capitalized bank can absorb unexpected loan losses without compromising financial stability (Bello, 2022). Capital adequacy ensures that a bank can continue to operate safely, even in challenging economic conditions. In Nigeria, the Central Bank of Nigeria (CBN) enforces minimum capital requirements for banks to protect against systemic risks. Research shows that banks with higher capital adequacy ratios (CAR) tend to be financially more stable, as they possess the necessary reserves to support lending activities while safeguarding their overall financial foundation (Olaniyan, 2022). In addition to bolstering capital adequacy, effective credit risk management improves a bank's operational efficiency. Credit evaluation, monitoring, and recovery processes become more streamlined when banks adopt advanced credit risk assessment tools, such as credit scoring models and early warning systems (Ajibade & Ibrahim, 2022). This operational efficiency translates into lower loan recovery costs and improved cost-to-income ratios, further strengthening financial performance (Okoye et al., 2023). Banks that implement proactive credit

risk management practices can detect potential issues early, minimizing losses and protecting their bottom line, which further contributes to their financial resilience and profitability.

Empirical studies provide substantial evidence supporting the positive impact of credit risk management on financial performance. For instance, Adewuyi and Oseni (2023) found that Nigerian banks with robust credit risk frameworks reported higher ROA and ROE than those with weaker risk practices. This is because well-managed credit risk reduces default rates, minimizes the need for large loan loss provisions, and improves capital utilization. Similarly, Fadun and Adegbite (2022) noted that effective credit risk practices in Nigerian banks enhance capital adequacy, support compliance with regulatory standards, and attract investor confidence.

Evidence from other markets aligns with these findings. In a study on African banking sectors, Ogunlana and Adepoju (2023) reported that banks with effective credit risk management strategies consistently exhibited lower NPL ratios, stronger profitability, and greater resilience in the face of economic volatility. This trend underscores the universal importance of credit risk management in driving financial performance across diverse economic environments, particularly in emerging markets like Nigeria. Overall, credit risk management is integral to the financial performance of DMBs. Effective credit risk practices improve ROA and ROE, strengthen capital adequacy, boost operational efficiency, and enhance resilience to economic shifts. For Nigerian DMBs, adopting comprehensive credit risk management frameworks is essential not only for achieving sustainable growth but also for ensuring financial stability, regulatory compliance, and long-term investor trust.

2.3 THEORETICAL FRAMEWORK

This study is anchored on the Financial Intermediation Theory, which provides a useful lens for examining the relationship between credit risk management and the financial performance of Deposit Money Banks (DMBs) in Nigeria. The theory posits that banks act as intermediaries between surplus and deficit units in the economy by mobilizing deposits and channeling them into loans and other credit facilities (Gurley & Shaw, 1960). In performing this role, banks assume various risks, with credit risk being the most significant. The ability of banks to effectively manage this risk determines their profitability, stability, and long-term survival.

2.3.1 FINANCIAL INTERMEDIATION THEORY

The Financial Intermediation Theory, propounded by Diamond and Dybvig (1983), explains the role of banks as intermediaries that mobilize funds from depositors and channel them to borrowers, thereby earning profits through interest rate spreads while managing the inherent risks of lending. The theory posits that banks exist because they can reduce transaction costs and mitigate risks that individual savers and borrowers would face if they interacted directly. In relation to credit risk management, the theory emphasizes the need for banks to thoroughly assess the creditworthiness of borrowers to minimize default risk and safeguard depositors' funds.

Effective credit risk management within this framework ensures that banks maintain high asset quality, sustain profitability, and uphold depositor confidence. Conversely, weak risk

management practices undermine the intermediary role of banks, leading to declining returns and greater vulnerability to financial distress. In Nigeria, where Deposit Money Banks (DMBs) serve as the primary source of financing for businesses and individuals, the relevance of this theory is particularly evident. Poorly managed credit risk has often resulted in elevated levels of non-performing loans (NPLs), which in turn reduce banks' lending capacity and weaken their financial performance. Thus, the Financial Intermediation Theory underscores the critical importance of sound credit risk management practices in enabling Nigerian banks to effectively perform their intermediary function and ensure long-term stability in the financial system.

2.3.2 MODERN PORTFOLIO THEORY

Modern Portfolio Theory (MPT), developed by Markowitz in 1952, emphasizes diversification as a means to minimize risk and optimize returns. While this theory is traditionally applied to investment portfolios, it is also relevant to the credit risk management strategies of banks. MPT suggests that banks should diversify their loan portfolios across different industries, geographical areas, and borrower types to reduce credit risk exposure. Diversification helps to ensure that defaults in one sector or borrower category do not disproportionately impact the bank's overall loan portfolio, thus stabilizing returns and enhancing financial performance. In the Nigerian banking context, Modern Portfolio Theory is relevant as it encourages DMBs to diversify their lending activities rather than concentrating on high-risk sectors. Given the economic volatility and sectoral risks within Nigeria, diversification across industries helps

reduce the probability of large-scale defaults. This theory suggests that Nigerian banks can achieve more stable financial performance by effectively balancing their credit risk exposures and aligning them with their overall risk appetite and capital adequacy requirements (Eze & Anyanwu, 2023).

2.3.3 AGENCY THEORY

Agency Theory, developed by Jensen and Meckling (1976), examines the relationship between principals (shareholders) and agents (bank management) in a firm, where agents are expected to act in the best interests of principals. However, agency problems arise when the interests of bank managers and shareholders diverge, potentially leading managers to pursue strategies that may not align with shareholder value maximization. In the context of credit risk management, Agency Theory implies that bank managers might take excessive risks to increase short-term profits, especially when compensation is linked to performance metrics like ROA or ROE. Such behavior can elevate the bank's credit risk exposure, thereby jeopardizing long-term financial stability. To mitigate agency problems, DMBs in Nigeria often implement robust governance structures, including risk management committees and performance incentives aligned with risk-adjusted returns. By aligning management objectives with prudent credit risk practices, banks can safeguard shareholder interests, enhance capital adequacy, and foster long-term profitability. Agency Theory, therefore, highlights the importance of strong internal governance in managing credit risk and underscores that responsible risk management is essential for sustained financial performance in the banking sector.

2.3.4. THE RISK-RETURN TRADEOFF THEORY

The Risk-Return Tradeoff Theory posits that there is a direct relationship between risk and return, where higher risks are typically associated with the potential for higher returns. This theory is highly relevant to credit risk management in banking, as it implies that banks may enhance their profitability by accepting higher-risk loans, albeit with careful consideration of the potential for defaults. Banks must strategically balance their credit risk appetite with the need to achieve returns that satisfy both shareholders and regulatory requirements. In Nigeria, the Risk-Return Tradeoff Theory provides a useful perspective for understanding the tradeoff that DMBs face when expanding their lending portfolios. While extending credit to riskier borrowers might increase short-term profits, excessive risk-taking could lead to higher NPL ratios and impair long-term financial performance. Therefore, the Risk-Return Tradeoff Theory supports the notion that Nigerian banks should establish a clear credit risk strategy that optimizes their risk-taking behavior in line with their financial goals and regulatory frameworks.

2.3.5. STAKEHOLDER THEORY

Stakeholder Theory, introduced by Freeman (1984), suggests that organizations have a responsibility to consider the interests of all stakeholders, not just shareholders. In the context of credit risk management, Stakeholder Theory highlights that banks must manage credit risk not only to protect shareholder value but also to ensure the stability of the financial system, protect depositors, and support borrowers. This theory underscores the importance of a bank's social responsibility in lending practices, as reckless lending can lead to systemic risks and financial

instability. For Nigerian DMBs, Stakeholder Theory emphasizes the need to adopt credit risk management practices that safeguard both the interests of depositors and the broader economy. Banks that manage credit risk responsibly contribute to overall financial system stability, which, in turn, fosters confidence among all stakeholders, including investors, borrowers, and regulators. Stakeholder Theory, therefore, encourages Nigerian banks to engage in responsible lending practices that align with the long-term interests of all stakeholders.

These theoretical frameworks provide a comprehensive understanding of the impact of credit risk management on the financial performance of DMBs. The Financial Intermediation Theory highlights the fundamental role of banks in managing credit risk to preserve their intermediary function. Modern Portfolio Theory emphasizes diversification as a strategy for managing credit risk, while Agency Theory underscores the importance of aligning managerial incentives with prudent risk-taking. The Risk-Return Tradeoff Theory illustrates the balance banks must achieve between profitability and risk exposure, and Stakeholder Theory highlights the responsibility banks have toward the financial system and society. By applying these theories, Nigerian Deposit Money Banks can enhance their credit risk management strategies to improve financial performance, maintain stability, and fulfill their roles as intermediaries in the financial system. These frameworks underscore that a balanced, well-governed approach to credit risk is essential not only for profitability but also for sustaining confidence and resilience within Nigeria's financial sector.

2.4 EMPIRICAL REVIEWS

Onaolapo (2017) covered the period from 2009 to 2016, focusing on 10 deposit money banks in Nigeria. Utilizing panel data regression analysis, Onaolapo examined the relationship between credit risk management and financial performance, using non-performing loans and capital adequacy ratios as key indicators. The findings indicated that non-performing loans negatively impacted bank profitability, while effective credit risk management measured through return on assest shows improved financial performance. The study recommended stricter loan approval processes and enhanced monitoring systems to mitigate risks.

Ajao and Oseyomon (2019) conducted a study on the relationship between credit risk management and the performance of Deposit Money Banks (DMBs) in Nigeria over the period from 2006 to 2016. They employed dynamic Generalized Method of Moments (GMM) and Granger causality techniques for their analysis. The findings revealed a direct and statistically significant relationship between credit risk management variables, including capital adequacy ratio, liquidity ratio, non-performing loan ratio, and loan loss provision ratio, and the banks' performance, measured by return on assets (ROA). The study also identified a significant inverse relationship between liquidity ratio and DMBs' performance, indicating that improperly managed excess liquidity could lead to a reduction in financial performance. The authors recommended rigorous credit risk management practices to ensure the long-term survival of banks in a turbulent operating environment.

Abubakar, Sulaiman, Usman, and Mohammed (2019) analyzed data from the annual reports and financial statements of ten listed DMBs over a seven-year period (2010-2016) to assess how

credit risk management practices impact financial outcomes. Employing an ex-post facto and longitudinal research design, the study utilized descriptive statistics and a fixed-effects panel estimator to examine the effects of variables such as capital adequacy ratio (CAR), non-performing loans ratio (NPLR), cost-to-income ratio (CIR), return on assets (ROA), liquidity ratio (LR), and loans-to-deposit ratio (LDR) on financial performance. The findings revealed that CAR, ROA, and LDR positively and significantly impact ROE, while NPLR, CIR, and LR had no significant impact.

Okafor (2019) covered the period 2012 to 2018 and used panel data econometrics to investigate the effects of credit risk indicators, such as default rates, on financial performance metrics like return on assets (ROA) and return on equity (ROE). The findings revealed a significant negative relationship between credit risk and profitability. Okafor recommended implementing robust risk assessment protocols and aligning with Basel II and III frameworks to strengthen banks' resilience to credit risks.

Otitolaiye (2019) investigated the relationship between credit management and the financial performance of Deposit Money Banks (DMBs) in Nigeria, covering the period 2010 to 2019. The study examined key credit management variables such as non-performing loans, capital adequacy ratio, loan loss provisions, and loan-to-deposit ratio. An ex-post facto research design was employed, alongside a purposive sampling technique that selected 14 banks out of the 21 licensed DMBs in the country. Regression analysis was used to evaluate the impact of these credit management variables on financial performance, thereby underscoring the importance of

sound credit policies. The findings revealed that non-performing loans had a significant negative effect on profitability, while capital adequacy ratio and effective loan-to-deposit management contributed positively to financial performance. This indicates that banks with stronger credit management practices are better positioned to enhance profitability and maintain financial stability.

Adekunle and Olayemi (2020) studied the relationship between credit risk management strategies and financial performance from 2010 to 2019, involving 12 deposit money banks. They employed descriptive and inferential statistics, including correlation and regression analysis. Their findings highlighted that well-structured loan loss provisioning positively influenced profitability, while excessive risk aversion reduced financial performance. The authors suggested diversifying credit portfolios and investing in risk management training programs for bank employees.

Jegede, Soyebo, Fakunmoju, and Okunbanjo (2021) explored the relationship between financial risk management and financial performance in Nigerian deposit money banks (DMBs) with international authorization. Their study covered the period up to 2021, referencing financial risks such as credit, market, and liquidity risks. The research emphasized the impact of financial mismanagement and regulatory challenges on bank performance, highlighting the role of governance structures in mitigating risks.

Apochi and Baffa (2022) investigated the interplay between credit risk and financial performance in Deposit Money Banks (DMBs) in Nigeria, covering 2012 to 2021. The study

emphasized the moderating role of the risk management committee and was contextualized within the economic disruptions caused by COVID-19. Using a regression model for panel data analysis, the findings indicated a negative correlation between credit risk and financial performance, with the risk management committee playing a critical role in mitigating these risks.

Nwachukwu and Okoye (2022) Analyzing a panel of 12 Deposit Money Banks from 2010 to 2021, this study assessed the effects of recent regulatory changes on credit risk management practices and bank performance. Using a difference-in-differences estimation approach, the research demonstrated that regulatory reforms—such as stricter capital requirements and enhanced monitoring protocols—led to a significant reduction in non-performing loans and improvements in key performance indicators (ROA and ROE). The study concludes that continuous regulatory updates and rigorous enforcement are vital for maintaining financial stability in the Nigerian banking sector.

Okoro and Nwankwo (2023) This study analyzed the impact of credit risk management on the financial performance of 14 Nigerian Deposit Money Banks from 2012 to 2022. Using fixed-effects panel regression models, the authors found that lower non-performing loan (NPL) ratios and higher collateralization levels were significantly associated with improved return on assets (ROA) and return on equity (ROE). The study concluded that the adoption of advanced risk assessment tools and AI-driven monitoring systems can further enhance bank performance. The

authors recommended the integration of digital risk-management frameworks to reduce loan defaults and improve profitability.

Ibrahim, Musa, and Bello (2023) Focusing on 16 banks over the period from 2011 to 2022, this study examined how innovations in credit risk management—especially the adoption of digital credit scoring technologies—affect financial performance. Using a difference-in-differences estimation strategy, the research compared banks that integrated modern risk-management tools with those that maintained traditional practices. The results revealed that banks utilizing digital solutions experienced significantly lower NPL ratios and higher profitability metrics. The authors suggested that ongoing investment in fintech innovations is key to sustaining enhanced credit risk assessments and recovery processes.

Eke and Obinna (2022) analyzed data from 2015 to 2020, focusing on the role of risk management committees in 15 Deposit Money Banks. Using multivariate analysis, the study found that banks with active and knowledgeable committees experienced fewer loan defaults and higher profitability. Non-performing loans were identified as significant constraints to performance. The authors recommended that risk management committees include members with expertise in financial and accounting practices to enhance oversight and policy implementation.

Yusuf and Ibrahim (2023) conducted a mixed-method study spanning 2010 to 2022, examining the credit risk management practices of 20 Deposit Money Banks in Nigeria. Combining financial statement analysis with interviews from risk managers, the study underscored the

importance of effective credit appraisal systems in reducing non-performing loans. However, high loan-to-deposit ratios were linked to increased defaults and reduced profitability. The authors recommended adopting advanced credit rating systems and strengthening loan recovery frameworks to enhance financial performance.

Adegboyega (2023) explored the relationship between credit risk management and shareholder returns within Deposit Money Banks (DMBs) in Nigeria, covering 2011 to 2021. Utilizing an ex-post facto research design, the study analyzed data from 12 selected banks and employed both descriptive and inferential statistical analyses to evaluate the impact of credit risk management on Return on Equity (ROE). The findings revealed that Non-Performing Loan Ratio (NPLR) and Loan to Deposit Ratio (LDR) exhibited significant statistical impacts on ROE, emphasizing the importance of strategic credit risk management for financial performance.

Chukwuma and Adegoke (2024) Investigating data from 2013 to 2023, this study explored the dynamic relationship between non-performing loans, loan loss provisions, and overall bank profitability in Nigerian banks. Employing a dynamic panel data model, the authors observed that elevated NPL levels adversely affected profitability. However, banks that implemented more rigorous monitoring and revised credit policies saw a mitigated impact of defaults on their financial outcomes. The study emphasized the need for legal and regulatory reforms that would facilitate more effective recovery of non-performing loans and recommended enhanced internal controls to support these reforms.

Anyanwu and Eze (2024) This study explored how macroeconomic volatility influences the effectiveness of credit risk management and, in turn, the financial performance of Nigerian banks, covering the period from 2010 to 2023. Utilizing vector autoregression (VAR) and panel data techniques, the authors found that macroeconomic shocks (including inflation surges and exchange rate fluctuations) significantly impaired credit risk management outcomes, resulting in lower profitability. The research recommended that banks incorporate robust stress testing and scenario analysis frameworks to anticipate and mitigate the adverse impacts of economic instability on their credit portfolios.

2.5 Summary and Gaps in the Literature Reviewed

The studies reviewed shed light on the critical relationship between credit risk management and the financial performance of Deposit Money Banks (DMBs) in Nigeria. They emphasize the importance of effective credit risk management practices for banks to enhance shareholder returns and maintain financial stability, particularly in light of economic challenges such as the global financial crisis and the COVID-19 pandemic. Key findings from the literature consistently demonstrate that inadequate credit risk management leads to adverse financial outcomes for banks, including lower returns on equity and overall performance. Non-Performing Loans (NPLs) frequently emerge as a significant factor contributing to this negative impact. Furthermore, the involvement of risk management committees is highlighted as playing a positive role in influencing the relationship between credit risk and financial performance. This underscores the need for active governance and oversight in managing credit practices. The

studies employ rigorous statistical analyses to validate their findings, with significant p-values confirming the detrimental effects of poor credit risk management. In response to these challenges, researchers recommend that banks enhance their credit policies and management practices to prevent financial distress and improve shareholder returns. Despite these valuable insights, notable gaps remain in the existing literature. One significant gap is the limited scope of analysis; most studies focus on specific time frames or a small number of banks, which may not adequately capture broader trends in credit risk management across the entire Nigerian banking sector. Expanding the scope to include a more comprehensive dataset could yield more generalizable findings. Additionally, while quantitative analyses dominate the current literature, there is a lack of qualitative research that explores the perspectives of bank management and stakeholders regarding credit risk management practices. Gaining insights into the rationale behind decision-making processes could provide a deeper understanding of the challenges faced by banks.

Another gap is the insufficient exploration of external factors, such as economic conditions, regulatory changes, and technological advancements, and their impact on credit risk management practices. Future research could benefit from investigating how these factors influence the implementation and effectiveness of credit risk strategies. Moreover, there is a scarcity of comparative studies that assess credit risk management practices across different countries or regions. Such studies could provide valuable lessons for Nigerian banks and contribute to a more robust understanding of best practices in credit risk management. Lastly,

most existing research employs cross-sectional data analysis, which limits the ability to discern trends and changes over time. Longitudinal studies could offer insights into how credit risk management practices evolve in response to changing economic conditions. Addressing these gaps could significantly enhance the understanding of credit risk management's role in the financial performance of banks in Nigeria, providing a more nuanced perspective for policymakers, researchers, and banking professionals.

CHAPTER THREE

METHODOLOGY

3.1 **INTRODUCTION**

This chapter focuses on the methodology adopted to examine the relationship between credit risk management and financial performance of Deposit Money Banks (DMBs) listed on the Nigerian Exchange Group (NGX), specifically, it outlines the research design, population, sample, sampling technique, data collection methods, and analytical procedures. Additionally, the operationalization of variables are also considered in this section.

3.2 **RESEARCH DESIGN**

The aim of this study is to examine the impact of credit risk management on the financial performance of deposit money banks in Nigeria. To achieve this objective, the study relies on secondary data obtained from published annual reports of the investigated banks, The study adopts an ex-post facto cross sectional research design. This design is appropriate for the study of nature because the data required for the study already has already existed and have been previously compiled by recognized institutions. Hence, the researcher has no direct control over the variables of interest and cannot manipulate them. Cross sectional investigation is invoked when a phenomenon is observed within a period of time and covering a number of unit.

3.3 **POPULATION AND SAMPLE OF THE STUDY**

The population consists of all Deposit Money Banks operating in Nigeria. However, the study focuses on the 14 DMBs listed on the Nigerian Exchange Group (NGX) as of 2024. These banks are selected on the bases of their size, Market capitalization,and regularity of Share trading at the exchange.

The banks includes Access Bank Plc,Ecobank Transnational Incorporate,Fidelity Bank Plc,First Bank of Nigeria Plc,First City Monument Bank Plc,Guaranty Trust Bank Plc,Heritage Bank Plc,Keystone Bank Limited,Polaris Bank Limited,Stanbic IBTC Bank Plc,Sterling Bank Plc,Union Bank of Nigeria Plc,Unity Bank Plc ,Wema Bank Plc.

3.4 **SAMPLING TECHNIQUE**

Banks were selected for this study on the bases of the following criterion

- Listing on the Nigerian Exchange Group.
- Stocks traded on the exchange till 2024
- Must be interest charging Banks
- Must have a customer based of nothing less than 3,500

3.5 SOURCES OF DATA

Secondary data will be obtained from the following sources:

- **Annual Reports and Financial Statements**: Key metrics like Non-Performing Loan Ratio, Loan Loss Provisioning, and Return on Assets will be extracted.
- **Nigerian Exchange Group Database**: Supplementary financial data for listed banks.
- **Central Bank of Nigeria Reports**: Industry trends and macroeconomic indicators.

The data will cover the period from 2015 to 2023, providing a comprehensive view of credit risk management practices and financial performance trends over time.

3.8 MODEL SPECIFICATION

This study adopts the credit risk management and financial performance model developed by Miller and Noulas (1997), who examined the relationship between non-performing loans (NPLs) and bank profitability. The original model by Miller and Noulas can be expressed as:

$$FP = \beta 0 + \beta 1 \text{ (NPL Ratio)} + \varepsilon$$

Where:

FP represents financial performance, measured through profitability indicators such as Return on Assets (ROA) or Return on Equity (ROE)

- NPL Ratio is the proportion of loans in default
- $\beta 0$ is the constant
- $\beta 1$ is the regression coefficient
- ε is the error term

While the original model focuses solely on the impact of NPLs on profitability, this study adapts and extends the model to include additional credit risk management variables that are relevant in the Nigerian banking context. Specifically, the study incorporates Loan Loss Provisioning and Collateralization Ratio to provide a more comprehensive assessment of credit risk management practices and their effects on financial performance. The modified model is expressed as follows:

$$FP_it = \beta_0 + \beta_1 + NPL_{it} + \beta_2 LLP_{it} + \beta_3 CR + \beta_4 CAR_{it} + E_{it}$$

$$FP = \beta 0 + \beta 1 \text{ (NPL Ratio)} + \beta 2 \text{ (Loan Loss Provisioning)} + \beta 3 \text{ (Collateralization Ratio)} + \varepsilon$$

Where:

- FP = Financial Performance (ROA) of banking at time t
- NPL = Non-Performing Loan Ratio of banking at time t
- LLP = Loan Loss Provisioning of banking at time t
- CR = Collateralization Ratio of banking at time t
- CAR = Capitalization ratio of banking at time t

- $\beta 0$ = Constant
- ε = Error term

$\beta_1, \beta_2, \beta_3$ and β_4 are the coefficient of the explanatory variables to be estimated.

This adaptation allows the study to capture a broader spectrum of credit risk management practices beyond just non-performing loans, providing a more detailed understanding of their influence on the financial performance of Nigerian Deposit Money Banks.

3.6 **Operationalization of Variables**

The table below presents the operational definitions of variables used in the study:

Variable	**Type**	**Measurement/Description**	**Formula/Unit**	**Source**
Non-Performing Loan (NPL) Ratio	Independent	Measures the percentage of loans in default.	(Non-Performing Loans / Total Loans) × 100	Annual Reports
Loan Loss Provisioning	Independent	Measures the funds set aside to cover potential loan defaults.	Amount in financial statements	Annual Reports
Collateralization	Independent	Measures the extent to which	(Collateral	Annual

Variable	Type	Measurement/Description	Formula/Unit	Source
Ratio		loans are secured by collateral.	Secured Loans / Total Loans) × 100	Reports
Return on Assets (ROA)	Dependent	Measures profitability relative to total assets.	(Net Income / Total Assets) × 100	Annual Reports
Return on Equity (ROE)	Dependent	Measures profitability relative to shareholders' equity.	(Net Income / Shareholders' Equity) × 100	Annual Reports

3.7 **DATA ANALYSIS TECHNIQUES**

The study employs the following analytical techniques:

Descriptive Statistics: Used to summarize the data, providing insights into mean, standard deviation, and trends for the variables.

Correlation Analysis: Pearson's correlation coefficient will test the strength and direction of relationships between credit risk management variables and financial performance indicators.

Multiple Regression Analysis: The model will examine the impact of independent variables (NPL Ratio, Loan Loss Provisioning, and Collateralization Ratio) on dependent variables (ROA and ROE). The

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

4.0 INTRODUCTION

This chapter focuses on data presentation, analysis and interpretation of result arising from econometric software estimation. Specifically, the data collected was subjected to econometric analysis in the order of descriptive statistics, correlation and regression analysis. The output of the econometric analysis was thereafter interpreted. Also, in this chapter the hypotheses formulated earlier in chapter one was tested using the regression result. The data was estimated using E-view 9.0 computer software.

4.1 DATA PRESENTATION AND INTERPRETATION

Descriptive Statistics

The descriptive statistics was undertaken in this study in order to ascertain the characteristics of the data set used. The summary statistics of the data set employed in this study is displayed on table 1 below.

Table 1: Descriptive Statistic of Variables

	ROA	NPL	LLP	CR	CAR
Mean	1.345026	0.172096	0.595939	0.403421	0.296020
Median	1.119573	0.121400	0.637200	0.307250	0.206000
Maximum	4.101920	0.570000	0.933200	1.625800	1.290000
Minimum	0.110000	0.011530	0.130000	-0.217000	0.110000
Std. Dev.	1.018192	0.146606	0.211535	0.384565	0.267333
Skewness	0.595967	1.389836	-0.938711	1.669802	2.733786

Kurtosis	2.491941	3.778970	3.107893	5.503202	9.694623
Jarque-Bera	2.798054	13.88895	5.893928	29.03162	124.5206
Probability	0.246837	0.000964	0.052499	0.000000	0.000000
Sum	53.80104	6.883840	23.83754	16.13684	11.84080
Sum Sq. Dev.	40.43185	0.838244	1.745137	5.767722	2.787211
Observations	40	40	40	40	40

Researcher's estimation 2025

Table 1 above reveals that the mean of bank performance proxy by return on asset (ROA) stood at a value of 1.3450. This tend to suggest that on the average, bank performance increases by about 1.35% within the period under investigation, which is relatively low. This low performance may be attributed to a lot of factors including credit risk which the main trust of this study. A close look at table 1 also demonstrate that the ratio of non-performing loan to total loan used in this study as measure of credit risk stood at 0.1720 on the average. This implies that about 17.20% of total loan granted to customer were either not recovered or were not repaid at the appropriate time. This ratio increases to as high as 0.57 in some of the banks, thus depriving the banks the needed liquidity and posing risk to performance. Similarly, the mean of the mean of loan loss provision relative to total loan with a value of 0.595939, suggest that provision for loan defaults by banks under investigation is remarkably high, reaching to a maximum of 93.32%. This implication of this action is that a huge amount of fund that would have been invested to generate earnings and improve performance is keep idle. It is also obvious in table 1 above that the secured or collateralized loan relative to total loan (CR) is about 40.34%, implying that relatively large amount of credit granted by the banks are not secured using borrowers' property as expected, thus exposing the bank to great risk in case of default. Finally,

capital adequacy ratio (CAR) which capture the extent to which owner equity is sufficient to absorbed the risk banks are expose to stood impressively at 0.296020 (about 29.60%). This implies that on the average, the investigated banks have sufficient capital to absorbed risk and meet the regulatory threshold of 15% for systemically important banks and 10% for national banks.

The probability of Jarque-Bera statistic which is significant at 5% for most of the variables except return on asset (ROA), tends to suggest that the data set is not normally distributed. Therefore, unit root test should be applied on the data series to ascertain the level of their stationarity before conducting regression on them.

Correlation.

Correlation is econometric tool that help to determine the relationship between different indicators. Thus, the purpose of correlation in this study is to understand the nature of association existing between the variables used. The correlation matrix showing the relationship among the variables is displayed in table 2 below:

Table 2: Correlation

Variables	ROA	NPL	LLP	CR	CAR
ROA	1.0000				
NPL	-0.481118	1.0000			
	0.0017				
LLP	0.125331	-0.489653	1.0000		
	0.4410	0.0013	-----		
CR	-0.426796	0.561221	-0.686120	1.0000	
	0.0060	0.0002	0.0000	-----	
CAR	-0.305280	0.580542	-0.689534	0.599201	1.0000
	0.0554	0.0001	0.0000	0.0000	-----

Researcher's estimation 2025

As shown in table 2 above, non-performing loan (NPL) is negatively related to bank performance (return on asset) and is significant at 5% level. This implies that non-performing loan and bank performance are inversely related. Thus, non-performing loan can be used to account for variations in bank performance. Table 2 further reveals that loan loss provision (LLP) is positively associated with bank performance measure by return on asset. However, this relationship is not significant at 5% level. Similarly, table 2 indicates that collateralization of loan (CR) using borrowers' assets is inversely associated with bank performance and this relationship is significant at 5% level. This got to show that securing loan using assets of the borrower may not improve bank performance. A close look at table 2 also reveals that capital adequacy ratio impose on banks by regulatory authority to absorbed the risk faced by banks is negatively connected to bank performance and is significant at 5% level. The explanatory variables engaged in this study are related to each other either positively or negatively as indicated in table 2 above.

Unit Root Test on Variables

To avoid unreliable regression outcomes and ascertain the order of integration, it was necessary to conduct unit root tests on the variables. This will help to determine whether or not data series are stationary. To this end, the Levin, Lin and Chu (2002); the Fisher-type unit root tests reflecting Augmented Dickey-Fuller (ADF-Fisher Chi2) and Philip Peron (PP) unit root tests

(Choi, 2001), here-in-after refers to as LLC, IPS, ADF-Fisher, PP-Fisher unit root tests were applied on the variables at levels. The result is presented in table 3A below.

Table 3A: Panel Unit Root Tests on Variables at Levels

Variable	LLC	Prob.	ADF-Fisher Chi^2 Statistic	Prob.	PP-Fisher Chi^2 Statistic	Prob.
ROA	-7.27946	0.0000	25.7752	0.0473	29.6230	0.0201
NPL	-0.75466	0.2252	20.1493	0.2136	18.4321	0.2992
LLP	-5.13370	0.0000	30.5789	0.0152	40.7323	0.0006
CR	-7.13625	0.0000	23.5929	0.0988	29.2618	0.0222
CAR	-3.80176	0.0087	30.4120	0.0160	34.0532	0.0053

Source: Researchers' computation 2025

Table 3A above reveals that all the variables except NPL are stationary at levels judging by the Levin, Lin and Chu (LLC). This suggests that these variables are integrated of order zero 1(0). A close look at table 3A also indicates that all the variables are stationary at levels using ADF-Fisher and PP-Fisher parameters except NPL. As a result, the unit root test was repeated on the variables but this time at their differenced level and the result is presented in table 3B below.

Table 3B: Panel Unit Root Tests on Variables at First Difference

Variable	LLC	Prob.	ADF-Fisher Chi^2 Statistic	Prob.	PP-Fisher Chi^2 Statistic	Prob.
ROA	-5.86318	0.0000	27.1931	0.0394	36.3080	0.0026
NPL	-12.5224	0.0000	35.1515	0.0038	39.4860	0.0009
LLP	-13.3806	0.0000	51.5621	0.0000	60.9352	0.0000
CR	-26.3169	0.0000	43.1957	0.0003	51.3167	0.0000
CAR	- 7.40501	0.0000	26.3766	0.0090	32.5287	0.0085

It is obvious in table 3B above that all the variables are now stable at their first difference level. The probability of LLC, ADF-Fisher and PP-Fisher is significant at 5% level for all the

variables namely ROA, NPL, LLP, CR and CAR. This indicates that all the variables are stationary at their first difference, suggesting that there is no unit root on the data set at this level. Meaning, that the regression result obtains using this data set will be consistent and reliable. It is this backdrop; this study went ahead to conduct regression analysis using the data set.

Regression Analysis

The focus of this study is to examine the impact of credit risk on bank performance in Nigeria. Bank performance which is the dependent variable was proxy in this study using return on assets, while credit risks were mimic using non-performing, loan loss provision among others.

To examine the relationship between the dependent variable and the explanatory variables, a panel least squares regression was conducted on the variables with the aid of E-view 9.0 computer software. First, the fixed and the random effect regression were conducted on the data set. The random effect regression output was subjected to Hausman test procedure to determine the most efficient output between fixed effect and random effects estimate. The random effect regression is rejected if the chi^2 of the Hausman test result is significant at 10% level, otherwise the fixed effect result is rejected. The result of the fixed and random effects results together the Hausman test output is displayed in table 4 below.

Table 4: Random and Fixed Effect Results (ROA=Dependent Variable)

IND. Variables	Random Effects	Fixed Effects

	Coeff.	Error T	T.Stat.	Prob.	Coeff.		T.Stat.	Prob.
NPL	-2.1625	1.0142	-2.1321	0.0410	-1.9446	0.6306	-3.0837	0.0051
LLP	-2.3031	1.1499	-2.0028	0.0480	-1.5452	0.4852	-3.1844	0.0040
CR	-1.0507	0.3576	-2.9382	0.0062	-0.9513	0.5869	-1.6208	0.1181
CAR	-0.9100	0.7245	-1.2560	0.2185	0.3838	1.0604	0.3619	0.7205
R^2	0.806942				0.681319			
ADJ. R^2	0.753895				0.682143			
F.STAT	2.658930				3.420693			
PROB(F.STAT	0.023948				0.003596			
D.W	2.182209				2.146423			
	Hausman Test Outcome							
	Test Summary				Chi^2Stat.	Prob.		
	Cross-section random				6.18810	0.9800		

Researcher's computation, 2025

The Hausman test output in table 4 above reveals that the random effects result is preferred because the probability of the Chi2 statistic is not significant at 5% level. Therefore, the random effect regression output was selected for analysis.

The result in table 4 above reveals that the non-performing loan (NPL) proxy for credit risk negatively influence bank performance. The significance of non-performing loan at 5% level, implies that a rise in non-performing loan will lead to a decline in bank performance when measured using return on asset. Indeed, an increase in non-performing loan means loss of funds and the interest income that would have been earned from the loan is also loss, hence the negative effect on performance.

Table 4 also shown that loan loss provision (LLP) aversely and significantly determines bank performance at 5% level. The implication of this result is that, as provision for loan loss increases, a substantial portion of bank funds that would have been used either to create credit

(loan) or invested in other income yielding assets is tied down. It should be noted that idle fund does not generate income, hence the negative effect on bank performance.

Similarly, table 4 above demonstrates that collateral facility used to secured loan has negative and significant effect on bank performance. Though banks require collateral facilities from borrower to safeguard against default, this facility or pledged asset do not automatically translate to income for the bank, thus may not have direct impact on bank performance. For instance, if a loan customer default, the collateral pledge will not be disposed off that same period to recover the fund granted to the customer. In fact, some of the pledged asset may not even be recovered, therefore leading to loss of fund.

Finally, table 4 unveils that capital adequacy ratio (CAR) used as control variable in this study negatively influence bank performance. However, the outcome is not significant at 5% level. This weak impact may be an indication that the current capital adequacy ratio prescribed by the regulatory authority is not sufficient to absorbed to risk exposes of Nigerian banks. The negative impact of this indicator suggest that capital adequacy requirement may constitute financial regression affecting bank performance.

A careful look at table 4 above shows that the coefficient of determination (R^2) which stood at 0.8069, implies that the systematic variations in the dependent variable in the past is absorbed by the independent variables to the tune of 80.69%. On adjustment, the R^2 stood impressively at

75.39%. The F. statistic which measures the goodness of fit of the model is significant at 5% level, indicating that the variables incorporated in the model are appropriate and sufficient. It also validates that the model has strong predictive power. The result in table 4 further revealed that the Durbin Watson with a value of 2.1822 is impressive and suggest the absence of auto correlation in the data sets. These diagnostic test outcomes suggest that the regression result is adequate and consistent, and therefore will be useful for policy direction.

4.2 TEST OF HYPOTHESES

The hypothesis formulated in chapter one earlier is tested in this section

Decision Rule

Reject the null hypothesis if the T-statistic is significant at 5% level, using the probability value, otherwise we accept the hypothesis. The T-statistic and probability values in table 4 above applies.

Test of hypothesis one (H_{01}): There is no significant relationship between non-performing loans and financial performance of deposit money banks in Nigeria.

Test statistic: The test statistic of non-performing loans in table 4 with a T-statistic value of -2.1321 is significant at 5% level looking at the probability value. This implies that non-performing loans is a factor influencing the performance of deposit money banks in Nigeria. Based on this outcome, this study rejects the null hypothesis that there is no significant relationship between non-performing loans and financial performance of deposit money banks in Nigeria, and conclude that non-performing loans is a factor affecting the performance of deposit money banks in Nigeria.

H_{02}: Loan loss provision does not have significant impact on the financial performance of deposit money banks in Nigeria.

Test statistic: The test statistic of loan loss provision with the value -2.0028 is significant at 5% level, implying that loan loss provision negatively and significantly impacts the financial performance of deposit money banks in Nigeria. Therefore, hypothesis that Loan loss provision have no significant impact on the financial performance of deposit money banks in Nigeria is rejected.

H_{03}: Collateralization of loans does not significantly influence the financial performance of deposit money banks in Nigeria

Test statistic: The test statistic value of collateralization of loan which stood at -2.9382 looking at the random effect regression output in table 4 above is significant at 5% level. On this backdrop, this study rejects the hypothesis that collateralization of loans does not significantly influence the financial performance of deposit money banks in Nigeria.

4.4 DISCUSSION OF FINDINGS

The main trust of this study is to examine the effect of credit risk management on the performance of deposit money banks in Nigeria. Based on the outcome of the regression estimates and the analysis thereof, the following findings were inferred as discussed.

This study found that nonperforming loan negatively and significantly influence the performance of deposit money deposit at 5% level. The implication of this result is that a unit increase in non-performing loan led to decline in the performance of deposit money bank in Nigeria. Indeed, a rise in non-performing loan implies increase in credit risk for the banks and increase in credit risk has the potential to influence bank performance because of the likelihood

of loss of asset in the process. Besides, a rise in non-performing loan led to loss of interest income, thus reduction in earnings. This finding is in line with Onaolapo (2017) who found that non-performing loans negatively impacted bank performance; but contrary to Ajao and Oseyomon (2019) who exposed a positive and statistically significant connection between non-performing loan ratio and the bank performance.

Also, this study found that loan loss provision adversely and significantly impacts the performance of deposit money banks in Nigeria. The suggest that when bank make fund available to absorbed unexpected loan loss, it denies the bank the money that would have been used for investment and further credit creation. Besides, the money set aside become idle fund which cannot generate earnings for the bank, thus adversely affecting performance. This finding defers from Ajao and Oseyomon (2019) who concluded that a direct and significant relationship exit between loan loss provision and the bank performance; and Adekunle and Olayemi (2020) who uncovered that loan loss provisioning positively influenced bank performance.

Furthermore, the finding of this study reveals that collateralization of loan has negative and significant effect on the performance of deposit money banks. This result tends to implies that the collateral facilities demanded by banks as security for loan in Nigeria may not be adequate and sufficiently guarantee the safety of the loan. Arguably, the process of sale of pledged asset to recover the loan is not immediate and in some cases the credit granted may not be recovered either because of litigation or other unexpected eventualities.

In summary, though credit risk management strategies are necessary to mitigate the loss associated with credit creation, this study found that some of these credit risk management tools

may not guarantee improvement in the financial performance of deposit money banks. Therefore, banks should intensify effort aimed at minimising non-performing loan because of the potential its hold in slowing down the financial performance of banks, especially the deposit money banks.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION.

5.0 INTRODUCTION

This study examines the impact of credit risk managemnt on the financial performnace of deposit money banks in Nigeria. Specifically, the effect of non-performing loan, loan loss provision and the use of collateral facilities on bank performance were considered. In this chapter attention is given to the major findings of this study, the conclusion and policy recommendations.

5.1 SUMMARY OF FINDAINGS

Arising from the regression estimates and the subsequent analysis, the testing of hypotheses and the discussion therefrom, the major findings of this study are as followings:

i. That nonperforming loan negatively and sgnificantly influence the financial performance of deposit money banks in Nigeria.
ii. That loan loss provision inversely and significantly affect the peformance of deposit money banks in Nigeria.
iii. That loan collateralization ratio has negative and signoficant impact on the performance of deposit money banks in Nigeria.

5.2 CONCLUSION

This study examined the impact of credit risk management on the financial performance of deposit money banks in Nigeria covering the period 2020 to 2024 using bank specific data. Specifically, non-performing loan, loan loss provision and the use of collateral facilities as back up for laon and the effects these would have on the performance of deposit money banks were considered. The banks examined were First Bank, Access Bank, United Bank for Africa, Wema Bank, Unity Bank, First City Monument Bank, Zenith Bank and Fidelity Bank. The data used for the study were collected from investigated banks' audited financial reports. Panel Least squares regression technique was employed in the investigation. Particularly, the fixed effects and random effects regression were undertaken and the Hausman test was applied on the random effect to determine the most efficient estimate which was selected for analysis. The estimation was carried out using E-view 9.0 econometric software. This study found that credit risk management negatively and significantly influence the financial performance of deposit money banks in Nigeria. Precisely, non-performing loan, loan loss provision and the use of collateral facilities negatively and signficantly impact the financial performance of deposit money banks. Based on these findings, this study conclude that credit risk management is a significant factor influencing the financial performance of deposit money banks in Nigeria.

5.4 RECOMMENDATION

Based on the outcome of the analysis and findings, this study recommends the following for policy directions:

i. That bank manager should intensify action and strategies to minimize the rate of non-performing loan because of the risk it poses to financial performance and depositors' fund.
ii. That banks should limit the amount set aside as loan loss provision because it diminishes the fund that would have been available for credit creation, thereby denying the banks the needed interest income to credit, thus depressing financial performance.
iii. That loan collateralization is not sufficient guarantee for loan recovery, therefore additional security such as third-party guarantee should be activated.

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Appendix i: Regression Result

Fixed Effect Regression

Dependent Variable: ROA
Method: Panel Least Squares
Date: 10/11/25 Time: 11:16
Sample: 2020 2024
Periods included: 5
Cross-sections included: 8
Total panel (balanced) observations: 40
White cross-section standard errors & covariance (d.f. corrected)
WARNING: estimated coefficient covariance matrix is of reduced rank

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.870733	0.776816	3.695514	0.0011
NPL	-1.944628	0.630605	-3.083750	0.0051
LLP	-1.545252	0.485244	-3.184482	0.0040
CR	-0.951357	0.586939	-1.620880	0.1181
CAR	0.383853	1.060472	0.361964	0.7205

Effects Specification

Cross-section fixed (dummy variables)
Period fixed (dummy variables)

R-squared	0.681319	Mean dependent var	1.345026
Adjusted R-squared	0.682143	S.D. dependent var	1.018192
S.E. of regression	0.732714	Akaike info criterion	2.505051
Sum squared resid	12.88487	Schwarz criterion	3.180603
Log likelihood	-34.10102	Hannan-Quinn criter.	2.749309
F-statistic	3.420693	Durbin-Watson stat	2.146423
Prob(F-statistic)	0.003596		

Random Effect Regression

Dependent Variable: ROA
Method: Panel EGLS (Cross-section random effects)
Date: 10/11/25 Time: 11:19
Sample: 2020 2024
Periods included: 5
Cross-sections included: 8
Total panel (balanced) observations: 40
Swamy and Arora estimator of component variances
Cross-section SUR (PCSE) standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.

C	3.783045	0.936592	4.039158	0.0003
NPL	-2.162511	1.014254	-2.132120	0.0410
LLP	-2.303191	1.149956	-2.002852	0.0480
CR	-1.050781	0.357624	-2.938229	0.0062
CAR	-0.910047	0.724533	-1.256047	0.2185

Effects Specification		
	S.D.	Rho
Cross-section random	0.000000	0.0000
Period fixed (dummy variables)		
Idiosyncratic random	0.732714	1.0000

Weighted Statistics

R-squared	0.806942	Mean dependent var	1.345026
Adjusted R-squared	0.753895	S.D. dependent var	1.018192
S.E. of regression	0.879487	Sum squared resid	23.97843
F-statistic	2.658930	Durbin-Watson stat	2.182209
Prob(F-statistic)	0.023948		

Unweighted Statistics

R-squared	0.806942	Mean dependent var	1.345026
Sum squared resid	23.97843	Durbin-Watson stat	2.182209

Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	6.188100	4	0.9800

Appendix ii: Descriptive Statistics

ROA NPL LLP CR CAR

Mean	1.345026	0.172096	0.595939	0.403421	0.296020
Median	1.119573	0.121400	0.637200	0.307250	0.206000
Maximum	4.101920	0.570000	0.933200	1.625800	1.290000
Minimum	0.110000	0.011530	0.130000	-0.217000	0.110000
Std. Dev.	1.018192	0.146606	0.211535	0.384565	0.267333
Skewness	0.595967	1.389836	-0.938711	1.669802	2.733786
Kurtosis	2.491941	3.778970	3.107893	5.503202	9.694623
Jarque-Bera	2.798054	13.88895	5.893928	29.03162	124.5206
Probability	0.246837	0.000964	0.052499	0.000000	0.000000
Sum	53.80104	6.883840	23.83754	16.13684	11.84080
Sum Sq. Dev.	40.43185	0.838244	1.745137	5.767722	2.787211
Observations	40	40	40	40	40

Appendix iii: Correlation Matrix

Covariance Analysis: Ordinary
Date: 10/11/25 Time: 11:35
Sample: 2020 2024
Included observations: 40

Correlation Probability	ROA	NPL	LLP	CR	CAR
ROA	1.000000				

NPL	-0.481118	1.000000			
	0.0017	-----			
LLP	0.125331	-0.489653	1.000000		
	0.4410	0.0013	-----		
CR	-0.426796	0.561221	-0.686120	1.000000	
	0.0060	0.0002	0.0000	-----	
CAR	-0.305280	0.580542	-0.689534	0.599201	1.000000
	0.0554	0.0001	0.0000	0.0000	-----