Indian Journal of Finance and Economics
Vol. 6, No. 1, 2025, pp. 43-60
https://DOI:10.47509/IJFE.2025.v06i01.03

ARF INDIA
Academic Open Access Publishing
www.arfjournals.com

EFFECTS OF DEBT FINANCE ON FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

Jeremiah Ogorry Ugbu[1], Seini Odudu Abu[2] and Emmanuel Apedzan Kighir[3]

[1]*Department of Accounting Education, School of Secondary Education (Business), Federal College of Education (Technical), Bichi Kano State, Nigeria. E-mail: Ogbumaxy2020@yahoo.com*
[2]*Department of Accounting, Faculty of Management Sciences, Federal University Dutsinma, Katsina State, Nigeria. E-mail: seiniabu@yahoo.com*
[3]*Department of Accounting, Faculty of Management Sciences, Federal University Dutsinma, Katsina State, Nigeria. E-mail: Apedzankighir2007@yahoo.com*

Received: 16 March 2025; Revised: 20 April 2025; Accepted 29 April 2025; Publication: 29 June 2025

Abstract: This study was inspired by Nigerian Deposit Money institutions' persistent poor performance, which in turn affects the return on investment available to capital providers. It concentrated on debt financing and return on investment for businesses that transfer money from economic sectors with surpluses to those with deficits. The study looks at how the return on assets of Nigerian listed deposit money banks is affected by both total debt to total assets and long-term debt to total assets. The audited financial accounts of eleven (11) of the fourteen (14) DMBs that make up the study population over a ten-year period (2014–2023) provided secondary data for the study. The Trade-Off Theory serves as the foundation for the study, which used a correlational research approach. The panel data utilized in the study was analyzed using STATA 14 and several regression models were applied. The 110 observations' results from the Random Effect Regression model were examined. The results showed that whereas long-term debt to total assets (LTDTA) has a considerable and positive impact on ROA, total debt to total assets (TDTA) has a negative but significant impact. The study's findings showed that debt financing

To cite this paper:
Jeremiah Ogorry Ugbu, Seini Odudu Abu & Emmanuel Apedzan Kighir (2025). Effects of Debt Finance on Financial Performance of Listed Deposit Money Banks in Nigeria *Indian Journal of Finance and Economics*. 6(1), 43-60.

has a 26% impact on the ROA of listed DMBs in Nigeria, with long-term debt accounting for the remaining 74% of the influence. The study recommends that DMBs should use debt more sparingly in order to prevent debt traps that could jeopardize their ability to continue operating in the event of default.

Keywords: Debt finance, long-term debt, returns on assets, total debt to total assets, trade-off theory

1. INTRODUCTION

Financial performance is a crucial measure of a firm's success, indicating its ability to generate profit and sustain operations efficiently. In the banking sector, financial performance is often assessed using metrics such as return on assets (ROA), return on equity (ROE), and net interest margin (NIM) (Abiola & Olausi, 2014). However, a bank's financial performance is influenced by several factors, including capital structure, asset quality, operational efficiency, and macroeconomic conditions (Olowokure, *et al.*, 2015). Among these factors, total debt to total assets and long-term debt plays a significant role in shaping financial performance.

Financial performance is a snapshot of the economic health of the company and the work that its management is doing; it gives insight into whether the company's operations and earnings will expand in the future as well as the outlook for its stock. It also assist in the understanding of the overall financial position of the companies or banks and forecasting their future performance, financial performance appraisals offer useful information for management decisions regarding the effectiveness of banks' operations and the efficient use of equity (Abu, *et al.*, 2023)

Banks, as financial intermediaries, rely on both equity and debt to fund their operations. Debt financing, particularly long-term debt, enables banks to expand their asset base and enhance lending capacity. However, excessive reliance on debt can lead to financial distress, increased interest expenses, and reduced profitability (Modigliani & Miller, 1958). In the Nigerian banking sector, the composition of debt especially long-term liabilities has become a subject of concern due to its implications on financial performance (Uwuigbe, *et al.*, 2014).

Total debt to total assets is a ratio that reflects a poor bank's financial performance. A high ratio suggests heavy reliance on debt financing, which can

amplify returns during favorable economic conditions but may also increase vulnerability during financial downturns (Akani & Lucky, 2014). Long-term debt, on the other hand, allows banks to finance capital-intensive investments and expansion strategies, but its cost in terms of interest payments can impact profitability if not properly managed (Nzotta, 2014).

The excessive reliance on total debt has been a significant factor in the decrease in financial performance of Nigerian banks. High debt levels increase interest expenses, which reduce profitability and increase the risk of non-performing loans (NPLs) (IMF, 2023). Many banks have collapsed due to their inability to manage debt effectively. For example, Intercontinental Bank faced severe financial distress due to excessive leverage, leading to its acquisition by Access Bank in 2011. Similarly, Union Bank of Nigeria had to undergo recapitalization due to its high debt burden following the 2005 banking consolidation exercise (CBN, 2023). Despite these concerns, some studies suggest that a moderate level of debt can enhance bank efficiency and return on assets (Aniefor & Onatuyeh, 2019; Wilbert *et al*., 2023).

Following the 2009 banking sector reforms, which emphasized recapitalization and performance-based supervision; many banks have adjusted their capital structures to enhance financial performance (Sanusi, 2010). Despite these measures, concerns persist regarding the impact of debt financing on bank performance.

Despite the significance of debt financing in banking operations, there is no consensus on the optimal level of debt that maximizes financial performance. Some studies argue that higher total debt to total assets enhances financial performance by providing tax benefits and increasing returns on equity (Akani & Onyema, 2022). Others suggest that excessive debt, particularly long-term liabilities, leads to financial distress and declining financial performance (Egbunike & Okereke, 2020). The banking sector in Nigeria has witnessed several challenges in recent years, including liquidity crises, high non-performing loans, and macroeconomic volatility, raising concerns about the impact of debt financing on bank performance.

Previous research on capital structure and bank performance in Nigeria has focused primarily on broad leverage ratios without adequately distinguishing between **total debt and long-term debt** (Uwuigbe *et al*., 2019). Given the changing regulatory landscape, economic fluctuations, and rising interest rates

in Nigeria, there is a need for an updated empirical analysis of how TD/TA and LTD affect the financial performance of **listed** Deposit Money Banks. This study aims to fill this gap by providing a comprehensive assessment of the impact of these total debts to total assets and long term debt measures on financial performance proxy **return on assets (ROA).**

From the studies on the relationship between total debt to total assets and financial performance which have been out in the past, some by Bunyaminu, *et al*. (2021) found that total debt to total assets had a negative impact on financial performance, Oranefo and Egbunike (2023) assessed the relationship between total debt to total assets and financial performance in Nigeria, the results of the studies found both negative and no association between financial performance and total debt to total assets. Stephen and Gang (2019) examined the influence of long-term debt on financial performance and found no significant impact. Therefore, there is conflicting evidence about the optimizing capital structure for enhanced financial performance in Nigerian deposit money banks. Thus, the main problem of this study is to examine effects of total debt to total assets and long term debt on financial performance of listed deposit money banks in Nigeria with the goal of providing a comprehensive assessment for the banking sector.

The study provides answer to the following questions; (i) how does the total debt to total assets affect ROA of Nigerian deposit money banks? (ii) How does long-term debt affect the ROA of the Nigerian deposit money banks? (iii) How does debt financing influences ROA. The objective of the study is to determine the effects of total debt to total assets, long term debt and extent to which debt financing influences on ROA of listed deposit money banks in Nigeria from 2014 to 2023. Hence, the following hypothesis was formulated in line with objectives of the study;

$H0_1$: Total debt to total assets has no significant effect on the ROA of listed deposit money banks in Nigeria.

$H0_2$: Long-term debt does not have significant effect on the ROA of listed deposit money banks in Nigeria.

2. LITERATURE REVIEW

The study reviews the existing literature on the effects of total debt to total assets and long term debt on financial performance of listed deposit money banks in

Nigeria. It aims to provide a comprehensive assessment for the banking sector, relevant theories, and empirical review.

Concept of Financial Performance

Financial performance is a critical measure of how well an organization can use its assets to generate revenues and manage its financial obligations. It reflects the overall health of the business and provides insights into its operational efficiency, profitability, and growth prospects. In the context of the study on the relationship between capital structure and financial performance of listed deposit money banks in Nigeria, understanding financial performance is pivotal.

According to Mohammed, *et al.* (2023), financial performance helps stakeholders understand the economic viability of an organization, guiding investment and management decisions. The study adopted ROA that provides insight into how efficiently banks are using its assets to improve financial performance. The choice of ROA is helps managers, stakeholders, investors, analysts, and regulators, assess the bank's financial performance relative to its asset base.

Concept of Total Debt to Total Assets

Total debt to total assets is a proxy used to assess the capital structure of a Deposit Money Bank (DMB). It measures the proportion of a bank's total assets that are financed by debt. The total debt to total assets is calculated by dividing the total debt of the bank by its total assets. A firm with a low total debt to total assets ratio is considered financially stable, as it relies less on external borrowing. Conversely, a high ratio may indicate potential liquidity challenges and higher interest obligations, which can negatively impact financial performance (Brealey, *et al.*, 2019).

Concept of Long Term Debt

Long-term debt refers to financial obligations that extend beyond one year and are typically used by businesses and financial institutions to finance capital-intensive projects, acquisitions, or expansion activities. It includes instruments such as bonds, debentures, bank loans, and lease obligations that require periodic interest payments and eventual principal repayment over an extended period (Brealey, *et al.*, 2020).

In the banking sector, long-term debt plays a crucial role in shaping a bank's capital structure, influencing financial performance, risk exposure, and investment capacity. According to Ross, Westerfield, and Jaffe (2019), long-term debt allows firms, including banks, to leverage external funding for growth while maintaining operational liquidity. However, excessive reliance on long-term debt can lead to increased financial risk, higher interest expenses, and potential insolvency issues if not managed effectively.

Long-term debt is often preferred for funding strategic investments, such as infrastructure development, technology upgrades, and loan portfolio expansion in banks (Damodaran, 2016). Its cost and accessibility depend on several factors, including interest rates, credit ratings, regulatory policies, and macroeconomic conditions. High levels of long-term debt can enhance financial performance if the returns on investment exceed the cost of debt, but they can also pose financial distress if mismanaged (Modigliani & Miller, 1958).

Theoretical Review

The theoretical review provides various perspectives on how total debt to total assets and long-term debt affect financial performance. While the **trade-off Theory** suggests an optimal balance between debt and equity, the **pecking order theory** emphasizes a preference for internal financing. The **agency theory** highlights the role of debt in reducing managerial inefficiencies, while the **M&M theory** suggests that capital structure decisions are influenced by market imperfections. These theories provide a solid foundation for analyzing the impact of debt on the financial performance of listed Deposit Money Banks in Nigeria. The study examines the effects of **total debt to total assets** and **long-term debt** on the financial performance of **listed deposit money banks (DMBs) in Nigeria**. To provide a strong theoretical foundation, the **trade-off theory** and the **pecking order theory** have been adopted. These theories effectively explain the relationship between debt financing and financial performance in the banking sector.

Review of Empirical Studies

This section reviews empirical studies on the effects of **total debt and long-term debt** on the financial performance of **listed Deposit Money Banks**

(DMBs) in Nigeria, identifying findings, methodological approaches, and research gaps.

Total Debt to Total Assets and Financial Performance

Several empirical studies have investigated the impact of total debt to total assets on financial performance across different industries and regions, yielding mixed findings. Abuamsha and Shumali (2021) analyzed Palestinian banks from 2010 to 2019 using panel data regression under the Trade-Off Theory, finding a negative relationship between total debt and ROA due to financial distress and interest expenses. Similarly, Patrick and Atieno (2023) examined 15 Tanzanian commercial banks between 2012 and 2022 using a fixed-effects regression model and found that high debt ratios significantly reduced profitability. In contrast, Adeyemi and Fagbemi (2010) studied 21 Nigerian deposit money banks from 2000 to 2009 using multiple regression analysis under the Pecking Order Theory and reported a positive relationship between total debt and financial performance, suggesting that moderate leverage enhances profitability. Yakubu and Bashiru (2021), in their analysis of 18 listed banks in Ghana from 2011 to 2020 using OLS regression under the Signaling Theory, found that moderate leverage improved profitability, though excessive debt increased financial instability. Similarly, Wilbert *et al*. (2023) examined 20 South African banks from 2013 to 2021 using the Generalized Method of Moments (GMM) within the Market Timing Theory framework and found that moderate debt improved ROA, but excessive leverage reduced profitability due to heightened risk exposure. Bawa (2022) investigated 50 Indian banks from 2010 to 2020 using dynamic panel regression based on the Agency Cost Theory and found a negative but insignificant effect of total debt on financial performance. Beyond the banking sector, Estiasih *et al*. (2024) analyzed 12 food and beverage manufacturing companies in Indonesia from 2017 to 2019 using an explanatory research design and PLS regression, finding a significant effect of total debt to total assets on financial performance, but noted that the short study period limited long-term insights. Sifullah *et al*. (2024) studied 150 pharmaceutical companies in Bangladesh from 2013 to 2022 using a panel regression model under the Pecking Order Theory, incorporating 13 financial variables, and found that total debt to total assets significantly influenced financial performance, particularly EPS, due to the

industry's high R&D costs. Similarly, Arhinful and Radmehr (2023) examined 263 non-financial companies listed on the Tokyo Stock Exchange from 2001 to 2021 using GMM to analyze six debt-related variables, concluding that higher debt levels positively influenced firm profitability. However, Akuku *et al*. (2023) studied 61 deposit-taking SACCOs in Kenya from 2016 to 2020 using cross-sectional research design and panel regression under the Pecking Order Theory, finding that higher debt levels reduced profitability due to financial burdens. These studies collectively suggest that the relationship between total debt to total assets and financial performance is influenced by industry-specific factors, economic conditions, and regulatory frameworks. While some research supports moderate debt as a driver of profitability, others provide the risks of excessive influence, reinforcing the need for firms to maintain a balanced capital structure. Future research should extend study periods and cover broader industry sectors to gain a more comprehensive understanding of the long-term impact of debt financing on financial performance.

Long Term Debt and Financial Performance

A number of studies have examined the impact of long-term debt on financial performance across different industries and regions. Aniefor and Onatuyeh (2019) analyzed Nigerian banks, using a sample of 12 deposit money banks from 2008 to 2018, employing the trade-off theory and a panel data regression model. They found that long-term debt negatively affects financial performance, as excessive debt increases financial costs and reduces profitability. Abuamsha and Shumali (2021) investigated Palestinian banks from 2010 to 2019, applying the agency cost theory and fixed-effect regression, and revealed that long-term debt financing leads to lower returns due to increased financial risks and agency conflicts. Wilbert *et al*. (2023) studied 15 South African commercial banks between 2012 and 2021, adopting the pecking order theory and a dynamic panel regression model, concluding that long-term debt negatively impacts return on equity and net interest margin, reinforcing the need for an optimal capital structure. Patrick and Atieno (2023) assessed Tanzanian commercial banks from 2011 to 2020 using an explanatory research design and the trade-off theory, finding a negative but insignificant effect of long-term debt on financial performance, indicating that moderate debt levels may not severely harm profitability. Stephen and Gang (2019) examined 50

listed Asian financial institutions from 2005 to 2018, applying the market timing theory and a panel econometric model, reporting that higher long-term debt levels result in lower financial performance due to increased interest obligations. Lidovolo and Atieno (2023) evaluated commercial airlines in Kenya from 2018 to 2022, using the pecking order theory and a cross-sectional research design, and found that long-term debt financing had a negative and statistically significant effect on profitability, measured by net profit margin. Ilugbusi *et al.* (2021) analyzed five Nigerian oil and gas companies from 2011 to 2020 using an ex post facto research design and reported a negative significant influence of long-term debt on return on assets. Conversely, Shikumo *et al.* (2020) examined 45 non-financial enterprises in Kenya from 2008 to 2017 using an explanatory research design and found that long-term debt positively affected financial growth, contributing to variations in earnings per share and market capitalization. Generally, the majority of empirical studies show that long-term debt has negative impacts on financial performance due to increased financial costs and risks, though some suggest that a well-managed long-term debt strategy can foster growth. Firms are recommended to enhance their debt levels, balancing financial performance while minimizing excessive debt exposure.

3. METHODOLOGY

The study adopted correlation research designs. The study aims to examine effects of total debt to total assets and long term debt on financial performance of listed deposit money banks in Nigeria using secondary data. The population of the study is the fourteen (14) listed deposit money banks on the Nigerian Exchange Group as at 31st December, 2024 namely: Unity Bank incorporated 1987, Access Bank listed 2022, Fidelity Bank listed 2005, First Bank listed 2012, First City Monument Bank (FCMB) listed 2013, Guaranty Trust Bank listed 2021, Stanbic IBTC Bank listed 2012, Union Bank listed 1979, United Bank for Africa (UBA) listed 1970, Wema Bank incorporated 1945, Zenith Bank listed 2004. Jaiz Bank incorporated 2003, Eco Bank listed 2006, and Sterling Bank listed 2023. Jaiz Bank incorporated 2003, Eco Bank listed 2006, and Sterling Bank listed 2023 do not have complete data for the period under study and was eliminated. The remaining 11(eleven) deposit money banks thus constituted the sample of the study. The data were collected from secondary

sources as contained in the published annual reports of the deposit money banks on the Nigerian Exchange Group.

Model Specification and Justification of the Method Adopt

This study aims to examine effects of total debt to total assets and long term debt on financial performance of listed deposit money banks in Nigeria. To achieve this, the study employed a multiple regression model, where financial performance indicators serve as the dependent variable and capital structure components act as the independent variables. The model adopt is specified as follows:

$$ROA_i = \beta_0 + \beta_1 TDTA_i + \beta_2 LTD_i + \beta_3 FMS_i + \beta_4 FMA_i + \varepsilon_i$$

The dependent variable is a function of a constant, explanatory variable, control variable and error term of the sampled DMBs

Where:

ROA_i represents the financial performance indicator for DMBs i (return on assets).

TDTA, LTD, represent the debt financing proxies for DMBsi (total debt to total assets and long-term debt respectively).

β_0 = constant.

β1 to β4 are the coefficients of the regression for explanatory variables of DMBsi, while ε_i is the error term of DMBsi capturing other explanatory variables not clearly included in the model.

4. RESULTS AND DISCUSSION

This sub-section considered data presentation, analysis, interpretation and discussion of the result of the study. The results from the descriptive statistics, the panel multiple correlations and the regression are presented and discussed of data on total debt to total assets and long-term debt on financial Performance of listed Deposit Money Banks in Nigeria for the period of 2014-2023, data were collected from audited financial report of the Banks under study year 2024. This part of the research work is necessary in order to test the validity of the hypotheses stated in the study.

Descriptive Statistics

The descriptive statistics in this study provide a foundational overview of the dataset, summarizing variables used in analyzing data to determine the effects

of total debt to total assets and long-term debt on financial Performance of listed Deposit Money Banks in Nigeria. This analysis includes measurements of central tendency and variability, such as the mean, standard deviation, minimum, and maximum values for each variable.

Table 2, indicate descriptive statistics of the variables of the study; mean, standard deviation, minimum and maximum have been used to describe the data.

Table 1: Descriptive Statistics

Variable	*Obs*	*Mean*	*Std. Dev.*	*Min*	*Max*
ROA	110	.3643591	1.210175	.003	0.2691
TDTA	110	.3552664	.2991044	.0012	.902
LTD	110	.21064	.2112434	.0008	.6878
FMS	110	7820669	13548	48774	94489
FMA	110	30.54545	14.23501	12 54	

Source: Author Computation using STATA14 Output 2024.

The data set indicated above contains 110 observations for 11 banks listed on the Nigeria Exchange Group over the research period. The descriptive statistics provide an overview of the variables used in the study. Return on assets has a mean of 0.3644 with a standard deviation of 1.2102, showing inconsistency in financial performance among the observations. The minimum and maximum values range from 0.003 to 0.2691, showing a relatively low spread. Total debt to total assets has a mean of 0.3553 and a standard deviation of 0.2991, with values ranging from 0.0012 to 0.902, signifying some firms rely heavily on debt while others do not. Long-term debt has an average of 0.2106 with a standard deviation of 0.2112, representing moderate distribution, and its values range from 0.0008 to 0.6878. Firm size, measured in financial terms, has a mean of 7,820,669 with a standard deviation of 13,548, and its range spans from 48,774 to 94,489, demonstrating considerable variation in firm sizes. Finally, firm age has an average of 30.55 years, a standard deviation of 14.24, and values ranging from 12 to 54 years, showing that the firms in the sample have varying levels of experience in the banking sector. These statistics provide the diversity in debt financing, size, and experience of the firms analyzed in the study.

Correlation Analysis

The correlation matrix on table 3 shows the nature of the relationship between the dependent and independent variables (TDTA, LTD, FMS, FMA and ROA) of the study as well as the relationship among the independent variables.

The Person's correlation analysis was performed to measure the direction and strength between different variables. The results are shown in table 3.

Table 2: Correlation Matrix of the Sample Observations, star (0.05) sig

	ROA	*TDTA*	*LTD*	*FMS*	*FMA*
ROA	1.0000				
TDTA	0.2141	1.0000			
LTD	0.1917	0.6511	1.0000		
FMS	-0.3035	-0.1643	0.3582	1.0000	
FMA	0.3228	0.3610	0.0096	-0.1424	1.0000

Source: Correlation Matrix Results Using STATA

The correlation analysis presented in Table 3 provides insights in the relationships between various effects of total debt to total assets and long term debt on financial performance of listed deposit money banks in Nigeria. The variables analysed include TDTA and LTD as well as control variables such as FMS and FMA. These correlations help to understand how total debt to total asset and long term debt associate with financial performance of listed deposit money banks.

From table 3 ROA has a strong and positive correlation with FMA (r=0.3228, P<0.1), which means with the increase of ROA the FMA will also increase. The ROA also has a negative and strong relationship with FMS (r= -0.3035, p<0.1), which indicates that where ROA decrease the FMS will also decrease. The ROA also has a positive and strong relationship with TDTA (r= 0.2141, p<0.1), LTD has a positive and strong relationship with ROA (r= 0.1917), which indicate that ROA increase will result in increase in the LTD and so on.

Table 3: Heteroskedasticity Test and Hausman Fixed Random Effect

Test	*Statistic*	*P. value*
Hettest: Chi2 (1)	230.26	0.0000
Obs* R-square	0.3437	0.0000
Hausman: Chi2 (0)	Prob > chi2	0.050
Random Effect: Chi2	0.05	0.0000

Source: Result output from STATA

The Hausman test is used to determine whether the fixed-effects (FE) or random-effects (RE) model is more appropriate for the given data. The test essentially assesses if the unique errors (u_i) are correlated with the regression in the model. A significant result indicates that the RE estimates are biased and that the FE model should be preferred.

The test Statistics shows that the Chi-squared Test Statistic is 230.26 while the **p-value:** Prob > chi2 = 0.0000. Since the p-value (0.0000) is significantly less than the conventional alpha level of 0.05, we reject the null hypothesis. This shows that the differences in coefficients between the fixed and random-effects models are systematic.

As a result, we conclude that the random-effects model is not appropriate for this dataset because it produces biased estimates due to the correlation between the regression and the unique errors (u_i).

The Hausman test suggests that the Random-effects model should be preferred over the Fixed-effects model for analyzing the relationship between ROA and the independent variables (TDTA, LTD, FMS and FMA). This emphasizes the importance of accounting for unobserved heterogeneity that could influence the financial performance measures across different banks

Table 4: Regression Results

ROA	*Coef.*	*Std. Err.*	*z*	*P>|z|*	*[95% Conf.*	*Interval]*
TDTA	-4.259888	.614508	-6.93	0.000	-5.464302	-3.055475
LTD	6.849145	.6771247	10.12	0.000	5.522005	8.176285
FMS	-.5302279	.1840091	-2.88	0.004	-.8908792	-.1695766
FMA	.0515971	.0205487	2.51	0.012	.0113224	.0918717
_CONS	3.005731	1.640885	1.83 0.067	-.2103448	6.221807	
R2 Within = 0.5349 Between = 0.0846 Overall = 0.2572		min = 10 avg = 10.0				

Sources: Generated by Researcher (Stata output) 2024.

The results from the random effect regression provide insights into the relationship between Return on Assets (ROA) and the independent variables (TDTA, LTD, FMS, and FMA). The Wald chi-squared test indicates that the complete model is significant; suggesting that at least one of the independent variables is significantly related with ROA.

Total debt to total assets coefficient of **-4.26** indicate that an increase in Total debt to total assets is related with decrease in ROA. The p-value (0.000) shows this effect is significant at the 5% level. The **Long-term Debt (LTD)** coefficient value of **6.85** indicates that a one-unit increase in the **Long-term Debt ratio** is related with an increase in ROA. The p-value (0.000) signifies a significant positive relationship. **FMS (Firm Size)** coefficient value of **-0.53** shows that a negative relationship with ROA, where an increase in firm size is related with a decrease in ROA by about 0.019. The result is significant (p = 0.0) while **FMA (Firm Age)** coefficient **0.05** shows a significant effect at p-value 0.012 when ROA increase slightly by 0.002 per unit increase in firm age.

Test of Hypothesis

$H0_1$: Total debt to total assets coefficient of **-4.26** indicate that decrease in Total debt to total assets is related with an decrease in ROA and the p-value 0.000 shows this effect is significant at the 5% level. **TDTA** has a significant positive effect on ROA.

$H0_2$: The result found that long term debt had a negative effect to financial performance. The **Long-term Debt (LTD)** coefficient value of **6.85** indicates that an increase in the **Long-term Debt** relatedly increase the ROA at p-value 0.000.

Finding

The findings of the study reveal that total debt to total assets has a negative but significant effect on return on assets, showing that an increase in total debt reduces financial performance. On the other hand, long-term debt to total assets has a significant positive effect on return on assets, signifying that a well-structured long-term debt strategy enhances financial performance.

5. CONCLUSION AND RECOMMENDATIONS

The study concludes that debt financing has a significant impact on the financial performance of listed deposit money banks in Nigeria. The findings show that total debt to total assets has a negative but significant effect on return on assets, suggesting that excessive reliance on debt reduces profitability due to increased interest expenses and financial distress. On the other hand, long-term debt to total assets has a significant and positive effect on return

on assets, implying that long-term financing supports business expansion and enhances profitability when properly managed. The study establishes that debt financing accounts for 26% of the variation in financial performance, while the remaining 74% is influenced by other factors. This provides the importance of a best capital structure to balance debt and financial performance.

Recommendations

The study recommends that deposit money banks in Nigeria should exercise caution when utilizing debt financing to avoid the risk of falling into a debt trap capable of affecting their continuity in the case of default. Given the findings that total debt to total assets negatively affects return on assets, banks should strike a balance in their capital structure by enhancing their debt levels to ensure financial stability while still benefiting from leverage. Moreover, since long-term debt was found to have a positive and significant impact on financial performance, banks should prioritize long-term financing over short-term debt, as it provides financial flexibility and reduces liquidity pressures.

References

Abiodun, B. O. (2014). An analysis of capital structures and firms' performance in Nigeria. *International Proceedings of Economics Development and Research Journal, 69(12), 75- 82.*

Abor, J. T. (2005). Impact of capital structures on profitability. *Journal of Risk Finance, 6(5), 438-445.*

Abu, S. O., Alhassan, A. S., & Okpe, J. U. (2020). Board committees and financial performance of listed deposit money banks in Nigeria. *Journal of Management Sciences, 2(2), 33-47.*

Abuamsha, M., & Shumali, S. (2021). Debt structure and its impact on financial performance: An empirical study on the Palestinian stock exchange. *Journal of International Studies, 15(1), 211-229.*

Al-Tamimi, K., & Hassan, A. (2023). Debt structure and financial performance: Evidence from Middle Eastern banks. *International Review of Banking & Finance, 22(4), 90-106.*

Ajibola, A. A., Wisdom, O. O., & Qudus, K. A. (2018). Capital structure and financial performance of listed firms: Empirical evidence from Nigeria. *Journal of Accounting and Taxation, 10(2), 19-28.*

Akaji, O., Nwadialor, E. O., & Agubata, N. (2021). Effect of debt financing on firms' performance in Nigeria. *Journal of Accounting and Financial Management, 7(3), 60-72.*

Akintoye, I. R. (2018). Sensitivity of performance to capital structure. *European Journal of Social Science, 7(1), 163-144.*

Aniefor, S. J., & Onatuyeh, A. E. (2019). Effect of debt financing on the corporate performance: A study of listed consumer goods firms in Nigeria. *International Journal of Academic Accounting, Finance & Management Research (IJAAFMR), 3(5), 26-34.*

Arhinful, R., & Radmehr, M. (2023). The effect of total debt to total assets on financial performance: Evidence from non-financial institutions listed on the Tokyo stock market. *Journal of Capital Markets Studies, 7(1), 53-71.*

Badori, B. M., Manu, Y., & Kachalla, B. (2023). Capital structure and financial performance: A study on commercial banks in Nigeria. *Research Journal of Management Practice, 2782, 7674.*

Bawa, S. M. (2022). Impact of capital structure on financial performance of listed industrial goods companies in Nigeria. *Research Journal of Management Practice, 2(8), 24-49.*

Bello, S., Pembi, S., & Vandi, V. P. (2020). Impact of capital structure on financial performance of listed deposit money banks in Nigeria. *International Journal of Management, Social Sciences, Peace and Conflict Studies, 3(4), 135-147.*

Brealey, R. A., Myers, S. C., & Allen, F. (2020). *Principles of Corporate Finance* (13th ed.). McGraw-Hill Education.

Bunyaminu, A., Yakubu, I. N., & Bashiru, S. (2021). The effect of total debt to total assets on profitability: An empirical analysis of recapitalized banks in Ghana. *International Journal of Accounting & Finance Review, 7(1), 93-102.*

Central Bank of Nigeria. (2024). New minimum capital requirements for banks. Retrieved from www.templars-law.com

Chen, Y., Zhang, W., & Li, J. (2022). The impact of leverage on bank performance: Evidence from Asian markets. *Journal of Asian Banking Research, 30(1), 55-72.*

Damodaran, A. (2016). *Investment valuation: Tools and techniques for determining the value of any asset* (3rd ed.). Wiley.

Etale, L. M. (2020). Dangote Cement PLC, capital structure, and financial performance link in Nigeria: Empirical analysis. *American International Journal of Business Management, 3(8), 1-10.*

García, M., & López, R. (2023). Long-term debt and financial performance in European banks. *European Financial Studies, 32(2), 102-119.*

Godday, O. O., & Peter, S. A. (2021). Capital structure optimality and performance metrics of selected multinationals in Nigeria. *European Journal of Business and Innovation Research, 9(1), 68-80.*

Igbal, U., & Usman, M. (2018). Impact of total debt to total assets on firm performance in Pakistani textile composite companies. *SEISENSE Journal of Management, 1(2), 70-78.*

Kaluarachchi, D. G. P., Fernando, A. A. J., & Mallawarachchi, R. (2021). The relationship between total debt to total assets and performance of Sri Lankan listed manufacturing companies. *Journal of Accounting, Finance and Auditing Studies, 7(4), 99-118.*

Lidovolo, K., & Atieno, R. (2023). Long-term debt financing and profitability of commercial airlines in Kenya. *African Journal of Finance and Economic Studies, 14(1), 67-84.*

Mboi, C. S., Muturi, W., & Wanjare, J. (2018). Effect of short-term debt to total assets ratio on financial performance of medium-sized and large enterprises in Kenya. *Research Journal of Finance and Accounting, 9(18), 40-49.*

Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance, and the theory of investment. *American Economic Review, 48(3), 261-297.*

Myers, S. C. (2001). Capital structure. *Journal of Economic Perspectives, 15(2), 81-102.*

Ogunsola, A., & Ogheneoparobo, A. D. (2022). Capital structure, asset liquidity, and financial performance of listed deposit money banks in Nigeria. *African Journal of Accounting and Financial Research, 5(3), 16-29.*

Patrick, M., & Atieno, R. (2023). The effect of total debt on financial performance of commercial banks in Tanzania. *African Economic Review, 15(1), 72-89.*

Ross, S. A., Westerfield, R. W., & Jaffe, J. (2019). *Corporate Finance* (12th ed.). McGraw-Hill Education.

Saeed, M. W., Gull, A. B., & Rasheed, M. O. (2013). Evaluating the impact of capital structure on banking performance. *Research Journal of Finance and Accounting, 3(9), 1-12.*

Suleiman, D. A. (2021). Effect of total debt to total assets on the financial performance of Jordanian public shareholding companies. *International Journal of Economics and Financial Issues, 11(2), 47-51.*

Wilbert, K., Mokoena, M., & Tlou, T. (2023). The influence of debt financing on bank performance: Evidence from South Africa. *South African Journal of Economic Studies, 9(1), 40-58.*

Yakubu, I., & Bashiru, M. (2021). The impact of leverage on financial performance: Evidence from Ghanaian banks. *Journal of African Financial Research, 10(2), 65-82.*