

## DEBT MATURITY STRUCTURE AND PROFITABILITY TRANSMISSION: EVIDENCE FROM SHORT- AND LONG-TERM LEVERAGE IN LISTED NON-FINANCIAL FIRMS IN NIGERIA

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**ABSTRACT:** This study investigated the effect of debt maturity structure on the profitability of listed non-financial firms in Nigeria, focusing on the transmission of profitability through short- and long-term leverage. Employing a quantitative research design, the study used secondary data from eighty purposively sampled non-financial firms listed on the Nigerian Exchange Group (NGX) over the period 2015–2024. Key independent variables include long-term debt ratio and short-term debt ratio, while profitability is proxied by Return on Capital Employed (ROCE), Return on Equity (ROE), and Debt/EBIT ratio. Operating cash flow is included as a control variable. Panel data analysis is conducted using the Panel-Corrected Standard Errors (PCSE) regression model to account for heteroscedasticity and cross-sectional dependence. The empirical results revealed that both long-term and short-term debt ratios exhibit largely insignificant effects on profitability, indicating that debt maturity choices are driven more by financing constraints than by performance optimization. In contrast, overall leverage intensity, measured by the debt-to-equity ratio, shows a stronger association with profitability variations and debt sustainability, highlighting that excessive leverage undermines firm performance through increased financial risk. Operating cash flow demonstrates limited direct influence on profitability. The findings suggest that in Nigerian non-financial firms, profitability transmission is less determined by the composition of debt maturity and more by capital structure discipline, earnings stability, and managerial efficiency. These insights emphasize the importance of prudent financial management and strategic leverage decisions in sustaining firm performance.

**Keywords:** Debt Maturity Structure, Short-Term Debt, Long-Term Debt, Profitability, Leverage, Panel-Corrected Standard Errors (PCSE)

### 1.0 Introduction

Corporate financing decisions have long been recognized as pivotal determinants of firm performance, value creation, and sustainability, particularly in emerging economies where capital markets are less developed and firms face higher financial constraints (Myers & Majluf, 1984; Nukala & Prasada Rao, 2021). Among the many dimensions of financing, debt maturity structure, the composition of short-term and long-term debt, plays a critical role in shaping a firm's profitability and operational efficiency. Short-term debt often imposes immediate liquidity pressures but may offer flexibility

and lower cost, while long-term debt supports strategic investments and signals financial discipline, albeit with higher commitment and potential agency concerns (Odhiambo, et al, 2022; Bereprebofa, et al. 2023). Understanding how these debt instruments influence profitability is essential for both corporate managers and policymakers seeking to enhance financial performance and economic growth in Nigeria's non-financial sector.

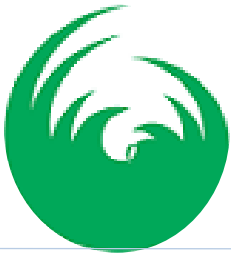
Agency theory suggests that debt maturity decisions can affect managerial behavior, investment choices, and risk-taking, thereby influencing profitability (Jensen & Meckling, 1976; Forster et al., 2025). Long-term debt

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may serve as a mechanism to discipline management, reducing agency costs and promoting shareholder value, while excessive short-term borrowing may intensify financial risk and constrain operational decision-making (Sinebe, 2025a; Buhari & Aruwa, 2025). Empirical evidence from emerging markets indicates mixed outcomes: some studies report that short-term debt enhances profitability through efficient monitoring and cost-effective capital (Rabberti & Hariyanto, 2024; Salsabila, et al. 2023), while others argue that high long-term leverage strengthens firm performance by enabling stable investment and resource allocation (Jihadi et al., 2021; Lestari, 2023). The heterogeneity of these findings underscores the importance of context-specific analysis, particularly in Nigeria, where institutional factors, market imperfections, and governance practices significantly affect financing outcomes (Bereprebofa & Sinebe, 2022; Moro-Visconti, 2025).

Beyond debt maturity, profitability transmission is also influenced by operational efficiency and cash flow management. Firms with robust operating cash flows can mitigate liquidity constraints and finance growth internally, reducing reliance on external debt (Rosemary et al., 2021; Ndruru, 2025). Nevertheless, without prudent capital allocation and governance oversight, even strong cash flows may fail to translate into improved profitability (Onyemenam, et al. 2023; Uchegbu, et al. 2023). This interplay between debt structure and internal financial health highlights the necessity of an integrated approach to corporate financing, one that considers both the maturity composition of debt and operational cash dynamics.

In Nigeria, listed non-financial firms operate within an environment characterized by macroeconomic volatility, limited access to long-term financing, and evolving regulatory frameworks (Babandi & Barjoyal, 2021; Stephen et al., 2024). Studies examining capital structure, leverage, and firm performance in Nigerian contexts emphasize that firm-specific factors such as size, profitability, and market capitalization moderate the effect of debt on financial outcomes (Sinebe, 2025b; Mensah, et al. 2025). Furthermore, empirical evidence suggests that debt maturity management interacts with

agency costs, liquidity strategies, and governance mechanisms to influence profitability transmission (Buhari, et al. 2025; Akhtar, 2025). These complexities necessitate focused research on how short- and long-term debt differentially impact profitability, particularly for non-financial firms that are central to industrial growth and economic stability.

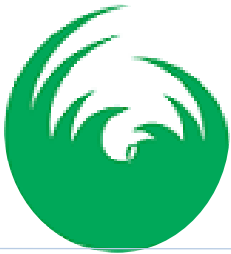
Despite extensive literature on capital structure and performance, few studies have examined the role of debt maturity in the Nigerian non-financial sector using robust panel data approaches (Sinebe, et al. 2025a; Onyinye & Ebiaghan, 2023). Existing studies largely focus on leverage ratios or broad financial performance metrics without distinguishing between short-term and long-term financing impacts. This study addresses this gap by empirically analyzing the relationship between debt maturity structure and profitability transmission among listed non-financial firms in Nigeria. Specifically, it investigates how short-term debt ratio (STDR), long-term debt ratio (LTDR), debt-to-equity ratio (DTER), and operating cash flow ratio (OCFR) collectively influence profitability, measured through return on equity (ROE) and other performance proxies.

The findings of this research will provide valuable insights for corporate managers in optimizing financing decisions, enhance investor understanding of firm risk-return dynamics, and inform policymakers in designing supportive credit markets and regulatory frameworks. The objectives of the study, therefore, are to;

- i. assess the effect of long-term debt ratio on Return on Capital Employed of listed non-financial firms in Nigeria.
- ii. examine the influence of short-term debt ratio on Return on Equity of listed non-financial firms in Nigeria.
- iii. evaluate the influence of debt to equity on Debt/EBIT ratio of listed non-financial firms in Nigeria.

### 1.2 Statement of the Problem

Corporate financing decisions, particularly regarding the maturity composition of debt, significantly influence firm profitability and operational efficiency. Short-term debt



can provide flexibility and lower financing costs, yet it imposes liquidity pressures that may constrain investment and operational decision-making. Long-term debt, conversely, enables strategic investments and promotes financial discipline, but it increases financial obligations and exposes firms to higher long-term risk (Abdulmumin et al., 2025; Odhiambo, et al. 2022; Nukala, et al., 2021). Despite its strategic importance, empirical evidence on how debt maturity structures impact profitability remains fragmented and inconclusive, especially in emerging markets like Nigeria, where firms face high macroeconomic volatility, limited access to long-term financing, and evolving regulatory environments (Yeboah et al., 2024; Buhari, et al. 2025).

While some research suggests that short-term borrowing enhances efficiency by promoting managerial monitoring, others argue that long-term leverage strengthens performance by enabling stable investment and risk management (Jihadi et al., 2021; Lestari, 2023 Sinebe, 2023; Yahaya, 2026). Moreover, firm-specific characteristics such as size, age, profitability, liquidity, and governance structures have been identified as potential moderators of the debt-profitability relationship, yet these factors are seldom analyzed in conjunction with debt maturity structures in Nigeria's non-financial sector (Christopher, 2025; Sinebe, 2020; Akan, et al. 2023).

Liquidity management further complicates this relationship. Efficient cash flow practices can buffer firms against short-term financing pressures and improve operational performance (Rosemary et al., 2021; Alhassan & Islam, 2021; Uchegbu, et al. 2023). However, misaligned debt structures combined with poor cash flow management can amplify financial risk, reduce profitability, and constrain growth (Akpan, 2024; Chukwunwike et al., 2018; Etim et al., 2022). In Nigeria, where non-financial firms operate in an environment characterized by high inflation, interest rate fluctuations, and inconsistent regulatory enforcement, understanding how debt maturity interacts with cash flow and firm characteristics to affect profitability is critical (Yahaya, 2026; Moridu & Abidin, 2023).

Without evidence-based insights, corporate managers lack guidance in optimizing debt maturity structures for

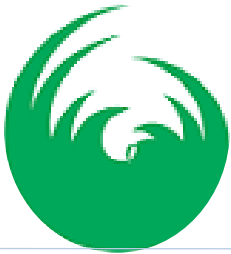
enhanced performance, while policymakers struggle to design frameworks that facilitate sustainable corporate financing in the non-financial sector. This study seeks to fill this gap by investigating the influence of short- and long-term debt on profitability among listed non-financial firms in Nigeria, considering firm-specific factors, liquidity management, and macroeconomic conditions as critical contextual determinants.

## **2.0 Empirical Review**

Ugo and Egbuhuzor (2022) investigated the effect of cash flow management on financial performance in the Nigerian pharmaceutical industry. Using an Ex-Post Facto design, the study analyzed ten listed pharmaceutical firms from 2011 to 2020, employing multiple regression and Pairwise Granger Causality tests via EViews10. Results revealed that operating and investing activities positively but insignificantly affected liquidity, while financing activities had a significant negative impact. The study recommends that firms adopt effective cash flow control strategies and periodically reassess cash flow management to enhance operational efficiency and improve overall financial performance.

Uchegbu, et al. (2023) examined the impact of cash flow management on the financial performance of listed Nigerian manufacturing firms from 2013 to 2022. Using panel data from 21 firms and an Ex-Post Facto research design, the study applied Pearson correlation, multicollinearity tests, Panel Least Squares regression, and the Hausman test. Findings revealed that abnormal cash flows and abnormal production costs significantly and positively influence cash value added, highlighting their role in enhancing financial performance. The study recommends firms strategically manage cash flows and production costs to sustain and improve performance.

Abdulmumin et al. (2025) examined the relationship between firm characteristics and debt maturity structure in publicly listed Nigerian oil and gas companies from 2012 to 2023. Using panel fixed effects and the Generalized Method of Moments (GMM), the study found that liquidity, asset structure, firm size, and profitability positively influence debt maturity, while non-debt tax shields have a negative effect. The findings



highlight that firm characteristics significantly shape debt maturity decisions. The study recommends that management optimize operational efficiency to reduce reliance on debt, addressing potential variable bias and clarifying causal relationships.

Akhtar (2025) investigated the relationship between capital structure, macroeconomic and firm-specific factors, and financial performance in Pakistan’s cement and energy sectors from 2001 to 2018 using regression analysis. The study found that in the cement industry, debt-to-equity ratio, asset turnover, growth rate, and export growth significantly enhance profitability, while total debt to total assets and taxation were insignificant. In the energy sector, capital structure showed no significant effect on profitability, but macroeconomic and firm-specific factors were strongly associated with financial performance. The findings underscore the differential impact of internal and external factors across sectors.

Yahaya (2026) examined the effect of capital structure on firm value in Nigeria, considering the moderating role of inflation, using panel data from 152 listed firms between 2015 and 2024. Fixed effects regression with robust standard errors revealed that both capital structure and inflation negatively affect firm value, while their interaction amplifies this adverse effect. The model explained 61.23% of the variance in firm value. Control variables such as firm size, profitability, asset tangibility, and growth opportunities positively influenced firm value. The study recommends adopting conservative, inflation-adjusted leverage strategies to protect and enhance shareholder value.

### Model Specifications

The model for this study is stated in econometrics terms below as;

**Model I**  $ROCE_{it} = \beta_0 + \beta_1LTDR_{it} + \beta_2STDR_{it} + \beta_3DEBR_{it} + \beta_4OCFR_{it} + \varepsilon_{it}$  Equa. i

**Model II**  $ROE_{it} = \beta_0 + \beta_1LTDR_{it} + \beta_2STDR_{it} + \beta_3DEBR_{it} + \beta_4OCFR_{it} + \varepsilon_{it}$  Equa. ii

**Model III**  $DEBR_{it} = \beta_0 + \beta_1LTDR_{it} + \beta_2STDR_{it} + \beta_3DEBR_{it} + \beta_4OCFR_{it} + \varepsilon_{it}$  Equa. iii

Where;

**Table 1: Data Measurements**

Variable Type	Variable	Acronym	Measurement
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### 3.0 Research Methodology

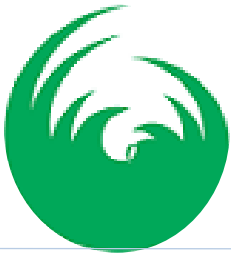
This study adopts a quantitative research design, employing secondary data from listed non-financial firms on the Nigerian Exchange Group (NGX) between 2015 and 2024. The population comprises all non-financial firms, with a purposive sample of eighty firms selected based on data availability and consistency. Key variables include short-term debt ratio, long-term debt ratio, and profitability proxies such as Return on Capital Employed (ROCE), and Debt/EBIT ratio. Control variables include and operating cash flow. Panel data analysis is conducted using the Panel-Corrected Standard Errors (PCSE) regression model to account for heteroscedasticity and cross-sectional dependence. Data is analyzed with Statistical tools to test hypothesized relationships and derive empirical conclusions.

### Hypotheses of the Study

Based on your objectives, the null hypotheses can be formulated as follows:

- i. **H<sub>01</sub>**: Long-term debt ratio has no significant effect on Return on Capital Employed (ROCE) of listed non-financial firms in Nigeria.
- ii. **H<sub>02</sub>**: Short-term debt ratio has no significant influence on Return on Equity (ROE) of listed non-financial firms in Nigeria.
- iii. **H<sub>03</sub>**: Debt-to-equity ratio has no significant impact on the Debt/EBIT ratio of listed non-financial firms in Nigeria.

These hypotheses reflect the assumption of no effect, which our empirical analysis will test against the alternative hypotheses.



Dependent	Return on Capital Employed	ROCE	measured as EBIT divided by total equity plus total liabilities (%)
	Return on Equity	ROE	measured as profit after tax divided by total equity (%)
	Debt/EBIT ratio.	DEBR	Measured as total debt divided by Earnings Before Interest and Taxes)
Independent	Long-term-debt ratio	LDTE	measured as earnings before interest and taxes divided by sales (%)
	Short term debt ratio	STDR	measured as current liabilities divided by total asset
	Debt-to-equity ratio	DER	measured as total liabilities divided by total equity
Control variable	Operating cash flow to asset ratio	OCFR	measured as net operating cash flow divided by total asset Continuous

$f$  = Stochastic error term capturing other unexplanatory variables

$\varepsilon_t$  = error term

$i$  = firm identifier (80 firms)

$t$  = time variable (10 Years)

$\alpha_0$  is the intercept of the regression.

$\beta_1 - \beta_4$  are the co-efficient of the regression equation.

The Apriori expectation:  $\beta_1 - \beta_4$  is less or greater than 0.

#### 4.0 Analysis and Discussion of Results

##### 4.1 Descriptive Statistics Analysis and Discussion

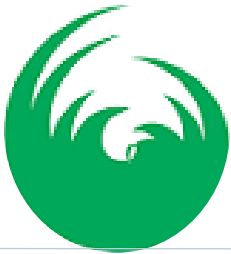
**Table 2: Summary of Descriptive for ROCE ROE DEBR LTDR STDR DTER and OCFR,**

VARIABLES	OBS	MEAN	STD. DEV	MIN	MAX
ROCE	800	.4013689	4.456626	-46.9206	63.43257
ROE	800	-12.60467	359.4142	-10165.22	81.01107
DEBR	800	-50.12679	4027.102	-91045.84	63205
LDTR	800	.2239288	.4129086	0	7.644946
STDR	800	.6124753	1.376288	-.8829961	17.95173
DTER	800	63.1951	1753.324	-449.4719	49588.31
OCFR	800	.3256093	2.651268	-20.81708	57.66069

##### Source: Regression Output, 2026.

Table 2 presents the descriptive statistics for the study variables based on 800 firm year observations. ROCE records a positive mean of 0.40, suggesting that, on average, firms generate modest returns from capital employed, though the wide dispersion and extreme values reflect substantial performance differences across firms and periods. ROE shows a negative mean of minus 12.60 with very high volatility, indicating that many firms experience losses, possibly driven by periods of negative equity or abnormal earnings. The Debt to EBITDA ratio reports a negative mean and large spread, pointing to

unstable earnings and heterogeneous debt servicing capacity among firms. Long term debt ratio averages 0.22, implying limited reliance on long term financing, while the higher mean of short term debt ratio at 0.61 suggests a preference for short term liabilities. The debt to equity ratio exhibits extreme variability, reflecting capital structure imbalances in some firms. Operating cash flow ratio remains positive on average, indicating generally adequate liquidity despite observed fluctuations.



#### 4.2 Normality Test Analysis and Discussion

**Table 3: Shapiro-Wilk W test for normal data for ROCE ROE DEBR LTDR STDR DTER and OCFR,**

VARIABLES	OBS	W	V	Z	PROB>Z
ROCE	800	0.26831	376.670	14.553	0.00000
ROE	800	0.01519	506.974	15.282	0.00000
DEBR	800	0.06649	480.569	15.151	0.00000
LDTR	800	0.44100	287.773	13.893	0.00000
STDR	800	0.23962	391.438	14.648	0.00000
DTER	800	0.01566	506.733	15.281	0.00000
OCFR	800	0.15151	436.802	14.917	0.00000

#### Source: Regression Output, 2026.

Table 3 reports the Shapiro Wilk normality test results for all study variables. For ROCE, ROE, DEBR, LDTR, STDR, DTER and OCFR, the W statistics are far below unity and the associated probability values are all significant at the 1 percent level. This provides strong evidence against the null hypothesis of normal distribution for each variable. The high Z values further confirm substantial departures from normality, which is consistent with the extreme minimum and maximum

values observed in the descriptive statistics. Such non normality is common in firm level financial data, particularly for leverage and profitability measures, due to outliers, skewness and structural differences across firms and time. These results imply that classical assumptions of normality are violated. Consequently, the use of robust panel estimation techniques and standard errors is appropriate to ensure reliable inference despite the non-normal distribution of the variables.

#### 4.3 Correlation Analysis and Discussion

**Table 4: Summary of Spearman Correlation Matrix**

	ROCE	ROE	DEBR	LDTR	STDR	DTER	OCFR
ROCE	1.0000						
ROE	0.4516*	1.0000					
DEBR	0.2945*	0.0868*	1.0000				
LDTR	-0.0328	0.3542	0.0842*	1.0000			
STDR	-0.0239	0.4989	0.0660	-0.0380	1.0000		
DTER	-0.0466	0.1883	-0.1605*	0.1440*	0.1180*	1.0000	
OCFR	0.2310*	0.2612*	0.1420*	0.0381	-0.2621*	-0.0526	1.0000

#### Source: Regression Output, 2026.

Table 4 presents the Spearman rank correlation coefficients among the study variables. ROCE shows a moderate and positive association with ROE, indicating consistency between operating and equity-based profitability measures. ROCE is also positively correlated

with DEBR and OCFR, suggesting that firms with stronger operating performance tend to exhibit higher debt capacity and better cash flow positions. ROE displays weak but significant positive relationships with DEBR and OCFR, while it is negatively related to DTER,



implying that excessive leverage may erode returns to equity holders. Long term debt ratio shows no meaningful association with profitability but is positively related to total debt exposure. Short term debt ratio is negatively and significantly correlated with long term debt,

reflecting substitution between debt maturities. The magnitude of all coefficients remains below conventional thresholds of concern, indicating the absence of severe multicollinearity among the explanatory variables.

#### 4.4 Levin-Lin-Chu Unit Root Test Analysis

**Table 5: Diagnostic Tests Results for all the variables**

Variable	Statistics	p-value	Level	Remarks
ROCE	Unadjusted t	-46.6375	0.0000	1(0)*
	Adjusted t*	-44.3181		
ROE	Unadjusted t	-3.403	0.0000	Stationary
	Adjusted t*	-3.703		
DEBR	Unadjusted t	-1.303	0.0000	Stationary
	Adjusted t*	-1.403		
LDTR	Unadjusted t	-29.8280	0.0000	Stationary
	Adjusted t*	-24.2122		
STDR	Unadjusted t	-18.9301	0.0000	Stationary
	Adjusted t*	-9.6919		
DTER	Unadjusted t	-1.703	0.0000	Stationary
	Adjusted t*	-1.803		
OCFR	Unadjusted t	-25.3226	0.0000	Stationary
	Adjusted t*	-16.4314		

**Source: Regression Output, 2026.**

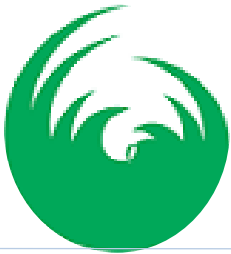
Table 5 reports the Levin Lin Chu unit root test results for all variables included in the model. The adjusted t statistics for ROCE, ROE, DEBR, LDTR, STDR, DTER and OCFR are all negative and statistically significant at the 1 percent level. This leads to the rejection of the null hypothesis of a unit root for each variable. The results indicate that all series are stationary at levels, I(0), without the need for first differencing. Stationarity at level suggests that the variables fluctuate around a

constant mean and variance over time, and shocks to the series are transitory rather than persistent. This property is particularly important in panel data analysis as it reduces the risk of spurious regression results. The findings therefore support the suitability of applying static panel estimation techniques in subsequent analysis, since the underlying variables satisfy the stationarity requirement necessary for valid and reliable inference.

#### 4.5 Hypotheses Testing I

**Table 6: Summary of ROCE LTDR STDR DTER and OCFR linear regression analysis**

ROCE	COEF.	STD. ERR.	Z	P> Z
LTDR	.3231714	.4681843	0.69	0.490
STDR	-.2141713	.2612287	-0.82	0.412
DTER	-9.79	06	9.22	06
OCFR	-.0055137	.0144719	-0.38	0.703
_CONS	.4625899	.2507492	1.84	0.065
N				800



R-squared	0.0036
Wald chi2(4)	1.70
Prob > chi2	0.7900

Source: Regression Output, 2026.

#### Findings and Discussion of result of hypotheses I

Hypothesis I examines the effect of debt maturity structure and operating cash flow on firms' return on capital employed. The regression results in Table 6 show that long term debt ratio has a positive but statistically insignificant coefficient. This suggests that long horizon financing does not exert a meaningful influence on operating returns within the sampled firms. This outcome aligns with Abideen et al. (2021) and Yusuf and Musa (2025), who report that debt maturity choices in Nigerian firms often reflect financing constraints rather than efficiency considerations, thereby limiting their impact on performance.

Short term debt ratio displays a negative and insignificant relationship with ROCE, indicating that reliance on short term liabilities may increase refinancing pressure without translating into productive capital use. Similar weak

effects of short-term leverage on operating performance are documented by Alzubi and Bani Hani (2021) and Sinebe, (2025c), particularly in emerging markets where short term debt is frequently used for liquidity smoothing rather than investment.

Debt to equity ratio also exhibits a negative coefficient, though it remains statistically insignificant. This finding supports the view that excessive leverage may dilute operating efficiency through higher financing risk, as observed by Elahi, et al. (2021, Jeroh, et al. (2022) and Akhtar (2025), yet such effects are not uniform across firms. Operating cash flow ratio equally shows no significant influence on ROCE, implying that liquidity strength alone does not guarantee efficient capital deployment, a result consistent with Rosemary et al. (2021) and Uchegbu et al. (2023).

#### 4.6 Hypotheses Testing II

Table 7: Summary of ROE LTDR STDR DTER and OCFR linear regression analysis

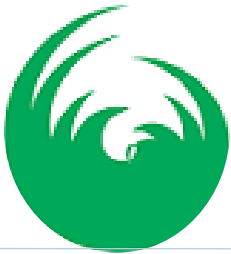
ROE	COEF.	STD. ERR.	z	P> z
LTDR	-.4635987	.3642593	-1.27	0.203
STDR	.0342173	.0497631	0.69	0.492
DTER	-.2049778	.0000851	-2410.03	0.000
OCFR	.0056551	.0103513	0.55	0.585
_CONS	.4299362	.118828	3.62	0.000
N				800
R-squared				0.9999
Wald chi2(4)				5864586.03
Prob > chi2				0.0000

Source: Regression Output, 2026.

#### Findings and Discussion of result of hypotheses II

Hypothesis II evaluates the effect of debt maturity structure and operating cash flow on return on equity. The results in Table 7 show that long term debt ratio carries a negative but statistically insignificant coefficient,

implying that long horizon financing does not materially influence shareholders' returns. This outcome is consistent with the pecking order and agency perspectives of Myers et al. (1984) and Fasua and Sinebe, (2024), which suggest that equity returns are sensitive to



information asymmetry and agency costs rather than debt maturity choices alone. Similar insignificant effects are reported by Jeroh (2020) and Daisy and Julius, (2025) for emerging market firms.

Short term debt ratio also exhibits a positive but insignificant relationship with ROE. This indicates that short term borrowing neither enhances nor erodes equity returns in a systematic way. Studies such as Odhiambo et al. (2022) and Jihadi et al. (2021) report comparable findings, arguing that short term debt mainly supports working capital needs rather than profitability maximization.

In contrast, the debt-to-equity ratio shows a strong and negative statistically significant effect on ROE. This

suggests that excessive leverage substantially diminishes returns to shareholders, likely due to increased financial risk and higher agency costs. This result aligns with Nukala et al. (2021), Salsabila et al. (2023), and Sinebe (2025d), who document that high leverage weakens equity performance in volatile environments.

Operating cash flow ratio remains positive but insignificant, implying that liquidity strength alone does not translate into higher equity returns. Sinebe and Henry, (2023) and Ndruru (2025) reach similar conclusions, emphasizing that cash flow effectiveness depends on governance and investment discipline.

#### 4.7 Hypotheses Testing III

**Table 8: Summary of DEBR LTDR STDR DTER and OCFR linear regression**

DEBR	COEF.	STD. ERR.	z	P> z
LTDR	-501.6607	312.3212	-1.61	0.108
STDR	59.62457	41.9946	1.42	0.156
DTER	.0111907	.0032173	3.48	0.001
OCFR	4.347447	6.690149	0.65	0.516
_CONS	23.56814	129.5949	0.18	0.856
N				800
R-squared				0.0022
Wald chi2(4)				20.96
Prob > chi2				0.0003

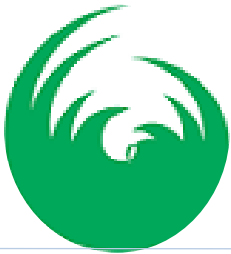
Source: Regression Output, 2026.

#### Findings and Discussion of result of hypotheses III

Hypothesis III examines the influence of debt maturity structure and operating cash flow on the debt to EBITDA ratio, a proxy for firms' debt servicing capacity. The results in Table 8 indicate that long term debt ratio has a negative but statistically insignificant effect on DEBR. This suggests that greater reliance on long term financing does not materially improve firms' earnings-based debt sustainability. Similar evidence is reported by Babandi et al. (2021) and Azekkar et al. (2025) and Sinebe, et al. (2025b), who argue that long-term borrowing in developing economies is often constrained by high costs and weak earnings alignment, thereby limiting its effectiveness in stabilizing leverage outcomes.

Short term debt ratio shows a positive yet insignificant relationship with DEBR. This implies that short term liabilities may increase repayment pressure without translating into proportional earnings growth. Bereprebofa et al. (2023) and Utama et al. (2023) document comparable patterns, noting that short term debt is typically used for working capital needs rather than productivity enhancing investments.

In contrast, the debt-to-equity ratio exerts a positive and statistically significant effect on DEBR. This indicates that firms with higher capital structure intensity face greater earnings-based leverage, reflecting elevated financial risk. This finding aligns with agency theory as advanced by Jensen et al. (1976), and is consistent with



empirical studies by Nukala et al. (2021), Odhiambo et al. (2022), and Sinebe (2025a), which show that excessive leverage weakens debt servicing capacity in volatile environments.

Operating cash flow ratio remains positive but insignificant, suggesting that liquidity alone does not guarantee improved debt coverage. Studies by Chukwunwike et al. (2018), Elahi et al. (2021), and Uchegbu et al. (2023) similarly emphasize that cash flow effectiveness depends on disciplined financial management and investment efficiency.

## 5.0 Conclusion, Recommendation,

### 5.1 Conclusion

This study examined how debt maturity structure influences profitability transmission among listed non-financial firms in Nigeria, with emphasis on short term and long-term leverage. The empirical findings show that debt maturity choices do not exert a consistent or significant influence on operating and equity-based profitability measures. Long term and short-term debt ratios were largely insignificant across the models, suggesting that leverage maturity is shaped more by financing constraints than by performance optimization. In contrast, overall leverage intensity, captured by the debt-to-equity ratio, demonstrated a stronger role in explaining variations in profitability and debt sustainability, indicating that excessive leverage weakens firm performance through heightened financial risk. Operating cash flow also showed limited direct impact on profitability. Overall, the evidence suggests that profitability transmission in Nigerian non-financial firms is driven less by debt maturity composition and more by capital structure discipline, earnings stability, and managerial efficiency.

Based on the study's objectives on debt maturity structure and profitability transmission, the following implications and recommendations emerge.

### 5.2 Implications of the study

1. Debt maturity composition, by itself, plays a limited role in explaining profitability outcomes among listed non-financial firms in Nigeria.

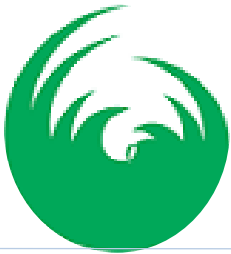
2. Excessive leverage weakens operating efficiency and shareholders' returns through heightened financial risk and agency costs.
3. Operating cash flow strength does not automatically translate into higher profitability without effective capital allocation and governance discipline.
4. Financing decisions of firms appear to be driven more by market constraints and institutional factors than by deliberate performance optimization.

### Recommendations of the study

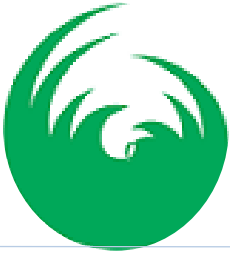
1. Managers should prioritize optimal leverage levels rather than focusing narrowly on restructuring debt maturity.
2. Firms should align borrowing decisions with stable earnings capacity to avoid excessive debt burden.
3. Greater emphasis should be placed on improving operational efficiency and investment quality to enhance profitability transmission.
4. Policymakers should strengthen credit market depth to enable firms access appropriately priced long-term financing.

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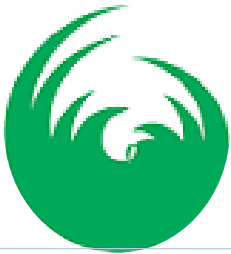
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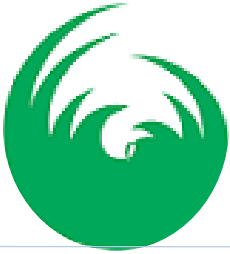
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