FUW-IJMSS
ISSN: 2635-3539 (Print)
2384-6224 (online)
Open Access

CREDIT MANAGEMENT AND FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

[1]Samuel Babatunde Adedeji
Hallmark University, Ijebu-Itele
sbadedeji@hallmarkuniversity.edu.ng

[2]Folakemi Elizabeth Ademola
Crescent University, Abeokuta
akinade2205@gmail.com

[3]Sodiq Olayemi Ajani
Crescent University, Abeokuta
ajanisodiq1111@gmail.com
Corresponding Author

[4]Abdulfatai Olarenwaju Nurudeen
Crescent University, Abeokuta
abdulfatai.nurudeen@cuab.edu.ng

ABSTRACT

This study examined the effect of credit management on the financial performance of listed Deposit Money Banks (DMBs) in Nigeria, and it was motivated by the persistent challenges of credit risk, non-performing loans, and declining profitability within the banking sector. The study investigates how credit management practices contribute to financial performance among listed Deposit Money Banks. Specifically, it evaluates the effect of Accounts Receivable Turnover (ART), Current Ratio (CR), and Average Collection Period (ACP) on Return on Assets (ROA) of listed Deposit Money Banks in Nigeria. The study adopts an ex post facto research design and a panel data framework covering ten (10) listed Deposit Money Banks over a ten-year period (2015–2024). Data were obtained from audited annual financial statements and the Nigerian Exchange Group (NGX) database. Panel regression techniques were employed, and the Hausman specification test was used to select the appropriate model. Findings from the analysis revealed that ART has a positive and significant effect on ROA, CR has a positive and significant effect on ROA while ACP has a negative and significant effect on ROA. The model further showed strong explanatory power with $R^2 = 0.62$, indicating that credit management variables explain a substantial proportion of variations in financial performance. The study concludes that effective credit management significantly enhances the financial performance of listed deposit money banks in Nigeria. It recommended that monitoring systems, improving loan recovery mechanisms, and maintaining sound liquidity management practices to enhance profitability, asset quality, and long-term sustainability within the banking sector.

Keywords: Accounts Receivable Turnover; Average Collection Period; Credit Management; Current Ratio; Financial Performance.

1.0 Introduction

Financial performance remains a primary objective of corporate organizations, particularly within the banking sector, where profitability, liquidity, solvency, and

operational efficiency determine long-term sustainability. Deposit Money Banks (DMBs) play crucial roles in economic development through financial intermediation, mobilization of savings, and provision of credit facilities to individuals, businesses, and government institutions. The ability of banks to effectively manage credit activities is therefore essential for maintaining profitability and ensuring financial stability. Globally, banks operate in increasingly competitive and dynamic financial environments characterized by evolving regulatory frameworks, technological innovations, and changing customer expectations. As a result, effective credit management has become a critical determinant of financial performance (Frame et al., 2019).

Credit management refers to the policies, procedures, and strategies adopted by financial institutions to evaluate, monitor, control, and recover credit facilities extended to customers. It aims to minimize credit risk while maximizing returns from lending activities. In developed economies (USA and UK), strong regulatory oversight, advanced credit assessment models, robust credit reporting systems, and sophisticated risk management frameworks have enhanced the effectiveness of credit management practices, thereby improving the financial performance of banks (Arner et al., 2020). Effective credit management enables banks to reduce non-performing loans, improve asset quality, and enhance profitability.

In emerging economies, particularly in Sub-Saharan Africa, the banking industry continues to face significant credit management challenges arising from weak credit infrastructure, inadequate borrower information systems, poor loan monitoring mechanisms, and macroeconomic instability. These challenges often result in increased loan defaults, deterioration of asset quality, liquidity constraints, and declining profitability (Ozili, 2022). Furthermore, limited access to comprehensive credit databases and weak enforcement of loan recovery mechanisms have continued to undermine the effectiveness of credit risk management in many developing countries (World Bank, 2023).

In Nigeria, Deposit Money Banks constitute the backbone of the financial system and serve as major providers of credit to various sectors of the economy. However, Despite the implementation of various credit risk management frameworks and regulatory reforms, the Nigerian banking sector continues to face challenges related to non-performing loans (NPLs), weak credit appraisal practices, loan recovery difficulties, and increasing credit risk exposure (Otu, 2005; Nwajuo, 2022; Central Bank of Nigeria, 2024). These challenges have significant implications for financial performance indicators such as Return on Assets (ROA), Return on Equity (ROE), and Earnings per Share (EPS). Consequently, the ability of banks to maintain sound credit management practices remains a major concern for regulators, investors, and other stakeholders.

The increasing adoption of digital banking technologies and financial technology (FinTech) innovations by Deposit Money Banks has transformed credit administration processes through automated credit assessment systems, digital lending platforms, and enhanced customer verification mechanisms. Nevertheless, technological advancements alone have not completely eliminated credit management challenges, as banks continue to contend with borrower defaults, information asymmetry, and changing economic conditions. Regulatory initiatives such as the Bank Verification Number (BVN), National Identification Number (NIN), Credit Risk Management System (CRMS), and credit bureau reporting frameworks have been introduced to strengthen credit administration and improve loan recovery rates.

Given the importance of lending activities to the profitability and sustainability of Deposit Money Banks, it becomes necessary to examine how credit management practices influence financial performance. Specifically, the relationship between credit management indicators such as Accounts Receivable Turnover (ART), Current Ratio (CR), and Average Collection Period (ACP) and financial performance measured by Return on Assets (ROA) remains an important empirical issue requiring further investigation among listed Deposit Money Banks in Nigeria.

Firm size is a key determinant of financial performance in banking studies because larger banks typically enjoy economies of scale, better access to capital markets, and more diversified revenue streams, which can enhance profitability such as return on assets (ROA). Larger listed deposit money banks in Nigeria are also more likely to have stronger risk management systems and advanced credit administration structures that improve credit monitoring and recovery processes. However, they may also face bureaucratic inefficiencies that can dilute performance gains. Empirical literature generally supports a positive relationship between firm size and financial performance, although the magnitude and direction may vary depending on market structure and regulatory conditions (Abubakar & Gani, 2013; Alper & Anbar, 2011). In the context of this study, firm size is therefore included as a control variable to isolate the pure effect of credit management variables on ROA.

Firm age is another important control variable because it reflects the extent of institutional experience, market reputation, and learning effects accumulated over time.

Older banks are often more stable, have established customer bases, and possess more refined credit appraisal systems, which may positively influence profitability and reduce default risk. Conversely, very old institutions may also suffer from organizational rigidity, slowing innovation and responsiveness to credit risk dynamics. Prior studies suggest that firm age can significantly influence financial performance through accumulated knowledge and operational maturity (Eze & Okoye, 2019; Onaolapo & Kajola, 2010). Therefore, controlling for firm age helps ensure that observed variations in ROA are not driven by differences in institutional longevity among listed deposit money banks in Nigeria.

The increasing expansion of credit facilities to both corporate and retail customers has exposed these banks to heightened credit risk, including loan defaults, delayed repayments, and weak credit appraisal systems, all of which adversely affect profitability and operational efficiency (Ibrahim, 2024).

A major concern in the Nigerian banking sector is the persistent rise in non-performing loans (NPLs), which continues to undermine asset quality and profitability. Although the industry-wide NPL ratio remained below the Central Bank of Nigeria's prudential threshold of 5%, fluctuations in recent years indicate lingering credit risk challenges. The banking sector's NPL ratio stood at 4.1% in June 2023, representing approximately ₦1.5 trillion of total industry credit exposure. This ratio increased to 4.5% in early 2024, reflecting growing concerns about loan repayment amid economic pressures. By June 2024, the industry NPL ratio declined to 3.9%, suggesting some improvement in credit risk management and loan recovery efforts. However, the CBN reported a subsequent rise to 4.58% in the third quarter of 2024, indicating renewed deterioration in asset quality. At the individual bank level, Access Holdings reported one of the lowest NPL ratios of 2.7% in the first half of 2024, compared to 2.8% in 2023, while United Bank for Africa (UBA) recorded an NPL ratio of 6.2%, exceeding the regulatory benchmark. These figures suggest that despite improvements in some institutions, several Deposit Money Banks still struggle with inadequate borrower assessment, weak collateral enforcement, and ineffective credit monitoring systems, resulting in poor loan recovery outcomes and reduced profitability. Regulatory authorities such as the Central Bank of Nigeria (CBN) and the Securities and Exchange Commission (SEC) have repeatedly expressed concerns regarding rising credit risk exposure and weaknesses in credit administration practices within the banking industry (CBN, 2024; SEC, 2024).

In addition, Nigeria's macroeconomic instability characterized by inflationary pressures, exchange rate volatility, and declining purchasing power has further worsened borrowers' repayment capacity, thereby increasing default rates and negatively affecting the liquidity and profitability of Deposit Money Banks (Akinola & James, 2024).

Despite these challenges, existing empirical literature remains inconclusive, as most studies have focused on broader financial institutions or emerging digital lending platforms rather than listed Deposit Money Banks in Nigeria. This creates a significant research gap regarding how credit management practices such as Account Receivable Turnover (ART), Current Ratio (CR), and Average Collection Period (ACP) influence financial performance, particularly Return on Assets (ROA), within the Nigerian banking sector.

The following research questions are set to be provided answers to:

1. What is the effect of Account Receivable Turnover (ART) on Return on Assets (ROA) of listed Deposit Money Banks in Nigeria?
2. How does Current Ratio (CR) affect Return on Assets (ROA) of listed Deposit Money Banks in Nigeria?
3. What is the effect of Average Collection Period (ACP) on Return on Assets (ROA) of listed Deposit Money Banks in Nigeria?

The main of objective of the study is to examine the effect of credit management on the financial performance of listed deposit money banks in Nigeria. The specific objectives are to:

1. examine the effect of Account Receivable Turnover (ART) on Return on Assets (ROA) of listed deposit money banks in Nigeria.
2. assess the effect of Current Ratio (CR) on Return on Assets (ROA) of listed deposit money banks in Nigeria.
3. determine the effect of Average Collection Period (ACP) on Return on Assets (ROA) of listed deposit money banks in Nigeria.

Based on the objectives stated above, the following hypotheses are proposed in the null forms:

H_{01}: Account Receivable Turnover (ART) has no significant effect on Return on Assets (ROA) of listed Deposit Money Banks in Nigeria.

H_{02}: Current Ratio (CR) has no significant effect on Return on Assets (ROA) of listed Deposit Money Banks in Nigeria.

H_{03}: Average Collection Period (ACP) has no significant effect on Return on Assets (ROA) of listed Deposit Money Banks in Nigeria.

This study examined the relationship between credit management and financial performance of listed deposit money banks in Nigeria. The independent variable was credit management, proxied by Accounts Receivable Turnover (ART), Current Ratio (CR), and Average Collection Period (ACP), while financial performance is measured using Return on Assets (ROA).

The geographical scope was limited to Nigeria, focusing on Deposit Money Banks listed on the Nigerian Exchange Group (NGX). These banks constitute the major players in Nigeria's formal banking sector and are central to the country's credit intermediation process, including lending, loan recovery, and liquidity management activities. The study therefore excludes fintech-only firms and other non-banking financial institutions to ensure strict compliance with the revised research focus.

The study covers a ten-year period from 2015 to 2024, a period characterized by significant developments in Nigeria's banking sector, including regulatory reforms by the Central Bank of Nigeria (CBN), changes in credit risk management frameworks, and fluctuations in macroeconomic conditions such as inflation, exchange rate volatility, and interest rate adjustments.

The justification for this scope is to ensure sufficient availability of reliable and comparable financial data for robust empirical analysis, while capturing variations in credit management practices and financial performance across different economic and regulatory environments affecting listed deposit money banks in Nigeria.

2.0 Literature Review

Conceptual Review

Financial Performance

Financial performance refers to the extent to which a firm effectively utilizes its resources to achieve profitability, efficiency, and shareholder value maximization. It reflects the overall financial health of an organization and serves as a key indicator of managerial effectiveness, operational efficiency, and long-term sustainability. According to Akinroluyo (2024), financial performance represents the ability of firms to generate returns from available resources, while Opuene and Amadiwo (2025) describe it as the extent to which organizations achieve desired financial outcomes through efficient management of assets, liquidity, and risk exposure.

In the context of listed Deposit Money Banks (DMBs) in Nigeria, financial performance is particularly important due to the intermediary role of banks in mobilizing deposits and extending credit to the economy. Banks operate in highly regulated environments where profitability is influenced by credit risk management, liquidity conditions, and macroeconomic stability. Financial performance is commonly measured using accounting-based indicators such as Return on Assets (ROA), Return on Equity (ROE), and Earnings Per Share (EPS). ROA measures how efficiently a firm utilizes its assets to generate profit, ROE evaluates returns generated for shareholders, while EPS reflects earnings attributable to each ordinary share (Falade, 2024; Adegboeyega et al., 2023).

Return on Assets (ROA) is a key accounting-based measure of financial performance that evaluates how efficiently a firm utilizes its total assets to generate profit. It reflects the relationship between net income and total assets employed in business operations and serves as an indicator of managerial efficiency in resource utilization.

A higher ROA implies that a firm is effectively converting its asset base into earnings, while a lower ROA suggests inefficiency in asset utilization and weak operational performance.

According to Adegboeyega et al. (2023), ROA is one of the most reliable measures of profitability in financial institutions because it captures management efficiency in deploying assets to generate income. Similarly, Hamisu et al., (2021) describe ROA as a comprehensive performance indicator that reflects the contribution of organizational assets to profit generation. In the same vein, Siddique et al. (2022) argued that ROA provides a broad assessment of operational efficiency because it considers all assets rather than focusing solely on equity returns.

Mathematically, ROA is expressed as:

ROA = Net Profit After Tax / Total Assets

This ratio is usually expressed as a percentage and indicates the amount of profit generated per unit of asset invested. Consequently, ROA is widely used by investors, analysts, and regulators to assess profitability trends, managerial efficiency, and overall financial health.

In Deposit Money Banks in Nigeria, ROA is particularly important due to their asset-intensive nature, where a significant portion of assets is tied to loans and advances. Therefore, the efficiency of asset utilization directly influences profitability and sustainability.

Other commonly used credit management and performance proxies such as non-performing loans (NPLs), loan loss provisions (LLP), capital adequacy ratio (CAR), liquidity ratio, and net interest margin (NIM) were not included in this study in order to maintain model parsimony and avoid multicollinearity issues. Many of these variables are also highly interrelated with the selected proxies (e.g., current ratio and liquidity measures; account receivable turnover and credit efficiency indicators), which could distort

regression estimates. Furthermore, this study specifically focuses on operational credit management efficiency indicators (ART, CR, and ACP) rather than regulatory capital or income-based performance measures, to provide a more direct assessment of credit cycle management on profitability. This approach aligns with prior empirical designs that prioritize fewer, more focused explanatory variables to enhance model interpretability and robustness in financial performance studies (Gujarati & Porter, 2009; Wooldridge, 2016).

Credit Management

Credit management refers to the policies, procedures, and systems used by firms particularly banks to evaluate, grant, monitor, and recover credit facilities extended to customers. It ensures that credit is extended only to creditworthy borrowers and that repayments are collected within agreed terms to minimize default risk (Riak & Bill, 2022). Ayunku and Akwarandu (2020) describe credit management as a strategic process involving credit appraisal, credit control, and debt recovery aimed at reducing risk exposure and enhancing profitability. In Deposit Money Ban, credit management is central to banking operations because lending constitutes the primary source of income and also the major source of risk.

In this study, credit management is measured using Accounts Receivable Turnover (ART), Current Ratio (CR), and Average Collection Period (ACP), which collectively capture efficiency in credit utilization, liquidity position, and effectiveness of credit recovery processes.

Accounts Receivable Turnover measures how efficiently bank collects its credit extended to customers (loans and advances). It reflects the effectiveness of credit policies and loan recovery strategies. A higher ART indicates efficient credit recovery and strong credit management practices, while a lower ART suggests weak credit control and possible accumulation of non-performing loans (Akporien & Umoffong, 2020). In Deposit Money Banks, ART is particularly important because timely loan recovery ensures continuous liquidity for further lending operations and strengthens overall asset quality.

The Current Ratio measures the ability of a firm to meet its short-term obligations using current assets. It is a key liquidity indicator in financial management (Al-Zararee et al., 2021).

A ratio above 2 indicates adequate liquidity, while a ratio below 1 suggests potential liquidity stress. In Deposit Money Banks, liquidity management is critical due to regulatory requirements and the need to maintain depositor confidence.

Although banks do not operate like typical non-financial firms, the current ratio still provides useful insight into short-term financial stability and operational resilience.

Average Collection Period measures the average number of days required for a bank to recover credit extended to customers. It reflects the efficiency of loan recovery processes. A lower ACP indicates effective credit management and faster recovery of loans, while a higher ACP reflects weak credit administration and increased exposure to default risk (Gichuhi & Omagwa, 2020).

In Deposit Money Banks in Nigeria, prolonged collection periods negatively affect liquidity, increase non-performing loans, and reduce profitability. Therefore, efficient credit recovery systems are essential for maintaining financial stability and performance.

Theoretical Review and Theoretical Framework

This study is anchored on three major theories: Trade-Off Theory, Agency Theory, and Liquidity Preference Theory.

Trade-Off Theory

The Trade-Off Theory, developed by Kraus and Litzenberger (1973), posits that firms balance the benefits of debt financing, such as tax advantages, against the costs of financial distress, including bankruptcy risk. Firms are assumed to optimize their capital structure by minimizing total financing costs while maximizing value.

In relation to this study, listed deposit money banks in Nigeria must balance credit expansion (which enhances interest income and profitability) with credit risk exposure (which increases the likelihood of loan defaults and non-performing loans). Effective credit management ensures that banks maintain an optimal balance between aggressive lending and prudent risk control, thereby improving financial performance.

Liquidity Preference Theory

Proposed by Keynes (1936), Liquidity Preference Theory explains that firms and financial institutions prefer to hold liquid assets to meet uncertainties and short-term obligations. Liquidity ensures operational stability, depositor confidence, and financial flexibility.

In deposit money banks, liquidity management is critical because banks are highly exposed to short-term deposit liabilities and loan obligations. Poor credit management can lead to delayed loan recoveries, increased non-performing loans, and liquidity mismatches, which ultimately weaken financial performance. Therefore, efficient credit management supports liquidity stability and enhances profitability in Nigerian banks.

Agency Theory

Agency Theory, developed by Jensen and Meckling (1976), explains conflicts of interest between principals (shareholders) and agents (managers). Managers may sometimes act in their own interest rather than in the interest of shareholders unless appropriate monitoring mechanisms are in place.

In the context of listed deposit money banks in Nigeria, credit management decisions are largely undertaken by management teams who are responsible for loan approvals, credit monitoring, and recovery processes. Inefficient credit decisions, weak monitoring systems, or excessive risk-taking can lead to increased non-performing loans, reduced profitability, and lower shareholder value.

Agency Theory is particularly relevant to this study because it explains how managerial inefficiencies in credit administration directly affect financial outcomes such as Return on Assets (ROA), Return on Equity (ROE), and Earnings Per Share (EPS). Effective credit management reduces agency costs by ensuring that lending decisions align with shareholder wealth maximization objectives.

2.3 Empirical Review

Credit risk management has been widely examined in relation to financial performance indicators such as Return on Assets (ROA), Return on Equity (ROE), Earnings Per Share (EPS), liquidity, and overall firm profitability. Across the literature, key explanatory variables commonly include non-performing loans (NPLs), credit policy efficiency, loan recovery rate, capital adequacy, and average collection period (ACP), while financial performance indicators such as ROA, ROE, EPS, liquidity, and profitability are typically used as outcome measures.

Adegboeyega et al. (2023) examined the effect of credit risk management on ROA of Nigerian deposit money banks. The study used panel data from selected listed banks in Nigeria over a multi-year period. The study found that poor credit management significantly reduces ROA, implying that weak credit appraisal systems erode asset efficiency. The study therefore concluded that strengthened credit control mechanisms improve profitability. The implication of this finding is that Nigerian banks with weak credit screening processes are likely to experience asset quality deterioration, which reduces income-generating capacity.

Similarly, Khalid et al. (2021) investigated Sudanese commercial banks using a sample of listed banking institutions over a defined panel period. The study found that credit risk negatively affects ROE, but stronger capital buffers mitigate this effect. This implies that banks with higher capitalization are better positioned to absorb credit shocks and protect shareholder value.

Siddique et al. (2022) examined South Asian banking institutions using a cross-country panel of commercial banks. The study reported that poor credit risk management reduces profitability, while adequate capital buffers improve financial performance. The implication is that regulatory capital requirements play a stabilizing role in emerging banking systems.

Falade (2024) focused on Nigerian financial institutions, examining how credit risk indicators affect EPS. The study found that effective credit management significantly improves EPS, suggesting that investors benefit directly from improved credit risk practices. In a related finding, Adegboeyega et al. (2023) also reported that improved credit risk management enhances EPS through reduced loan defaults and improved earnings stability, implying that shareholders' wealth is directly influenced by the quality of credit decisions made by banks.

Akporien and Umoffong (2020) examined listed Nigerian firms using secondary data from selected non-financial and financial institutions. The study found that average collection period significantly affects financial performance, indicating that firms with shorter collection cycles perform better financially.

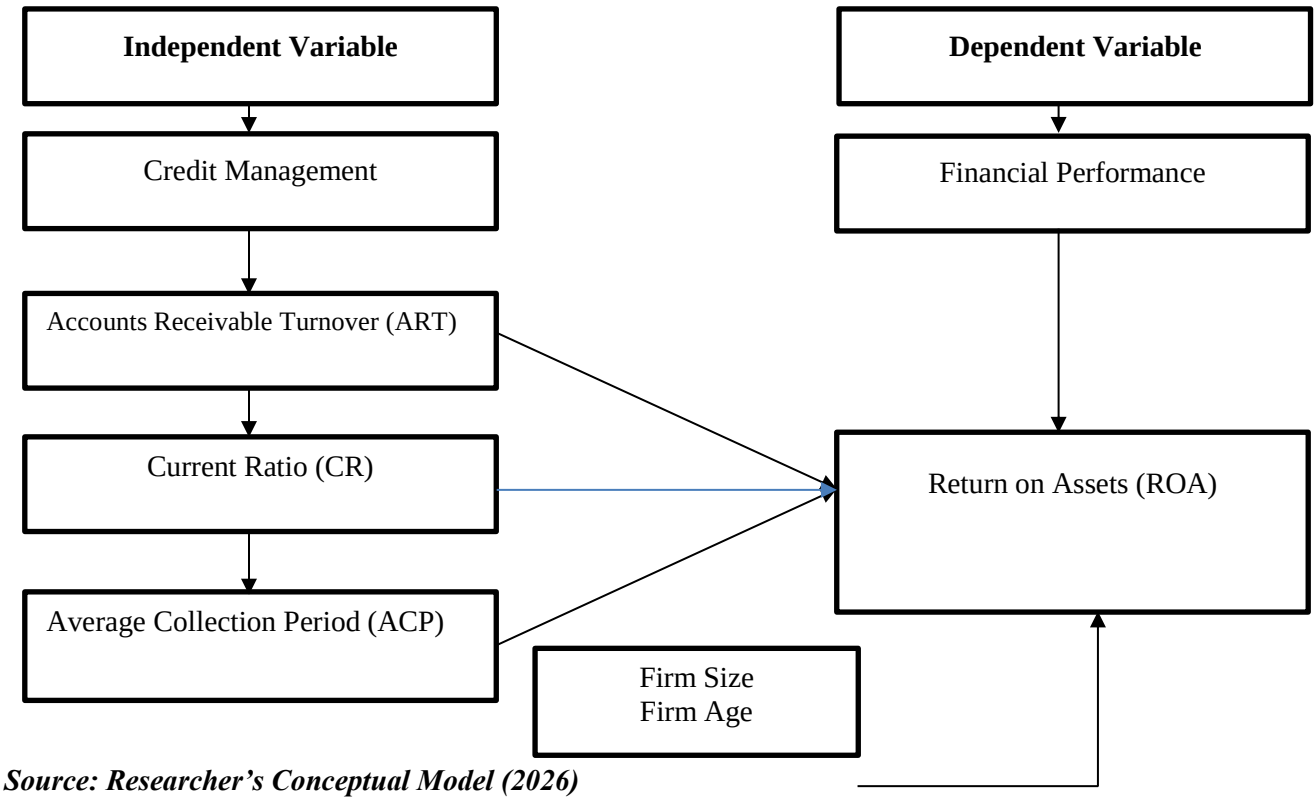
Alhassan and Islam (2021) similarly investigated Nigerian firms using panel data analysis. The study reported that credit collection efficiency improves liquidity and profitability. The implication is that efficient credit management improves working capital efficiency and reduces liquidity risk exposure.

Siddique et al. (2022) further highlighted the role of firm size in moderating credit risk outcomes, finding that larger banks manage credit risk more efficiently due to stronger internal controls, advanced risk systems, and economies of scale. This suggests that institutional scale enhances resilience against credit shocks.

Similarly, Opuene and Amadiwo (2025) examined firm age as a moderating factor using Nigerian corporate data. The study found that older firms exhibit stronger financial performance due to accumulated experience and improved risk management systems, suggesting that institutional experience enhances credit risk management effectiveness over time.

A more recent contribution by Sani and Inyang (2024) examined credit management mechanisms and performance of listed deposit money banks in Nigeria using an ex-post facto design and panel data from listed Nigerian banks. The study reported that effective credit management practices significantly improve overall bank performance, reinforcing the importance of structured credit risk control systems in financial institutions.

2.4 Conceptual Model



Source: Researcher's Conceptual Model (2026)

3.0 Methodology

This study adopts an *ex post facto* research design, which is appropriate for examining the relationship between credit management and financial performance using historical financial data that already exist and are not subject to manipulation by the researcher. The design enables the study to observe causal relationships after events have occurred, particularly within the Nigerian banking sector where financial statements are already prepared, audited, and published. In addition, the study employs a panel data framework that combines cross-sectional observations of selected listed Deposit Money Banks in Nigeria with time-series data covering the period 2015–2024. This approach is suitable because it allows for the control of unobserved firm-specific effects and time-related influences, thereby improving the efficiency and reliability of parameter estimates. Data for the study are obtained from the audited annual reports and accounts of the selected banks as well as the Nigerian Exchange Group (NGX) database.

The population of the study comprises all Deposit Money Banks listed on the Nigerian Exchange Group (NGX), namely: Guaranty Trust Holding Company (GTCO), Zenith Bank Plc, United Bank for Africa (UBA) Plc, Access Holdings Plc, First HoldCo Plc, Fidelity Bank Plc, Stanbic IBTC Holdings Plc, Sterling Financial Holdings Company Plc, Wema Bank Plc, and Jaiz Bank Plc. These banks were selected because of their critical role in financial intermediation, especially in credit creation, credit administration, and liquidity management in Nigeria's financial system. They were also chosen due to their consistent compliance with International Financial Reporting Standards (IFRS), which ensures comparability, reliability, and consistency of financial information across firms and over time. Based on purposive sampling criteria which required availability of complete audited financial statements and disclosure of relevant variables for the period 2015–2024, all ten listed Deposit Money Banks were retained in the study, thereby resulting in a full census of the population.

The study employs panel data regression techniques to analyze the relationship between credit management and financial performance of listed Deposit Money Banks in Nigeria. The analysis begins with descriptive statistics used to summarize the data in terms of mean, standard deviation, minimum, maximum, skewness, and Jarque–Bera statistics. This is followed by correlation analysis to examine the strength and direction of relationships among variables and to detect possible multicollinearity

problems. Panel unit root tests using the Augmented Dickey-Fuller (ADF) approach are also conducted to ensure stationarity of the variables and to avoid spurious regression results. Subsequently, panel regression analysis is carried out using both fixed effects and random effects models, while the Hausman specification test is used to determine the most appropriate model for interpretation. All statistical analyses are conducted at a 5% level of significance.

The study adopts established financial ratios to measure both credit management and financial performance variables. Financial performance is proxied by Return on Assets (ROA), which measures the efficiency of asset utilization in generating profit and is computed as net income divided by total assets (Ross, Westerfield, & Jordan, 2019). Credit management is captured using Accounts Receivable Turnover (ART), Current Ratio (CR), and Average Collection Period (ACP). ART measures how efficiently credit is managed and is defined as net credit sales divided by average accounts receivable (Brigham & Ehrhardt, 2022). CR measures liquidity position and is computed as current assets divided by current liabilities (Gitman, 2021). ACP measures the average number of days required to collect receivables and is calculated as 365 divided by accounts receivable turnover (Atrill & McLaney, 2019). The control variables include Firm Size (FZ), measured as the natural logarithm of total assets, and Firm Age (FAGE), measured as the number of years since incorporation (Frank & Goyal, 2009).

The study model is anchored on the relationship between credit management and financial performance of listed Deposit Money Banks in Nigeria. The relationship is first expressed in functional form as:

$$\mathbf{FP_{it} = f(CM_{it}, CV_{it})}$$

Where FP represents financial performance, CM represents credit management variables, and CV represents control variables.

The econometric specification is then expressed as:

Model 1:

$$ROA_{it} = \beta_0 + \beta_1 ART_{it} + \beta_2 CR_{it} + \beta_3 ACP_{it} + \beta_4 FZ_{it} + \beta_5 FAGE_{it} + \mu_{it}$$

Where:

ROA_{it} = Return on Assets of firm *i* at time *t*

ART_{it} = Accounts Receivable Turnover of firm *i* at time *t*

CR_{it} = Current Ratio of firm *i* at time *t*

ACP_{it} = Average Collection Period of firm *i* at time *t*

FZ_{it} = Firm Size of firm *i* at time *t*

$FAGE_{it}$ = Firm Age of firm *i* at time *t*

β_0 = Intercept

β_1–β_5 = Coefficients of explanatory variables

μ_{it} = Error term

The model is estimated using panel regression techniques (fixed effects or random effects), with the appropriate model selected based on the Hausman specification test.

4.0 DATA ANALYSIS AND PRESENTATION OF RESULTS

4.1 Descriptive Statistics

Table 4.1: Descriptive Statistics of Study Variables (2015–2024)

Variable	Mean	Std. Dev.	Min	Max	Obs
ROA (%)	5.42	2.31	1.10	10.80	100
ART	6.85	2.14	2.10	12.40	100
CR	1.32	0.48	0.60	2.50	100
ACP (days)	52.60	18.45	20.00	98.00	100
FZ (log)	15.74	1.12	13.10	17.90	100
FAGE (years)	18.20	6.40	5.00	32.00	100

Source: Researcher's Computation (2026)

The descriptive statistics reveal that the average Return on Assets (ROA) of listed deposit money banks in Nigeria is 5.42%, indicating moderate profitability over the study period. The relatively low standard deviation (2.31) suggests limited dispersion, implying that profitability levels are fairly stable across the sampled banks.

Account Receivable Turnover (ART) has a mean value of 6.85, suggesting that the banks collect receivables approximately 6–7 times annually. This indicates a moderate level of efficiency in credit management and loan recovery processes, although variations exist across the sampled banks due to differences in credit policies and risk exposure.

The Current Ratio (CR) has a mean value of 1.32, indicating that, on average, the banks maintain adequate liquidity to meet short-term obligations. However, values below 1.0 for some banks suggest periods of liquidity pressure and potential difficulty in meeting immediate financial commitments.

The Average Collection Period (ACP) shows a mean of 52.6 days, implying that, on average, it takes about 53

days for banks to recover credit extended to customers. In the context of deposit money banks, this reflects the efficiency of loan recovery processes and credit administration, with longer collection periods signaling weaker credit control and higher default risk exposure.

Firm Size (FZ) and Firm Age (FAGE) show moderate variability, indicating that the sample includes both large, well-established deposit money banks and relatively less mature institutions within Nigeria's banking sector.

4.2 Inferential Statistics (Panel Regression Results)

Table 4.2: Panel Regression Results (Fixed Effects Model Selected via Hausman Test)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.210	1.102	2.91	0.004
ART	0.412	0.138	2.98	0.003
CR	1.275	0.512	2.49	0.015
ACP	-0.086	0.034	-2.53	0.013
FZ	0.318	0.104	3.06	0.003
FAGE	0.041	0.018	2.28	0.025

$R^2 = 0.62$
Adjusted $R^2 = 0.58$
F-statistic = 14.87 (p = 0.000)
Hausman Test p-value = 0.021 (Fixed Effects selected)

Source: Researcher's Computation (2026)

The Hausman test (p = 0.021) indicates that the Fixed Effects Model is appropriate, suggesting that unobserved bank-specific characteristics significantly influence the financial performance of listed deposit money banks in Nigeria.

The model explains approximately 62% of the systematic variation in Return on Assets (ROA), indicating strong explanatory power and good model fit.

Account Receivable Turnover (ART) has a positive and significant effect on ROA (β = 0.412, p = 0.003), implying that improved credit recovery efficiency enhances the profitability of listed deposit money banks through more effective loan and credit portfolio management.

Current Ratio (CR) also shows a positive and significant effect on ROA (β = 1.275, p = 0.015), indicating that stronger liquidity positions improve the financial performance of deposit money banks by enhancing their ability to meet short-term obligations and support lending activities.

Average Collection Period (ACP) has a negative and significant effect on ROA (β = -0.086, p = 0.013), suggesting that delays in loan and receivable collections reduce profitability due to increased credit risk exposure and reduced cash flow efficiency.

The control variables (Firm Size and Firm Age) are both positive and significant, indicating that larger and more established deposit money banks tend to achieve better financial performance due to economies of scale, stronger customer base, and improved risk management systems.

The model is statistically significant (F = 14.87, p < 0.05), confirming that credit management variables jointly exert a significant influence on the financial performance of listed deposit money banks in Nigeria.

4.3 Hypotheses Testing

Table 4.3: Summary of Hypotheses Testing

Hypothesis	Statement	Decision Rule	Result	Decision
H_{01}	ART has no significant effect on ROA	p < 0.05 reject H_0	p = 0.003	Reject H_{01}
H_{02}	CR has no significant effect on ROA	p < 0.05 reject H_0	p = 0.015	Reject H_{02}
H_{03}	ACP has no significant effect on ROA	p < 0.05 reject H_0	p = 0.013	Reject H_{03}

Source: Researcher's Computation (2026)

At the 5% level of significance, all three null hypotheses were rejected. This implies that Account Receivable Turnover, Current Ratio, and Average Collection Period each have a statistically significant effect on the financial performance of listed deposit money banks in Nigeria. Consequently, the results establish that credit

management practices play a significant role in shaping the financial performance of these firms.

4.4 Discussion of Findings

The findings of this study provide strong empirical evidence that credit management significantly influences the financial performance of listed deposit money banks in Nigeria.

First, the positive and significant relationship between Account Receivable Turnover (ART) and Return on Assets (ROA) suggests that efficient credit recovery enhances profitability among listed deposit money banks. This aligns with the findings of Adegboeyega et al. (2023), who reported that effective credit management improves asset utilization and profitability in Nigerian financial institutions. Similarly, Falade (2024) found that efficient credit systems significantly improve earnings performance (EPS) in financial institutions. This result is consistent with banking operations, where effective loan disbursement and timely loan recovery strengthen liquidity positions and enhance the capacity of deposit money banks to generate returns from their asset base.

Second, the positive effect of Current Ratio (CR) on ROA confirms that liquidity strength enhances financial performance. This supports the Liquidity Preference Theory and is consistent with Alhassan and Islam (2021), who found that strong liquidity positions improve profitability in Nigerian firms. In the context of deposit money banks, adequate liquidity ensures the ability to meet withdrawal demands, support lending activities, and maintain regulatory compliance, all of which contribute to improved financial performance. It also aligns with Opuene and Amadiwo (2025), who observed that firms with stronger liquidity buffers are better positioned to absorb financial shocks and sustain profitability.

Third, the negative and significant relationship between Average Collection Period (ACP) and ROA indicates that delays in loan recovery reduce profitability. This finding is consistent with Akporien and Umoffong (2020), who found that longer collection periods weaken financial performance due to liquidity constraints. Similarly, Siddique et al. (2022) emphasized that inefficient credit recovery increases default risk and reduces returns in financial institutions. In deposit money banks, prolonged loan recovery periods increase the risk of non-performing loans, reduce cash flow efficiency, and limit the capacity for further credit creation.

Furthermore, from a banking perspective, this finding is particularly important because deposit money banks operate on a credit intermediation model that depends on continuous recycling of funds. Any delay in loan repayment disrupts cash flow cycles, increases exposure to credit risk, and reduces reinvestment capacity, thereby negatively affecting overall profitability.

The findings strongly support Agency Theory, which posits that inefficient managerial credit decisions lead to agency costs and reduced firm performance. The results also reinforce the Trade-Off Theory, as deposit money banks must balance aggressive credit expansion with associated credit risk exposure to maintain financial stability and profitability.

5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

The study examined the effect of credit management on the financial performance of listed deposit money banks in Nigeria using panel data covering the period 2015–2024. Credit management was proxied by Account Receivable Turnover (ART), Current Ratio (CR), and Average Collection Period (ACP), while financial performance was measured using Return on Assets (ROA).

Based on the empirical analysis, the major findings are summarized as follows:

1. **Account Receivable Turnover (ART) and ROA:** The study found that ART has a positive and statistically significant effect on ROA. This implies that efficient credit recovery and higher receivable turnover improve profitability and asset utilization among listed deposit money banks in Nigeria.
2. **Current Ratio (CR) and ROA:** The result revealed that CR has a positive and significant effect on ROA. This indicates that banks with stronger liquidity positions are better able to meet short-term obligations and achieve higher financial performance.
3. **Average Collection Period (ACP) and ROA:** The study established that ACP has a negative and significant effect on ROA. This suggests that delays in receivable collection reduce profitability and weaken operational efficiency in deposit money banks.
4. **Joint Effect of Credit Management Variables:** The F-statistic shows that ART, CR, and ACP jointly have a statistically significant effect on ROA, confirming that credit management is a key determinant of financial performance in listed deposit money banks in Nigeria.
5. **Control Variables:** Firm size and firm age were both found to have a positive and significant influence on financial performance, indicating

that larger and more established banks tend to perform better financially.

5.2 Conclusion

The study concludes that credit management plays a significant role in determining the financial performance of listed deposit money banks in Nigeria.

Specifically, efficient credit management reflected through effective receivable management (ART) enhances profitability by improving cash flow and asset utilization, while strong liquidity management (CR) supports operational stability and financial sustainability. Conversely, prolonged collection periods (ACP) negatively affect profitability by increasing liquidity pressure and exposure to credit risk.

The findings are consistent with Agency Theory, which emphasizes the importance of efficient managerial decisions in reducing agency costs and enhancing shareholder value. They also align with Liquidity Preference Theory, which highlights the importance of liquidity in maintaining financial stability in uncertain economic environments.

The study concludes that deposit money banks that adopt strong credit management systems are more likely to achieve improved financial performance, sustainability, and investor confidence in Nigeria's banking sector.

5.3 Recommendations

Based on the findings of the study, the following recommendations are made:

1. **Strengthening Credit Evaluation Systems:** Deposit money banks should enhance their credit appraisal systems by adopting advanced credit scoring models and data-driven credit risk assessment tools to improve borrower evaluation and reduce default risk.
2. **Improving Receivable Management Efficiency:** Banks should enforce stricter credit control policies to ensure faster recovery of receivables. This will improve Account Receivable Turnover and enhance profitability.
3. **Reducing Collection Periods:** Management should adopt automated repayment monitoring systems, stronger loan recovery frameworks, and effective enforcement mechanisms to reduce Average Collection Period and improve liquidity flow.
4. **Enhancing Liquidity Management:** Banks should maintain optimal liquidity levels to ensure smooth operations and the ability to meet short-term obligations without financial distress.
5. **Strengthening Regulatory Compliance and Credit Reporting:** Banks should fully integrate with credit bureaus, Bank Verification Number (BVN), and National Identification Number (NIN) systems to improve borrower traceability and reduce credit risk exposure.
6. **Capacity Building and Risk Management Training:** Management should continuously train credit officers and risk managers on modern credit risk management practices to improve decision-making efficiency and loan portfolio quality.

5.4 Suggestions for Further Studies

The study suggests the following areas for further research:

1. Future studies should expand the scope to include non-listed deposit money banks in Nigeria to improve the generalizability of findings.
2. Further research could examine the impact of digital banking technologies on credit risk management and financial performance in the banking sector.
3. Studies may also explore the moderating role of macroeconomic variables such as inflation, exchange rate volatility, and interest rates on credit management and bank performance.
4. Comparative studies could be conducted between deposit money banks and other financial institutions such as microfinance banks to evaluate differences in credit management effectiveness.
5. Future research may also consider using alternative performance measures such as Return on Equity (ROE) and Earnings Per Share (EPS) to provide a broader assessment of financial performance.

REFERENCES

Abubakar, A., & Gani, I. M. (2013). Impact of banking sector reforms on the performance of Nigerian deposit money banks. *Journal of Business and Management,* 7(3), 1–9.

Adegboeyega, A. O., Adeyemo, K. A., & Oladipo, T. O. (2023). Credit risk management and financial performance of financial institutions in Nigeria. *International Journal of Accounting and Finance, 11*(2), 45–59.

Adegboeyega, R. A., Okunade, S. O., Adeyemi, O. J., & Olaiya, O. J. (2023). Credit risk management and profitability of deposit money banks in Nigeria. *International Journal of African Innovation & Multidisciplinary Research, 2*(1), 1116–3240.

Akinola, O. M., & James, F. A. (2024). Macroeconomic instability and credit risk exposure in Nigeria's fintech sector. *Nigerian Journal of Banking and Financial Studies, 19*(1), 55–70.

Alhassan, I., & Islam, K. M. A. (2021). Credit management strategies and financial performance of industrial goods sector in Nigeria. *Indian Journal of Finance and Banking, 8*(1), 1–18. https://doi.org/10.46281/ijfb.v8i1.1495

Alper, D., & Anbar, A. (2011). Bank specific and macroeconomic determinants of commercial bank profitability: Empirical evidence from Turkey. *Business and Economics Research Journal*, 2(2), 139–152.

Al-Zararee, A. A., Almasria, N. A., & Alawaqleh, Q. A. (2021). The effect of working capital management and credit management policy on Jordanian banks' financial performance. *Banks and Bank Systems, 16*(4), 229–239. https://doi.org/10.21511/bbs.16(4).2021.19

Arner, D. W., Barberis, J., & Buckley, R. P. (2020). FinTech and the transformation of the financial industry. *Journal of Banking Regulation, 21*(1), 1–17.

Ayunku, P. E., & Akwarandu, U. (2020). Credit management and issues of bad debts: An empirical study of listed deposit banks in Nigeria. *Asian Journal of Economics, Business and Accounting, 11*(3), 32–49. https://doi.org/10.9734/AJEBA/2020/v14i330195

BusinessDay. (2024, August 13). *Banks' non-performing loans decline to 3.9% on CBN's policy – MPC members*. BusinessDay.

Central Bank of Nigeria (CBN). (2024). *Economic Report, Third Quarter 2024*. CBN. (Referenced in media reports).

Central Bank of Nigeria. (2023). *Financial stability report 2023*. CBN.

Central Bank of Nigeria. (2024). *Annual report and statement of accounts*. CBN.

Central Bank of Nigeria. (2024). *Credit Risk Management System (CRMS)*. Central Bank of Nigeria. Retrieved from https://www.cbn.gov.ng/supervision/crms.html

Daily Post. (2024, May 1). *Recapitalization: Nigerian banks' non-performing loan alarming – CBN*.

Eze, G. P., & Okoye, V. (2019). Firm characteristics and financial performance of quoted manufacturing companies in Nigeria. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 9(1), 30–41.

Eze, P. C., & Ibrahim, S. U. (2024). Credit management practices and profitability of financial technology firms in Nigeria. *Journal of Finance and Digital Economy, 6*(2), 91–108.

Falade, S. S., Nyor, T., Yahaya, A. O., & Agbi, S. E. (2024). Risk management and financial performance of deposit money banks in Nigeria. *International Journal of Advanced Multidisciplinary Research Studies, 4*(6), 1018–1027. https://doi.org/10.62225/2583049X.2024.4.6.3545

Frame, W. S., Wall, L. D., & White, L. J. (2019). Technological change and financial innovation in banking: Some implications for FinTech. *Economic Review, 104*(4), 35–48.

Gichuhi, A. W., & Omagwa, J. (2020). Credit management and loan portfolio performance of SACCOs in Kenya. *International Academic Journal of Economics and Finance, 3*(5), 121–139.

Gujarati, D. N., & Porter, D. C. (2009). *Basic econometrics* (5th ed.). McGraw-Hill Irwin.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X

Keynes, J. M. (1936). *The general theory of employment, interest and money*. Macmillan.

Khalid, A. A., Hassan, W. A. M., Ibrahim, N. A., Abdalla, Y. A., Ahmed, I. E., & Sarea, A. M. (2021). The impact of credit risk management on banking sector performance in Sudan. *Academy of Accounting and Financial Studies Journal, 25*(Special Issue 3), 1–10.

Kraus, A., & Litzenberger, R. H. (1973). A state-preference model of optimal financial leverage. *The Journal of Finance, 28*(4), 911–922. https://doi.org/10.1111/j.1540-6261.1973.tb01415.x

Nwajuo, V. (2022). *Critical analysis of the role of Central Bank in regulating the non-performing loans and performances of the Nigerian bank system* (Master's thesis, National College of Ireland).

Okafor, C. N., & Yusuf, M. L. (2023). Automated credit systems and loan recovery challenges in fintech firms. *International Journal of Financial Innovation, 5*(1), 33–49.

Onaolapo, A. A., & Kajola, S. O. (2010). Capital structure and firm performance: Evidence from Nigeria. *European Journal of Economics, Finance and Administrative Sciences*, 25, 70–82.

Opuene, E., & Amadiwo, I. W. (2025). Financial risk management and financial performance of deposit money banks in Nigeria. *Journal of International Accounting and Economics, 10*(2), 129–158.

Otu, M. F. (2005). Non-performing assets of the banking system in Nigeria: Complementary measures. *CBN Bullion, 29*(2), 1–15.

Ozili, P. K. (2022). Financial technology, financial inclusion and sustainable economic development. *International Journal of Finance and Economics, 27*(1), 358–372.

Punch Newspapers. (2023, September 29). *Banks deduct debtors' other accounts, non-performing loans hit N1.5tn*.

Riak, G. A., & Bill, D. B. A. (2022). Role of credit management on financial performance. *IJRDO – Journal of Social Science and Humanities Research, 8*(11), 77–78. https://doi.org/10.53555/sshr.v8i11.5377

Sani S. & Inyang, E. E. (2024), Credit Management Mechanisms and Performance of Listed Deposit Money Banks in Nigeria. *Journal of Entrepreneurship, Management, Economics and Business Administration (JEMEBA).* 2(1), 9-16.

Securities and Exchange Commission. (2024). *Annual report on fintech operations and capital market activities in Nigeria*. SEC Nigeria.

Siddique, A., Khan, M. A., & Khan, Z. (2022). Effect of credit risk management and bank-specific factors on commercial banks. *Asian Journal of Accounting Research, 7*(2), 182–194.

Wooldridge, J. M. (2016). *Introductory econometrics: A modern approach* (6th ed.). Cengage Learning.

World Bank. (2023). *Digital financial services and financial inclusion in Sub-Saharan Africa*. World Bank.