



Moderating Effect of NPL Ratio on the Relationship Between Short-Term and Total Leverage and Dividend Payout of Listed Deposit Money Banks in Nigeria

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Abstract

This study assessed the moderating effect of Non-Performing Loan ratio on the relationship between short-term and total leverage and dividend payout of listed deposit money banks in Nigeria. The population of this study consists of the Thirteen (13) Deposit Money Banks in Nigeria listed on the Nigerian Exchange Group as of 30th April 2025. This study covers the period of ten years between the year (2015-2024). Multiple regression analysis test was used to examine the moderating effect of non-performing loans on the relationship between short-term leverage and total leverage on dividend payment of deposit money banks in Nigeria. The results of this findings revealed a positive relationship between short-term leverage (STL) and dividend payouts, the result of this findings shows total leverage (TL) appears to have no significant direct effect on dividends, the result also revealed that short-term leverage, higher NPLs strengthen the positive relationship with dividend payout and finally, the results of this findings show a negative relationship between total leverage and non-performing loans on dividend payout. The study therefore recommends. Banks should adopt more prudent dividend policies that account for both leverage levels and asset quality. When non-performing loans (NPLs) exceed certain thresholds, management should consider reducing or suspending dividend payments to preserve capital.

Keywords: Non-performing loans; Dividend Payout; Short-term leverage; Total leverage.

1.1 INTRODUCTION

High levels of non-performing loans (NPLs) can significantly hinder the profitability and liquidity of deposit money banks (DMBs). Liquidity risk and leverage are interconnected with the financial performance of Nigerian Deposit Money Banks, suggesting that unfavourable credit circumstances may restrict dividend payments due to diminished retained earnings (Otekunrin et al., 2024). Conversely, capital adequacy directly impacts a bank's return on assets (ROA), underscoring the necessity of sustaining sufficient capital to alleviate risks linked to elevated non-performing loan (NPL) ratios (Adeoti & Akinroluyo, 2022). These indicate a reciprocal enhancement among capital reserves, asset quality, and dividend payment capacity. Leverage, especially in the form of debt, complicates the dividend distribution framework. A high debt-to-equity ratio may indicate stringent constraints set by creditors, thus restricting the available discretionary funds for dividends (Abubakar et al., 2022). Profitability profoundly influences dividend distribution policies, indicating that banks with diminished profitability, frequently attributed to elevated non-performing loans (NPLs), are less inclined to sustain considerable dividend disbursements (Harada & Nguyễn, 2011).

Short-term leverage can be quantified using several indicators, with the primary objective of most studies being to assess how effectively a company utilises its resources for both long-term and short-term operations. Salihu et al. (2023). Moreover, overall leverage is a significant statistic utilised to denote leverage. The resources of a company may include those derived from capital contributors or short-term instruments such as customer deposits, which can be quantified as a fraction of another report element, such as total assets or equity. Short-term leverage and total leverage ratios may present divergent narratives on a company's financial success at a specific moment. The rationale for these selections is twofold: to understand the impact of client deposits as a short-term obligation on operations, and to assess whether overall debt as a proportion of equity significantly affects financial performance. Salihu et al. (2023).

Despite the critical role that dividends play in attracting investment and signaling financial stability, research such as Salihu et al., (2023) shows that a high NPL ratio negatively correlates with banks' profitability and liquidity, thereby constraining their capacity to maintain robust dividend payouts. According to the Central Bank of Nigeria, NPL ratios for several banks have often surpassed the regulatory threshold, highlighting pressing concerns regarding credit risk management and financial sustainability. Moreover, the relationship between leverage whether short-term or total and dividend payouts is complicated by the interplay of risk and financial obligation. Increased leverage, often necessitated by the need for operational financing or asset acquisition, typically constrains banks' financial flexibility and can lead to intensified scrutiny from creditors. This dynamic is further exacerbated when high NPL ratios are introduced, leading to a domino effect where banks prioritize capital retention over dividend distributions to ensure solvency and liquidity.

Similarly, the global banking sector continues to face increasing regulatory pressures to maintain financial stability amid rising credit risks. On 13 March 2025, Bangladesh Bank issued a stern warning imposing dividend restrictions on banks exceeding a 10% Non-Performing Loan (NPL) ratio, reflecting a growing regulatory trend in emerging markets to link dividend payouts to asset quality. This development raises critical questions about similar risks in Nigeria's banking sector, where economic volatility, currency fluctuations, and sector-specific challenges have contributed to deteriorating loan quality. While existing studies acknowledge that higher leverage (both short-term and total debt) typically constrains dividend payouts due to debt servicing obligations and capital preservation needs. Therefore, this study examined the moderating effect of NPLs ratio on the relationship between short-term and total leverage and dividend payout of listed deposit money banks in Nigeria, specifically to:

- i) Ascertain the influence of short-term leverage on dividend payment of listed Deposit Money Banks (DMBs) in Nigeria
- ii) Determine the effects of total leverage on dividend payment of listed Deposit Money Banks (DMBs) in Nigeria
- iii) Assess the moderating impact of Non-Performing Loans on the relationship between short-term leverage and dividend payment of listed Deposit Money Banks (DMBs) in Nigeria
- iv) Investigate the moderating effect of Non-Performing Loans on the relationship between total leverage and dividend payment of listed Deposit Money Banks (DMBs) in Nigeria.

This study is guided by the following hypotheses and tested at 0.05 significant level.

H01: There is no significant relationship between short-term leverage and dividend payment of listed Deposit Money Banks (DMBs) in Nigeria.

H02: There is no significant relationship between total leverage and dividend payment of listed Deposit Money Banks (DMBs) in Nigeria.

H03: Non-Performing Loans does not significantly moderate the relationship between short-term leverage and dividend payment of listed Deposit Money Banks (DMBs) in Nigeria.

H04: Non-Performing Loans does not significantly moderate the relationship between short-term leverage and dividend payment of listed Deposit Money Banks (DMBs) in Nigeria.

Significance of the study

By examining the NPL-leverage dividend nexus, this study equips regulators, investors, and bankers with data driven strategies to navigate Nigeria's evolving financial landscape. Its significance extends beyond academia, offering practical tools to align shareholder expectations with financial resilience a need underscored by global precedents like Bangladesh's 2025 policy.

2.1 Conceptual Review

Dividend Payment

Dividend payments represent a fundamental pillar of corporate finance, serving as a critical mechanism through which firms distribute profits to shareholders. The decision to implement a dividend policy encompasses multiple dimensions, reflecting not only the company's financial performance but also its capital structure, market conditions, and stakeholder expectations. In the context of banking institutions, particularly in markets like Nigeria, understanding the dynamics of dividend payments becomes even more essential given the interplay with leverage and Non-Performing Loans (NPLs). Dividends can be categorized primarily into cash dividends and stock dividends, and their determination often hinges on various factors, including profitability, operational liquidity, and the firm's long-term investment strategies. Firms that maintain a clear dividend policy are often more stringent with their debt management, suggesting that the alignment between capital structure and dividend policies is prevalent in financially stable organizations Brunzell et al. (2013). This observation aligns with the notion that a well-structured dividend policy can enhance market perception, thereby potentially lowering the firm's cost of capital.

Short-Term Leverage

Short-term leverage refers to the use of short-term debt as a financing mechanism by firms, where liabilities are expected to be settled within one year. This type of leverage plays a pivotal role in a firm's operational strategy by affecting

liquidity, funding flexibility, and growth opportunities. The relationship between short-term leverage and a firm's financial performance is profound and multifaceted, influencing not only financial planning but also the strategic direction of the business. One of the primary characteristics of short-term leverage is its impact on liquidity management. Firms often use short-term debt instruments to finance immediate operational needs, manage cash flows, and exploit short-term opportunities. As noted by Abubakar, short-term debt ratios can significantly influence the financial performance of companies, particularly in dynamic markets Abubakar (2021). The ability to effectively manage short-term leverage can provide firms with a competitive edge, allowing them to respond quickly to market changes and investment opportunities.

Moreover, short-term leverage enhances a firm's flexibility. According to Kashefi-Pour and Khansalar, an appropriate level of short-term debt can alleviate underinvestment problems by allowing firms to capitalize on new ventures promptly (Kashefi-Pour & Khansalar, 2015). However, it is also noted that excessive short-term debt can accelerate the cost of suboptimal liquidation, which may reduce the benefits associated with its use (Kashefi-Pour & Khansalar, 2015). This increases financial flexibility but can also pose risks if levels are too high, leading to potential liquidity issues.

Total Leverage

Total leverage refers to the degree to which a bank utilizes borrowed funds (both short-term and long-term) to finance its assets and operations, amplifying both potential returns and risks. Unlike short-term leverage, which focuses on immediate obligations like customer deposits, total leverage provides a holistic view of a bank's debt exposure, encompassing all liabilities relative to its equity or assets. Leverage illustrates the amount of funds contributed by the borrower and the shareholder of the company. Leverage is measured by the debt-equity ratio (Harisa, Mohamad, & Meutia, 2019). It is used to measure the ability of a bank to pay all of its obligations by the shareholders' fund (Ngurah & Panji, 2021; Uddin, 2022). The bank's profitability will be lower if the DER is higher.

Non-Performing Loan

Non-performing loans (NPLs) are loans that have not been repaid in accordance with the stipulations of their initial contract. They may be delinquent, in arrears, or in default. A loan is classified as non-performing if no payments have been made towards the principle for a lengthy duration, often ninety days or longer. Non-performing loans may encompass both secured and unsecured obligations, including mortgages, credit cards, and personal lines of credit. Salihu et al. (2023). A non-performing loan (NPL) is a classed debt that yields no income for the bank. Loans are grouped into four categories based on risk levels: Special Mention Account (SMA), Sub-standard (SS), Doubtful, and Bad/Loss. A non-performing loan consists of sub-standard, dubious, and bad/loss categories (Bangladesh Bank, 2021). A non-performing loan is a loan in which the principal and interest payments are overdue for a designated term. The credit risks of a bank are often assessed by non-performing loans (NPL). The elevated NPL ratio indicates that the bank's credit quality is inadequate, resulting in a charge against income. Uddin (2022).

Pecking Order Theory

Pecking Order Theory, conceptualized by Myers and Majluf in 1984, posits that firms prioritize their sources of financing according to the principle of least effort or least resistance. In essence, companies prefer internal financing to external financing, and when external financing is necessary, they opt for debt before equity. This hierarchy arises largely due to information asymmetry that exists between managers (insiders) and external investors, which can affect the costs and availability of financing options. This study therefore considered pecking order theory suitable to underpinning this study.

Empirical Review

Salihu et al. (2023) assessed the influence of short-term leverage and overall leverage on the return on assets of eight deposit money banks listed on the Nigerian Exchange Group, spanning the years 2013 to 2021. This study also investigates the moderating effect of non-performing loans on the links between the short-term ratio, total leverage ratio, and return on assets. The Hausman test indicates that random effects regression is suitable. Robust standard errors in random-effects regression analysis indicate that short-term leverage significantly and adversely impacts return on assets, whereas total leverage has an insignificant and negative influence on return on assets. The regression analysis indicates that the non-performing loans ratio significantly and positively moderates the relationship between short-term leverage and return on assets, whereas it significantly and negatively moderates the relationship between total leverage and return on assets of the sampled companies. The report advises that managers within the examined exchange sub-sector should consider the implications of elevated non-performing loans while making long-term and short-term financing decisions.

Bob-maneul (2023) examined the influence of non-performing loans (NPLs) on the performance of deposit money banks (DMBs) in Nigeria, emphasising the significance of capital adequacy, net interest income, and loan-to-deposit ratio in assessing return on equity (ROE). The study used panel data analysis, featuring a sample of five Nigerian Deposit Money

Banks from 2018 to 2022, to investigate the correlations among these variables. The study includes empirical analyses of current literature to offer a thorough grasp of the elements influencing bank performance. The results indicate that capital adequacy exerts a substantial positive influence on ROE, implying that well-capitalized banks demonstrate more efficiency in income generation, resulting in enhanced profitability. Net interest income demonstrates a substantial positive correlation with ROE, suggesting that banks with elevated net interest income are more adept at risk management and sustaining profitability. In contrast, the loan-to-deposit ratio does not significantly affect ROE in the Nigerian setting. This result may be ascribed to various variables, including the elevated rate of non-performing loans in the Nigerian banking system, which could undermine the beneficial effects of lending activities on profitability. In conclusion, mitigating elevated NPL levels and augmenting capital adequacy and net interest income can strengthen the performance of Nigerian DMBs. This study's findings provide essential insights for policymakers, regulators, and financial institutions in Nigeria, highlighting the necessity for careful risk management and rigorous capital requirements to maintain the stability and expansion of the banking system.

Taibu et al. (2024) examined the moderating influence of leverage on the association between liquidity and profitability in Nigerian Deposit Money Banks. The research gathered secondary data from the annual reports and financial statements of the selected DMBs throughout a decade, from 2010 to 2019. The research utilised the current ratio, quick ratio, and degree of financial leverage as independent factors, with the return on assets of listed Nigerian Deposit Money Banks as the dependent variable. The collected data is analysed by descriptive statistics, correlation, and multiple regression, utilising Stata software version 17. The data reveal that liquidity, as measured by the current ratio, has a negative and significant effect on return on assets. The results of profitability, as assessed by the quick ratio and Degree of Financial Leverage, were both good and significant in relation to return on assets. The results indicate that the examined variables considerably enhance the return on assets of listed Nigerian Deposit Money Banks (DMBs). The report proposes that DMBs maintain equilibrium between liquid assets and liabilities to optimise liquidity. DMBs should modify leverage ratios to optimise earnings while ensuring financial stability through independent management of financial leverage and liquidity.

Aza et al. (2024) analysed the effects of specific banking parameters, macroeconomic variables, and mergers and acquisitions on the dividend payout ratios of five designated deposit money banks (DMBs). Secondary data obtained from the annual reports of the selected banks spanning the years 1987 to 2022 were employed. Correlation analysis, panel least squares regression, and diagnostic assessments such as the Hausman test were utilised for data analysis. The results indicated that profitability, liquidity, and bank size were favourably correlated with the dividend payout ratio, however leverage had a negative impact on it. Furthermore, gross domestic product and exchange rate exerted a positive and significant influence on the dividend payout ratio. Conversely, inflation and interest rates have a substantial yet detrimental impact on the dividend payout ratio. Moreover, research on post-mergers and acquisitions indicated that banks' capitalisation, current ratio, and market shares had a positive and significant impact on the dividend payout ratio, while the debt ratio displayed a negative influence. The report recommended strategic actions for Nigerian banks, highlighting the need to improve profitability, sustain liquidity, and manage leverage effectively to strengthen their dividend distribution policies.

Tasie et al. (2024) examined the influence of liquidity management on the performance of banks in Nigeria. Three banks were randomly chosen to represent the whole banking sector in Nigeria. The indicators for liquidity management comprise loans and advances, bank balances maintained with the CBN, and treasury bills and certificates, whilst earnings after tax served as the indicator for performance. The Statistical Package for Social Sciences (SPSS) was employed to examine the relationship between the variables under investigation, while regression analysis was utilised to evaluate the hypothesis. The study's findings indicated that liquidity management is a significant issue within the Nigerian banking sector. The report advises that banks employ competent and qualified individuals to ensure the adoption of appropriate judgements, particularly about optimal liquidity levels, while maximising profit. No firm can operate without a requisite level of liquidity, which varies according to the nature and scale of its operations. Liquidity within the financial sector sustains the vitality of an economy. This highlights the necessity for proficient liquidity management to attain optimal economic and corporate goals. The more adeptly a bank manages its liquidity, the more likely it is to remain operational and attract investment in its shares. Liquidity can be compared to the blood that circulates within the bodies of animals. Optimal blood circulation sustains the organism's vitality, and conversely. Similarly, efficient liquidity flow sustains the bank's viability.

Saif-Alyousfi (2025) analysed the influence of the COVID-19 epidemic on non-performing loans (NPLs) in Nigerian banks, concentrating on the timeframe from 2010 to 2023. The study assessed the impact of bank-specific attributes, including capitalisation, liquidity, profitability, and cost efficiency, on non-performing loans during economic recessions. The research employs panel data analysis with pooled ordinary least squares. It employs two-stage least squares (2SLS) and generalised method of moments (GMM) to mitigate endogeneity, alongside subsample analyses for pre-COVID-19, during/post-COVID-19, and smaller versus larger banks. The research indicates that the COVID-19 pandemic

substantially elevated non-performing loans (NPLs) in Nigerian banks, with smaller institutions facing a more severe effect than their larger counterparts. Bank-specific attributes, including capitalisation, profitability, and liquidity, significantly contributed to the reduction of non-performing loan (NPL) levels, with elevated capitalisation acting as a safeguard against losses. The research revealed substantial interaction effects, suggesting that the correlation between these financial health indicators and non-performing loans was altered during the epidemic. Robustness tests validated that the negative impacts on non-performing loans were uniform across several COVID-19 metrics and varying bank sizes, highlighting the necessity for proactive policy actions to bolster financial stability within the banking system.

Research Gap

While prior studies such as Salihu et al. (2023), Taibu et al. (2024), and Aza et al. (2024) have examined the relationships between leverage, liquidity, profitability, and non-performing loans (NPLs) in Nigerian banks, significant gaps remain that this study addresses. First, existing research predominantly focuses on profitability metrics like return on assets (ROA) rather than dividend payout policies, despite dividends being a critical indicator of financial health and shareholder value. Second, while some studies (e.g., Salihu et al., 2023) explore NPLs as moderators, they limit their analysis to leverage-ROA linkages, neglecting how NPLs influence the leverage-dividend relationship a key concern for regulators and investors, especially in light of recent policies like Bangladesh Bank's 2025 dividend ban for high-NPL banks. Additionally, prior works often treat leverage as a monolithic construct without distinguishing between short-term (e.g., customer deposits) and total leverage, despite their differing implications for liquidity risk and dividend sustainability. Lastly, while studies like Tasie et al. (2024) emphasize liquidity management, they overlook the regulatory dimensions of NPLs and leverage, leaving a gap in actionable strategies for banks facing potential dividend restrictions.

3.1 METHODOLOGY

The ex-post facto research design was adopted for this study. The population of this study consists of the Thirteen (13) Deposit Money Banks in Nigeria listed on the Nigerian Exchange Group as of 30th April 2025. This study covers the period of ten years between the year (2015-2024). Since all the thirteen banks listed have the available data for the period under study, therefore all of them still forms the sample of the study. Afterwards, various ratios are computed using Microsoft Excel and the final ratios are approximated to 2 decimal places in accordance with the rules specified by Cole (2015). The ratios are then transferred into Stata 13 software where quantitative analysis is performed to test the hypotheses of the study.

The model specified for this study was adapted. This study adapted the model used by Salihu et al., (2023) with little modification.

The model used by Salihu et al., (2023):

$$ROA_{it} = \alpha + \beta_1 STL_{it} + \beta_2 TL_{it} + \beta_3 NPL * STL_{it} + \beta_4 NPL * TL_{it} + \epsilon_{it}$$

Model for this current study is specified as follows:

$$DIV_{it} = f(STL_{it1}, TL_{it2}, NPL_{it3}, \dots) \dots (I)$$

$$DIV_{it} = \beta_0 + \beta_1 STL_{it} + \beta_2 TL_{it} + \beta_3 STL * NPL_{it} + \beta_4 TL * NPL_{it} + \mu_{it} \dots (II)$$

Where:

DIV = Dividend Payment

STL = Short-Term Leverage

TL = Total Leverage

NPL = Non-Performing Loans

β_0 = Constant or Intercept;

$\beta_1 - \beta_2$ = Coefficient of the explanatory Variables;

β_3 = Moderating Variable

μ_{it} = error term of firm i for time period t;

it = firm i for time period t.

A priori expectations are $\beta_1, \beta_2, \dots, \beta_4$.

Theoretically, there are expectations of STL, TL, NPL, having no positive effect on DIV respectively.

Table 1: Variable Measurement

Variables	Type	Measurement	Source
Dividend Payment	Dependent	Measured as the ratio of dividend paid to the banks' profit after tax	Ademola et al., (2024)
Short-term leverage (STL)	Independent	Measured as total non-current liabilities divided by total assets	Salihu et al., (2022); (Efendi et al, 2019). (Salim, & Yadav 2012)
Total leverage (TL)	Independent	Measured as total liabilities divided by total equity	Salihu et al., (2022); (Efendi et al, 2019).
Non-performing loans ratio (NPL)	Moderator	Measured as total loans that are in default or overdue for more than 90 days divided by total customer loans granted	Salihu et al., (2022); (Kingu et al, 2018).

Source: Researcher's compilation (2025)

Multiple regression analysis test was used to examine the moderating effect of non-performing loans on the relationship between short-term leverage and total leverage on dividend payment of deposit money banks in Nigeria. Multiple regression analysis is considered appropriate because is normally designed to test the descriptive statistics, variable correlation analysis, and diagnostic tests. An ex-post facto design was adopted because the events in this study are past events and the data for the study are already in existence and cannot be manipulated. The source of the data is secondary data, which are in audited annual reports that are publicly available. The choice of panel data is because the variable in the study has cross-sectional and time-series data, and a diagnostic test was carried out to determine the fitness of the data for panel regression. A panel regression model will be used to establish the relationship between the variables.

4.0 RESULTS

4.1 Data Analysis

Table 4.1 presents descriptive statistics, including the total number of observations mean, maximum, minimum, and standard deviation.

Table 4. 1: Descriptive Statistics

Variables	Observations	Mean	Maximum	Minimum	Std. Dev.
DIV	130	.0972308	.49	0.01	.072604
STL	130	.0763846	0.72	.0.01	.1171959
TL	130	.5667692	0.98	0.08	.2318755
STL*NPL	130	.0114969	0.816	0.002	.0141582
TL*NPL	130	.0091838	1.098	0.001	.0155999

Source: The output produced by using the STATA 13 software

The table 1: The descriptive statistics reveal important patterns in Nigerian banks' financial metrics. The average dividend payout ratio (DIV) of 9.72% shows moderate but variable distribution (std. dev. 7.26%), ranging from minimal (1%) to substantial (49%) payouts. Short-term leverage (STL) averages 7.64% with relatively low variability (max 72%, std. dev. 11.72%), while total leverage (TL) shows a conservative mean of 56.68% (max 98%, std. dev. 23.19%), indicating most banks maintain moderate debt levels. The interaction terms (STL×NPL and TL×NPL) have low means (1%) but show some extreme values (max 8.16% and 10.98% respectively), suggesting that while most banks face limited combined pressure from leverage and NPLs, a few experience significantly heightened exposure where NPLs may critically influence the leverage-dividend relationship. These findings highlight the need to examine how NPLs moderate leverage's impact on dividends, particularly for banks with elevated levels of both risk factors.

Table 4. 2: Correlation Matrix

Variables	DIV	STL	TL	STL*NPL	TL*NPL
DIV	1				
STL	-0.0330	1			
TL	0.1022	-0.5257	1		
STL*NPL	0.1952	-0.0312	-0.0942	1	
TL*NPL	-0.0589	0.4631	-0.4975	0.2747	1

Source: The output produced by using the STATA 13 software

Table 4.2 shows the correlation matrix that reveals important relationships between key financial variables in Nigerian banks. Dividend payout (DIV) shows a negligible negative correlation with short-term leverage (STL) (-0.033) but a slightly positive association with total leverage (TL) (0.102), suggesting different leverage types may have distinct impacts on dividend policies. The strong negative correlation between STL and TL (-0.526) indicates these financing sources are likely used as substitutes. Notably, the STL*NPL interaction term shows a modest positive correlation with dividends (0.195), hinting that NPLs might alter how short-term leverage affects payouts. Therefore, it can be determined that multicollinearity among independent variables is not present, because all the linearity values lie below 80% (Gujarati, 2022). These patterns highlight the complex interplay between leverage, asset quality, and dividend decisions in the banking sector.

The study carried out a heteroskedasticity test as one of the assumptions of multiple regression which state that the variance of the errors must be constant. If the errors do not have a constant variance, they are said to be heteroskedastic (Gujarati & Porter 2009). However, the Breusch-Pagan\Cook-Weisberg test was employed to test the presence of heteroskedasticity. Based on the result from table 4.3 which showed the p-value is greater than 5%. Therefore, there is no evidence for the presence of heteroskedasticity.

Table 4.3: Breusch-Pagan / Cook-Weisbergtest for Heteroskedasticity

Test	Chi-square	Prob>chi2
Breusch-Pagan / Cook-Weisberg	5.49	0.7192

Source: The output produced by using the STATA 13 software

Table 4.5. Results of Multiple Regression Analysis

Model Summary			
No. of Observation	130		
F-statistic	3.53		
Prob. > F	0.0092		
R-square	0.2014		
Adj. R-squared	0.1727		
Variables	Coefficient	t-statistic	Sig.
STL	.3184241	2.48	0.014**
TL	.0444012	1.41	0.161
STL*NPL	1.903789	3.50	0.001**
TL*NPL	-2.485007	-2.55	0.012**
(Constant)	.048677	2.12	0.036

Source: Output generated using STATA 13 Software.

The statistically significant regression model ($F=3.53$, $p=0.009$) reveals complex relationships between leverage, NPLs, and dividend payouts in Nigerian banks, though it explains only 20.14% of dividend variation. Counterintuitively, short-term leverage positively affects dividends ($\beta=0.318$, $p=0.014$), suggesting banks use stable deposits to maintain payouts, while total leverage shows no direct impact. Notably, NPLs significantly moderate these relationships: they amplify short-term leverage's positive effect ($STL \times NPL$: $\beta=1.904$, $p=0.001$), possibly signaling financial health, but reverse total leverage's impact ($TL \times NPL$: $\beta=-2.485$, $p=0.012$), forcing highly leveraged banks with poor loans to cut dividends. These findings highlight the need for regulatory scrutiny of banks using short-term funding to sustain dividends amid high NPLs, while suggesting investors and managers should carefully assess how leverage types interact with asset quality. The modest R^2 indicates other unexamined factors significantly influence dividend policies, warranting further research.

Test of Hypothesis

Hypothesis One

The results show a positive relationship between short-term leverage (STL) and dividend payouts ($\beta = 0.318$, $p = 0.014$). This finding may reflect Nigerian banks' unique reliance on customer deposits and other stable short-term liabilities to fund dividend distributions, even when facing financial pressures. The study therefore failed to accept the null hypothesis that stated there is no significant relationship between short-term leverage and dividend payout.

Hypothesis Two

In contrast, the results show total leverage (TL) appears to have no significant direct effect on dividends ($\beta = 0.044$, $p = 0.161$), suggesting that long-term debt obligations may be less immediately consequential for payout decisions than

short-term liabilities. The study therefore accepts the null hypothesis two which states that there is no significant relationship between total leverage on dividend payment.

Hypothesis Three

The results shows that the interaction effects between leverage and NPLs yield particularly noteworthy findings. For short-term leverage, higher NPLs strengthen the positive relationship with dividends (STL×NPL: $\beta = 1.904$, $p = 0.001$), possibly indicating that banks with deteriorating loan quality may use short-term financing to maintain dividend payments as a signal of financial health. The study therefore failed to accept the null hypothesis that stated Non-Performing Loans does not significantly moderate the relationship between short-term leverage and dividend payment of listed Deposit Money Banks (DMBs) in Nigeria.

Hypothesis Four

Conversely, the results show the negative coefficient for the TL×NPL interaction ($\beta = -2.485$, $p = 0.012$) suggests that NPLs fundamentally alter how total leverage affects dividends, with highly leveraged banks becoming more likely to reduce payouts as their loan portfolios deteriorate. This dual pattern highlights the complex, conditional nature of the leverage-dividend relationship in the presence of asset quality concerns. The study therefore failed to accept the null hypothesis which state that non-performing loans does not significantly moderate the relationship between total leverage and dividend payment of listed Deposit Money Banks (DMBs) in Nigeria.

5.1 DISCUSSION

The results of this findings revealed a positive relationship between short-term leverage (STL) and dividend payouts, this result is consistent with the findings of Salihu et al., (2022) who found positive relationship between short-term leverage and profitability. This finding reflects Nigerian banks' unique reliance on customer deposits and other stable short-term liabilities to fund dividend distributions, even when facing financial pressures. In contrast, results of this findings show total leverage (TL) appears to have no significant direct effect on dividends which also agreed with the finding of Salihu et al., (2022), suggesting that long-term debt obligations may be less immediately consequential for payout decisions than short-term liabilities. The results shows that the interaction effects between leverage and NPLs yield particularly noteworthy findings. For short-term leverage, higher NPLs strengthen the positive relationship with dividends possibly indicating that banks with deteriorating loan quality may use short-term financing to maintain dividend payments as a signal of financial health. Conversely, the results of this findings show a negative relationship between total leverage and non-performing loans on dividend payout this suggests that NPLs fundamentally alter how total leverage affects dividends, with highly leveraged banks becoming more likely to reduce payouts as their loan portfolios deteriorate. This dual pattern highlights the complex, conditional nature of the leverage-dividend relationship in the presence of asset quality concerns.

These results have important practical implications. For regulators, the findings suggest that banks with high NPLs might be using short-term funding to sustain potentially unsustainable dividend payments, warranting closer scrutiny. Investors should be attentive to how different types of leverage interact with asset quality when assessing dividend sustainability. Bank managers may need to carefully balance their financing strategies, recognizing that while short-term liabilities might support immediate payouts, the combination of high leverage and poor loan quality could ultimately force dividend cuts. The study's limitations, particularly the modest explanatory power of the model, point to the need for future research incorporating additional variables that influence dividend decisions in emerging market banks.

6.1 CONCLUSION AND RECOMMENDATIONS

This study's results provide significant insights into the intricate relationship among leverage, non-performing loans, and dividend payout in Nigerian deposit money banks. The research indicates that short-term leverage exerts a positive and statistically significant effect on dividend payout, contrary to common expectations. Nigerian banks may be employing stable deposit liabilities as a tactic to continue disbursing dividends to shareholders, despite economic challenges. The correlation between short-term leverage and non-performing loans (NPLs) indicates that banks with poor asset quality may be utilising short-term capital to sustain dividend payments, maybe to maintain market confidence.

The study recommends that banks adopt more prudent dividend policies that consider both the quality of their assets and their debt levels. Management could consider reducing or suspending dividend payments to safeguard capital when non-performing loans (NPLs) exceed certain thresholds. The findings indicate that banks must exercise greater caution in maintaining dividends through short-term funding as the quality of their assets deteriorates. Financial institutions, including banks, should develop comprehensive stress-testing frameworks to assess the resilience of dividends under various scenarios characterised by elevated levels of non-performing loans (NPLs) and debt. These models must encompass both short-term liabilities and overall leverage measurements to provide a comprehensive assessment of financial health. Banks with elevated non-performing loans should prioritise debt recovery and adequate provisioning over distributing dividends to shareholders. This will enhance their balance sheets and increase their long-term resilience.

The Central Bank of Nigeria should consider complicating its dividend policy to reflect the interrelationship between leverage structures and asset quality. A tiered regulatory framework might be established wherein banks with elevated non-performing loan ratios and significant leverage are subjected to more stringent dividend regulations. Regulatory frameworks must be enhanced to elucidate the way banks utilise non-performing loans (NPLs) and leverage in determining dividend payouts. The CBN may establish early warning indicators that automatically initiate supervisory reviews when banks exhibit elevated levels of non-performing loans and leverage concurrently. These measures would maintain financial system stability while allowing banks with robust asset quality and substantial capital to continue distributing dividends.

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