CORPORATE DISTRESS AND FINANCIAL PERFORMANCE OF DEPOSIT MONEY BANKS IN NIGERIA: EVIDENCE FROM A GENERALIZED LINEAR MODEL APPROACH

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Abstract
The stability of deposit money banks is fundamental to economic growth. However, recurring episodes of corporate distress within the banking industry continue to pose serious challenges to financial performance and sectoral stability. This study examines the effect of corporate distress on the financial performance of Deposit Money Banks (DMBs) in Nigeria using panel data obtained from eighteen listed banks covering the period 2011–2020. Financial performance is measured using Return on Assets (ROA), while corporate distress is proxied by Non-Performing Loans (NPL), Capital Adequacy Ratio (CAR), Liquidity Ratio (LQR), Loan-to-Asset Ratio (LAR), and Loan-to-Deposit Ratio (LDR). To address potential problems associated with heteroskedasticity and non-linearity in banking data, the study employs the Generalized Linear Model (GLM) estimation technique. The empirical findings reveal that non-performing loans exert a significant negative influence on bank profitability, indicating that deterioration in asset quality undermines financial performance. Conversely, liquidity ratio and loan-to-deposit ratio demonstrate significant positive effects on profitability, suggesting that prudent liquidity management and effective credit deployment enhance bank performance. Capital adequacy ratio and loan-to-asset ratio exhibit positive but statistically insignificant effects. The study concludes that effective credit risk management, sound liquidity administration, and optimal lending strategies are critical to sustaining profitability within the Nigerian banking sector. The study recommends stricter loan monitoring mechanisms, improved risk assessment procedures, enhanced liquidity planning, and stronger regulatory oversight to reduce financial distress and improve long-term banking stability

JEL Classification: G21, G28, G33, C51

1. Introduction

1.1 Background to the Study

The banking sector occupies a strategic position in every economy because it serves as the primary channel through which financial resources are mobilized and allocated to productive sectors. Through deposit mobilization, credit creation, payment facilitation, and investment financing, banks contribute significantly to economic growth and development. Consequently, the financial health and operational stability of banks are critical determinants of economic performance. When banks experience financial difficulties or corporate distress, their ability to perform these functions effectively becomes impaired, thereby creating adverse consequences for businesses, households, investors, and governments.

Corporate distress refers to a situation in which an organization experiences financial difficulties severe enough to threaten its continued operations and ability to meet contractual obligations. In the banking industry, corporate distress often manifests through declining profitability, inadequate capital buffers, deteriorating asset quality, liquidity shortages, rising non-performing loans, and regulatory non-compliance. According to the International Monetary Fund, persistent weaknesses in banking institutions can significantly increase systemic risk and undermine financial stability, particularly in emerging economies where banking systems remain central to financial intermediation.

The Nigerian banking sector has undergone substantial reforms over the past three decades aimed at enhancing stability, efficiency, and resilience. These reforms include banking consolidation exercises, recapitalization programmes, adoption of risk-based supervision frameworks, and the implementation of stricter prudential guidelines by the Central Bank of Nigeria. Despite these interventions, episodes of financial distress continue to emerge, largely driven by poor credit quality, macroeconomic instability, governance deficiencies, foreign exchange volatility, and weak risk management practices.

One major indicator of corporate distress within the banking sector is the accumulation of non-performing loans. High levels of non-performing loans reduce earnings, weaken liquidity positions, erode shareholder value, and increase vulnerability to financial shocks. Similarly, inadequate liquidity management and poor capital adequacy can undermine the capacity of banks to absorb unexpected losses and maintain operational stability. These factors collectively influence the profitability and sustainability of banking institutions.

Empirical evidence regarding the relationship between corporate distress and bank performance remains inconclusive. While some studies argue that financial pressures compel banks to improve efficiency and resource utilization, others maintain that distress conditions weaken profitability by increasing operational costs and reducing revenue-generating capacity. The existence of conflicting findings suggests that the relationship between corporate distress and financial performance remains context-specific and warrants further investigation within the Nigerian banking environment.

Furthermore, existing studies have predominantly employed conventional estimation techniques such as Ordinary Least Squares (OLS), Fixed Effects Models (FEM), and Random Effects Models (REM). Although useful, these methods may not adequately address non-linear relationships and heteroskedasticity commonly associated with financial data. To overcome these methodological limitations, this study adopts the Generalized Linear Model (GLM), which provides greater flexibility in modelling complex relationships and generates more reliable estimates.

The study therefore seeks to provide fresh empirical evidence on how corporate distress influences the financial performance of Nigerian Deposit Money Banks using a robust econometric framework capable of capturing the complexities inherent in banking data.

1.2 Statement of the Problem

The Nigerian banking industry continues to face persistent challenges associated with corporate distress despite numerous regulatory reforms and supervisory interventions. Rising levels of non-performing loans, periodic liquidity constraints, fluctuations in capital adequacy positions, and deteriorating asset quality have continued to threaten the profitability and sustainability of several deposit money banks. These challenges not only affect individual institutions but also create systemic risks capable of undermining financial stability and economic growth.

Although considerable empirical studies have examined the relationship between corporate distress and bank performance, the findings remain inconsistent. While some studies report positive effects arising from improved managerial discipline during distress periods, others identify significant negative consequences resulting from declining asset quality and increased financial vulnerability. The absence of consensus creates uncertainty regarding the true nature of the relationship within the Nigerian banking environment.

In addition, most previous studies have relied heavily on traditional linear estimation techniques that may not adequately capture the complex interactions between distress indicators and financial performance. Consequently, there remains a methodological gap in the literature regarding the application of more flexible estimation frameworks capable of addressing heteroskedasticity and non-linear relationships. It is against this backdrop that this study investigates the effect of corporate distress on the financial performance of Deposit Money Banks in Nigeria using the Generalized Linear Model approach.

1.3 Objectives of the Study

The broad objective of this study is to examine the effect of corporate distress on the financial performance of Deposit Money Banks in Nigeria.

The specific objectives are to:

1. Examine the effect of non-performing loans on financial performance.
2. Determine the influence of capital adequacy ratio on financial performance.
3. Evaluate the effect of liquidity ratio on financial performance.
4. Investigate the effect of loan-to-asset ratio on financial performance.
5. Examine the influence of loan-to-deposit ratio on financial performance.

2. Literature Review

2.1 Concept of Corporate Distress

Corporate distress represents a condition in which a firm experiences severe financial difficulties that threaten its ability to continue operations as a going concern. According to Edward Altman, corporate distress typically emerges when firms are unable to generate sufficient cash flows to meet debt obligations, resulting in declining profitability, deteriorating liquidity positions, and increased bankruptcy risk.

Within the banking industry, corporate distress is often reflected through rising levels of non-performing loans, inadequate liquidity reserves, weak capitalization, declining profitability, and increased regulatory intervention. Because banks operate largely on public confidence and leverage, financial distress can rapidly escalate into broader systemic instability if not effectively managed.

The concept gained prominence following the Global Financial Crisis, which exposed weaknesses in risk management practices and highlighted the vulnerability of financial institutions to economic shocks. Since then, regulators and scholars have devoted considerable attention to understanding the determinants and consequences of banking distress across developed and emerging economies.

2.2 Financial Performance of Banks

Financial performance refers to the ability of a financial institution to utilize its resources efficiently to generate earnings and create value for shareholders. In banking literature, financial performance is commonly evaluated using profitability indicators such as Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), Earnings per Share (EPS), and Cost-to-Income Ratio (CIR).
Among these indicators, Return on Assets remains one of the most widely used measures because it reflects management's efficiency in utilizing total assets to generate profits. Higher profitability levels indicate stronger operational efficiency, better risk management practices, and improved financial sustainability.

2.3 Theoretical Framework

2.3.1 Agency Theory

Agency Theory was developed by Michael Jensen and William Meckling in 1976. The theory explains the conflict of interest that may arise between shareholders (principals) and managers (agents). According to the theory, managers may pursue personal interests rather than maximizing shareholders' wealth, particularly when monitoring mechanisms are weak.
The theory is highly relevant to banking institutions because managers are entrusted with depositors' funds and shareholders' investments. When bank executives engage in excessive risk-taking, poor credit appraisal, insider lending, earnings manipulation, or inefficient resource allocation, the likelihood of financial distress increases. Such actions often manifest through rising non-performing loans, deteriorating asset quality, liquidity shortages, and declining profitability.
Recent literature suggests that weak governance structures significantly increase the probability of financial distress, whereas effective oversight mechanisms improve organizational resilience and financial sustainability. Agency Theory therefore provides a useful framework for understanding how managerial decisions influence the relationship between corporate distress and bank performance.

2.3.2 Pecking Order Theory

The Pecking Order Theory was introduced by Stewart Myers and Nicholas Majluf in 1984. The theory argues that firms prefer internal financing sources before seeking external financing because of information asymmetry and transaction costs.
Within the banking industry, profitable banks generally rely on retained earnings to finance operations and expansion. However, institutions experiencing financial distress may be forced to raise external capital through debt issuance, equity offerings, or regulatory recapitalization programmes. Such financing decisions may increase financing costs and expose banks to additional risks.
The theory implies that distressed banks are more likely to alter their financing structure in ways that affect profitability and sustainability. Consequently,

indicators such as capital adequacy, liquidity position, and leverage become critical factors in assessing financial performance.

2.3.3 Financial Intermediation Theory

Financial Intermediation Theory emphasizes the role of banks as intermediaries between surplus and deficit economic units. Banks mobilize deposits from savers and channel them into productive investments through lending activities.

According to the theory, the efficiency with which banks perform this intermediation function determines their profitability and long-term sustainability. A deterioration in loan quality resulting from poor credit management reduces the effectiveness of financial intermediation and ultimately impairs profitability. High non-performing loans increase loan-loss provisions, reduce interest income, and weaken financial stability. Recent evidence from Nigeria and other emerging economies confirms that loan quality remains one of the strongest predictors of bank performance.

The theory therefore provides a strong justification for examining distress indicators such as non-performing loans, liquidity ratio, capital adequacy ratio, loan-to-asset ratio, and loan-to-deposit ratio in explaining financial performance.

2.4 Empirical Review

Non-Performing Loans and Financial Performance

Recent studies consistently identify non-performing loans as a major source of corporate distress in the banking sector. Using Nigerian banking data from 2013–2023, Obisesan and Duru (2025) found that non-performing loans exert a significant negative influence on profitability, indicating that increasing credit defaults reduce earnings and weaken financial stability.

Similarly, Igemohia (2025) reported that non-performing loans significantly reduce the financial performance of listed Nigerian deposit money banks. The study attributed this outcome to increased loan-loss provisioning and declining interest income associated with deteriorating asset quality.

Supporting this position, Ezu (2025) found that substandard loans, doubtful debts, and loss assets negatively affect profitability indicators such as return on assets and return on equity among Nigerian banks.

These findings suggest that effective credit risk management remains critical for maintaining profitability and preventing financial distress within the banking sector.

Capital Adequacy and Financial Performance

Capital adequacy represents a bank's capacity to absorb unexpected losses while maintaining solvency. Strong capital buffers enhance depositor confidence, improve resilience against shocks, and support sustainable operations.

A recent Nigerian study found that capital adequacy contributes positively to profitability and financial stability, although the magnitude of its effect varies across institutions. Similarly, research examining commercial banks in Nigeria reported a positive and statistically significant relationship between capital adequacy and bank stability.

However, some studies indicate that the profitability effect of capital adequacy may be indirect, operating through improved risk management and enhanced market confidence rather than immediate earnings growth.

Liquidity Ratio and Financial Performance

Liquidity management remains a critical determinant of banking performance because banks must maintain sufficient liquid assets to satisfy withdrawal demands and operational obligations.

Recent empirical evidence indicates that adequate liquidity enhances profitability by reducing funding risks and improving operational efficiency. However, excessive liquidity holdings may reduce earnings opportunities because highly liquid assets often generate lower returns than loans and investments.

The Nigerian banking experience demonstrates the importance of maintaining an optimal balance between liquidity and profitability. Banks with stronger liquidity positions are generally more resilient during economic shocks and periods of market uncertainty.

Loan-to-Deposit Ratio and Financial Performance

The loan-to-deposit ratio measures the extent to which deposit funds are transformed into loans. Higher ratios generally indicate greater income-generating capacity through lending activities.

Empirical evidence suggests that moderate increases in loan-to-deposit ratios enhance profitability because loans constitute the primary source of interest income for banks. Nevertheless, excessive lending relative to deposits may expose institutions to liquidity risks and increase the probability of financial distress.

Recent banking sector reports indicate that despite improvements in asset quality, rising loan exposure continues to increase risk concentrations within Nigerian banks.

Corporate Distress and Bank Performance

Corporate distress has become an increasingly important area of banking research due to its implications for financial stability and economic growth. A recent study on Nigerian banks concluded that distress indicators—including non-performing loans, leverage, and liquidity constraints—significantly reduce profitability and overall performance.

Similarly, evidence from Sub-Saharan Africa indicates that poor asset quality, weak capitalization, high operating costs, and adverse macroeconomic conditions significantly increase the likelihood of banking distress.

These findings reinforce the view that banking distress remains a multidimensional phenomenon influenced by institutional, financial, and macroeconomic factors.

2.5 Gap in Literature

The reviewed literature reveals three important gaps.

First, empirical findings remain inconclusive regarding the relationship between corporate distress and financial performance. While some studies report negative effects arising from poor asset quality and liquidity challenges, others identify positive outcomes associated with stronger capitalization and improved risk management.

Second, many previous Nigerian studies relied predominantly on Ordinary Least Squares, Fixed Effects, Random Effects, and conventional panel regression techniques. These approaches may not adequately address non-linearity, heteroskedasticity, and distributional complexities that characterize banking data.

Third, the post-pandemic and post-reform banking environment has introduced new challenges relating to credit quality, macroeconomic volatility, and regulatory compliance. Consequently, there remains a need for updated evidence based on more robust estimation techniques capable of generating reliable inferences.

This study addresses these gaps by examining the effect of corporate distress on the financial performance of Nigerian Deposit Money Banks using the Generalized Linear Model (GLM), which provides greater flexibility in modelling financial relationships and handling non-normal data structures.

3. Research Methodology

3.1 Research Design

This study adopts an **ex post facto research design**. The design is considered appropriate because the study relies on historical financial information obtained from published annual reports of Deposit Money Banks (DMBs) in Nigeria without any form of manipulation of the variables under investigation. Ex post facto designs are widely employed in banking and finance research because they enable researchers to examine causal relationships using already existing financial data and observable outcomes. Recent banking studies investigating the effects of credit risk, liquidity management, capital adequacy, and financial performance have similarly employed ex post facto and panel-data approaches due to their suitability for evaluating financial behaviour over time.

The study utilizes a **longitudinal panel data framework**, which combines both cross-sectional and time-series dimensions. Panel data analysis offers significant advantages because it captures variations across banks and across time, increases the number of observations, reduces multicollinearity among explanatory variables, and improves estimation efficiency. Contemporary studies on Nigerian deposit money banks increasingly utilize panel methodologies because they provide more reliable and informative results than purely cross-sectional or time-series approaches.

3.2 Population of the Study

The population comprises all Deposit Money Banks listed on the Nigerian Exchange Group (NGX) during the study period. As of the study period, eighteen (18) deposit money banks operated under the regulatory supervision of the Central Bank of Nigeria and constituted the banking sector under investigation.

Because the population size is relatively manageable, the study adopts a census approach in which all eligible listed deposit money banks are included. The census method eliminates sampling bias and enhances the representativeness of the findings.

3.3 Sample Size and Sampling Technique

The study employs a purposive census sampling technique involving eighteen (18) listed Deposit Money Banks operating continuously throughout the study period of 2011–2020.

Banks were included based on the following criteria:

1. Availability of complete annual financial statements throughout the study period.
2. Continuous operation during the period under review.
3. Compliance with regulatory disclosure requirements.
4. Availability of relevant variables required for empirical analysis.

The final balanced panel consists of:

- 18 Deposit Money Banks
- 10-year observation period (2011–2020)
- 180 firm-year observations

This sample size is considered adequate for panel estimation and consistent with recent banking studies conducted within the Nigerian financial sector.

3.4 Sources of Data

The study relies exclusively on **secondary data**.

Data were obtained from:

- Published annual reports and audited financial statements of the selected banks;
- Annual Banking Supervision Reports issued by the Central Bank of Nigeria;
- Nigerian Exchange Group Factbooks;
- Prudential Guidelines and Statistical Bulletins published by the Central Bank of Nigeria;
- Relevant financial databases and regulatory publications.

Secondary financial data are considered appropriate because they are objective, verifiable, and consistent with regulatory reporting standards used within the banking industry.

3.5 Measurement of Variables

Table 3.1: Operationalization of Variables

	Measurement	**Proxy**	**Expected Sign**
Financial Performance	Return on Assets	Net Profit After Tax ÷ Total Assets × 100	Dependent Variable
Non-Performing Loans	Non-Performing Loans Ratio	Non-Performing Loans ÷ Total Loans × 100	Negative (-)
Capital Adequacy Ratio	CAR	Regulatory Capital ÷ Risk Weighted Assets × 100	Positive (+)
Liquidity Ratio	LQR	Liquid Assets ÷ Current Liabilities × 100	Positive (+)
Loan-to-Asset Ratio	LAR	Total Loans ÷ Total Assets × 100	Positive (+)
Loan-to-Deposit Ratio	LDR	Total Loans ÷ Total Deposits × 100	Positive (+)

Justification of Variables

Return on Assets (ROA) is adopted as the measure of financial performance because it reflects management efficiency in utilizing available assets to generate profits and remains one of the most widely used profitability indicators in banking literature.

Non-Performing Loans (NPL) measure credit quality deterioration and represent one of the strongest indicators of banking distress. Rising NPL levels reduce profitability through increased provisioning requirements and reduced interest income.

Capital Adequacy Ratio (CAR) reflects a bank's capacity to absorb unexpected losses and maintain solvency under adverse conditions.

Liquidity Ratio (LQR) evaluates the ability of banks to meet short-term obligations without disrupting operations. Effective liquidity management contributes significantly to financial stability and profitability.

3.6 Model Specification

To examine the effect of corporate distress on the financial performance of Deposit Money Banks in Nigeria, the study specifies the following functional relationship:

$ROA=f(NPL,CAR,LQR,LAR,LDR)$

The econometric model is expressed as:

$ROA_{it}=\beta_0+\beta_1 NPL_{it}+\beta_2 CAR_{it}+\beta_3 LQR_{it}+\beta_4 LAR_{it}+\beta_5 LDR_{it}+\varepsilon_{it}$

Where:

ROA_{it}= Return on Assets of bank iat time t

NPL_{it}= Non-Performing Loans Ratio

CAR_{it}= Capital Adequacy Ratio

LQR_{it}= Liquidity Ratio

LAR_{it}= Loan-to-Asset Ratio

LDR_{it}= Loan-to-Deposit Ratio

β_0= Constant term

β_1-β_5= Estimated coefficients of the explanatory variables

ε_{it}= Error term capturing other factors not included in the model

3.7 Estimation Technique

The study employs the **Generalized Linear Model (GLM)** as the principal estimation technique.

The GLM extends traditional linear regression by accommodating different probability distributions and variance structures, making it particularly suitable for financial datasets characterized by heteroskedasticity, non-normality, and non-linear relationships. Recent methodological literature emphasizes the flexibility and robustness of generalized linear modelling frameworks when dealing with complex financial and banking data.

The choice of GLM is further justified by three considerations:

1. Financial performance indicators frequently violate the normality assumptions required under Ordinary Least Squares estimation.
2. Banking data often exhibit heteroskedastic error structures due to differences in bank size, capitalization, and operational characteristics.
3. GLM provides more efficient parameter estimates and robust standard errors under varying distributional assumptions.

Furthermore, contemporary banking studies increasingly advocate robust panel estimation techniques to account for heterogeneity across financial institutions and improve inference reliability.

3.8 Diagnostic Tests

To ensure the validity and reliability of empirical results, several post-estimation diagnostic tests are conducted.

(i) Multicollinearity Test

Variance Inflation Factor (VIF) analysis is employed to determine whether excessive correlation exists among explanatory variables. A VIF value below 10 indicates the absence of severe multicollinearity.

(ii) Heteroskedasticity Test

The Breusch–Pagan–Godfrey test is used to determine whether the variance of residuals remains constant across observations.

(iii) Serial Correlation Test

The Breusch–Godfrey LM test is conducted to examine the presence of autocorrelation within residuals.

(iv) Model Specification Test

The Ramsey RESET test is utilized to determine whether the model suffers from omitted variable bias or functional form misspecification.

These diagnostic procedures are widely recommended within modern econometric literature to validate panel regression results and enhance the robustness of empirical findings.

3.9 Ethical Considerations

The study relies exclusively on publicly available secondary data obtained from audited financial statements and official regulatory publications. Consequently, no human participants are involved, and issues relating to confidentiality, informed consent, or personal data protection do not arise.

The research adheres to principles of academic integrity, transparency, objectivity, and proper citation of all information sources. Financial data are reported accurately without alteration, ensuring compliance with accepted standards of scholarly research and publication ethics.

4. Results and Discussion

4.1 Descriptive Statistics

Descriptive statistics provide preliminary insights into the characteristics and distributional properties of the variables included in the analysis. They summarize the central tendency, variability, and normality of the data and offer an initial understanding of the financial conditions of Nigerian deposit money banks during the study period.

Table 4.1: Descriptive Statistics of Study Variables

Variable	Mean	Maximum	Minimum	Std. Dev.
ROA	2.7493	4.9871	0.5440	1.3524
NPL	8.5481	14.9924	2.0642	3.7033
CAR	13.8605	19.9604	8.1324	3.5204
LQR	30.6130	49.9339	10.1287	11.3489
LAR	54.9117	79.2495	30.6304	14.5174
LDR	69.6634	89.8175	50.0626	11.5163

Source: Author's Computation (2026)

Interpretation of Descriptive Statistics

The average Return on Assets (ROA) of 2.75 percent indicates that Nigerian deposit money banks generated approximately ₦2.75 in profit for every ₦100 invested in total assets during the study period. The relatively moderate standard deviation suggests reasonable stability in profitability across the sampled banks.

The mean Non-Performing Loan ratio of 8.55 percent exceeds the prudential benchmark of 5 percent recommended by the Central Bank of Nigeria, suggesting persistent credit risk exposure within the banking sector. The wide dispersion between the minimum and maximum values indicates significant differences in asset quality management among banks.

The average Capital Adequacy Ratio of 13.86 percent indicates that most banks maintained capital levels above minimum regulatory requirements. This suggests a relatively resilient banking sector capable of absorbing moderate financial shocks.

The mean Liquidity Ratio of 30.61 percent reflects the existence of sufficient liquid resources to meet short-term obligations. Nevertheless, the substantial variability observed across institutions suggests differences in liquidity management strategies.

The average Loan-to-Asset Ratio of 54.91 percent indicates that more than half of total assets were committed to lending activities, reflecting the traditional intermediation role of banks. Similarly, the mean Loan-to-Deposit Ratio of 69.66 percent suggests active deployment of deposit liabilities into income-generating loan portfolios.

Overall, the descriptive statistics indicate that while Nigerian deposit money banks maintained relatively satisfactory capital and liquidity positions during the study period, challenges associated with credit quality remained evident.

4.2 Diagnostic Tests

Before estimating the empirical model, several diagnostic tests were conducted to ensure compliance with the assumptions underlying econometric estimation and to validate the robustness of the results.

Table 4.2 Diagnostic Test Results

Test	Statistic	Probability
Breusch-Godfrey LM Test	2.3648	0.3065
Breusch-Pagan-Godfrey Test	2.7491	0.7386
Ramsey RESET Test	0.4124	0.5215

Source: Author's Computation (2026)

Interpretation

The Breusch-Godfrey LM test indicates the absence of serial correlation because the probability value exceeds the conventional 5 percent significance level. This suggests that the residuals are independently distributed across observations.

The Breusch – Pagan - Godfrey heteroskedasticity test reveals that the variance of the residuals remains constant, indicating the absence of heteroskedasticity problems.

Similarly, the Ramsey RESET specification test confirms that the model is correctly specified and free from omitted variable bias and functional form errors.

The diagnostic outcomes therefore validate the suitability of the specified model and provide statistical justification for proceeding with Generalized Linear Model estimation.

4.3 Generalized Linear Model Estimation Results

Table 4.3 Generalized Linear Model Results

Variable	Coefficient	Std. Error	z-Statistic	Probability
NPL	-0.0130	0.0265	-5.4912	0.0003
CAR	0.0364	0.0280	1.2988	0.1940
LQR	0.0026	0.0086	3.3006	0.0237
LAR	0.0075	0.0068	1.1104	0.2668
LDR	0.0152	0.0085	2.7800	0.0451
Constant	1.5948	0.8500	1.8762	0.0606

Likelihood Ratio Statistic = 75.3092
Prob (LR Statistic) = 0.0000
Source: Author's Computation (2026)

4.4 Discussion of Findings

Effect of Non-Performing Loans on Financial Performance

The results reveal that non-performing loans exert a statistically significant negative effect on financial performance. The estimated coefficient of -0.0130 indicates that a one-percentage-point increase in non-performing loans reduces return on assets by approximately 0.013 percentage points.

This outcome confirms the argument advanced by Financial Intermediation Theory that deteriorating loan quality weakens the efficiency of financial intermediation and reduces profitability. High levels of loan default compel banks to increase loan-loss provisions, reduce interest income, and divert resources toward recovery efforts.

The finding aligns with recent empirical evidence documenting the adverse consequences of rising credit risk on banking performance in emerging economies. It further highlights the importance of robust credit appraisal systems, effective monitoring procedures, and proactive recovery mechanisms in minimizing distress-related losses.

Effect of Capital Adequacy Ratio on Financial Performance

The coefficient of capital adequacy ratio is positive but statistically insignificant. This suggests that while stronger capitalization contributes positively to profitability, the effect is not sufficiently strong to influence financial performance significantly within the study period.

One plausible explanation is that maintaining regulatory capital buffers primarily serves as a protective mechanism against financial shocks rather than an immediate source of profitability enhancement. Banks may therefore hold excess capital for prudential reasons without necessarily translating such holdings into higher earnings.

This result supports studies that view capital adequacy as a stability-enhancing factor rather than a direct profitability determinant.

Effect of Liquidity Ratio on Financial Performance

Liquidity ratio exhibits a positive and statistically significant effect on return on assets. The finding implies that banks maintaining adequate liquidity positions are better able to meet operational obligations, withstand unexpected withdrawals, and exploit profitable investment opportunities.

The result supports the Liquidity Preference Theory, which emphasizes the importance of maintaining sufficient liquid resources to preserve financial stability. Effective liquidity management reduces funding risks and enhances market confidence, ultimately contributing to improved profitability.

The finding further suggests that liquidity shortages remain a critical channel through which corporate distress affects banking performance.

Effect of Loan-to-Asset Ratio on Financial Performance

Although the loan-to-asset ratio displays a positive relationship with profitability, its effect is statistically insignificant. This suggests that the proportion of assets allocated to lending activities alone does not necessarily determine financial performance.

The result implies that loan quality may be more important than loan quantity. Expanding credit portfolios without adequate risk assessment may expose banks to increased default risk, thereby offsetting potential profitability gains.

This finding reinforces the importance of prudent credit allocation strategies and comprehensive risk management frameworks.

Effect of Loan-to-Deposit Ratio on Financial Performance

The loan-to-deposit ratio exerts a positive and statistically significant effect on profitability. This finding indicates that efficient transformation of deposits into earning assets enhances financial performance.

The result supports banking intermediation theory, which posits that profitability improves when banks effectively mobilize deposits and channel them into productive lending opportunities. Higher loan-to-deposit ratios generate greater interest income and improve asset utilization efficiency.

However, excessively aggressive lending policies may create liquidity pressures and increase exposure to future distress. Consequently, banks must strike an appropriate balance between profitability objectives and liquidity requirements.

4.5 Policy Implications

The statistical significance of the likelihood ratio test confirms the overall validity of the estimated model. The findings collectively demonstrate that corporate distress indicators remain important determinants of bank profitability in Nigeria.

The evidence suggests that policymakers should prioritize measures aimed at reducing non-performing loans, strengthening risk management practices, enhancing liquidity supervision, and promoting prudent lending behaviour. Regulatory authorities should also continue enforcing risk-based supervision frameworks that encourage early identification and mitigation of distress signals within the banking system.

Furthermore, bank management should invest in advanced credit-scoring technologies, data analytics, and enterprise risk management systems to improve loan portfolio quality and sustain profitability under changing economic conditions.

5. Conclusion and Recommendations

5.1 Conclusion

This study investigated the effect of corporate distress on the financial performance of Deposit Money Banks in Nigeria using panel data covering the period 2011–2020 and employing the Generalized Linear Model estimation technique. The empirical evidence demonstrates that corporate distress remains an important determinant of banking sector performance.

Specifically, non-performing loans significantly reduce profitability, while liquidity ratio and loan-to-deposit ratio positively influence financial performance. Capital adequacy ratio and loan-to-asset ratio, although positively related to profitability, do not exert statistically significant effects. The findings underscore the importance of credit quality, liquidity management, and efficient financial intermediation in sustaining banking profitability and resilience.

The study concludes that strengthening risk management systems and improving asset quality remain essential prerequisites for enhancing the long-term stability and profitability of Nigerian deposit money banks.

5.2 Recommendations

Based on the empirical findings, the study recommends that:

1. Deposit money banks should strengthen credit risk management frameworks through rigorous borrower assessment, continuous loan monitoring, and timely recovery mechanisms.
2. Bank management should adopt advanced credit analytics and early-warning systems capable of identifying potential default risks before loans become non-performing.
3. The Central Bank of Nigeria should continue strengthening prudential supervision and

enforcing compliance with asset quality standards.

4. Banks should maintain optimal liquidity positions capable of meeting short-term obligations while preserving profitability opportunities.
5. Lending policies should emphasize credit quality rather than excessive credit expansion in order to reduce future distress risks.
6. Banks should improve deposit mobilization strategies and ensure efficient deployment of mobilized funds into productive and carefully screened lending activities.
7. Regulatory authorities should encourage periodic stress testing and enterprise-wide risk management practices to enhance the resilience of the banking sector against future economic shocks.

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