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CAPITAL STRUCTURE AND MARKET BASED FIRM PERFORMANCE OF LISTED INDUSTRIAL GOODS FIRMS IN NIGERIA

***Jamilu Hassan Wagini, Idris Adamu Adamu and Yunusa Abdulateef**
Department of Business Administration, Federal University Dutsinma, Katsina State, Nigeria.

*Correspondence: jhwagini@gmail.com

ABSTRACT

This study investigates the influence of capital structure on market based performance of listed industrial goods firms in Nigeria. The Population of the study constitutes all industrial firms listed on the NXG from 2015 –2024, out of which a sample of 9 firms were selected using purposive sampling technique. The study used a longitudinal panel data approach and test the relationship between the EQTTA, TDTA, LTDTA and TBQ using a descriptive statistics and random effect (Hausman-test) analysis. The results indicates that EQTTA and LTDTA have a significant positive relationship with TBQ while TDTA indicate a non-significant association. The result confirms prediction of the trade-off theory. The study concluded that capital structure significantly influences market performance. The study recommends that managers shall consider equity financing when expanding operations as the more EQTTA, the more the market firm performance of industrial goods firms in Nigeria improved.

Keywords: Capital structure, Tobin's Q, Market Performance, Equity, Firm size and Firm Age

1. INTRODUCTION

Capital structure is a key aspect of financial management as it affects firm risk, efficiency, and market value. It refers to the combination of debt and equity used to fund operations and investments (Olaoye, 2021; Chandra et al., 2019). Capital structure is central to corporate finance and market performance (Hussein, 2020; Olaoye, 2021; Chandra et al., 2019). It is commonly measured using total debt ratio, long-term debt ratio, equity ratios, and related indicators such as debt to equity and interest coverage (Horvathova & Mokrisova, 2017). The theoretical review offers various standpoints on how debt and equity affect firm performance. However the trade-off Theory proposes an optimal balance between debt and equity, pecking order theory put emphasis on a preference for internal financing. The agency theory emphasis is on the role of debt in minimizing managerial inefficiencies, however, the M&M theory point out that market imperfections impact capital structure decisions. Capital structure theory therefore recommends balancing equity and debt to minimize risk, reduce information asymmetry, and maximize firm value (Myers & Majluf, 1984; Nguyen & Nguyen, 2020), therefore, this study adapt trade off theory. Some studies find capital structure to have a positive effect on firm performance such as (Abdullah & Tursoy, 2021) (Huang et al., 2021) and (Le & Phan, 2017), while some find a negative result like (Ayange et al., 2021) and (Nguyen & Nguyen, 2020) and (Chadha, 2015), others find no relationship such as (Mardones & Cuneo, 2020) and Chandra et al., (2019). An optimal capital structure reduces the cost of capital and improve firm value, thereby improving market performance and investor confidence (Nguyen & Nguyen, 2020).

Firm performance is broadly classified into market-based and accounting-based measures, with market-based performance reflecting investor valuation based on expected earnings, growth, and risk (Oranefo &

Egbunike, 2022; Kumar, 2020). Market based performance is a metric that incorporates entirely relevant facts and figures and hence not limited to a particular aspect of performance contrasting the accounting based measures (Okon & Clement, 2025). These measures assess financial health, resource efficiency, and goal achievement, while signaling firm success to managers and investors (Behera, 2020; Mardones & Cuneo, 2020; Huang et al., 2021). Market-based indicators are forward-looking and include Tobin's Q, share price, price-to-earnings ratio, cash flow per share, market-to-book ratio, and stock price volatility (Hamdan, 2017; Rahayu et al., 2020; Adamu, 2023; Njoku & Lee, 2025). Tobin's Q reflect the time value of money and intangible assets in a better way, hence, it is frequently used to measure market firm performance as well as growth opportunities. According to Huang et al., (2021) Tobin's Q is the ratio of the firm's market value equity and of liabilities to the replacement cost of its assets.

The industrial goods sector is vital to economic development, yet its firm's performance in Nigeria has been volatile due microeconomic policies (Olowe & Oyetayo, 2022). Inflation, exchange rate instability, and high interest rates, influence financing decisions and performance (Ramli et al., 2018), this make capital structure decisions critical in Nigerian industrial goods firms (Umoinyang & Amarachi, 2025), in addition to capital intensity, high fixed costs, large working-capital requirements, and long project cycles (NESG, 2024). These firms require substantial investment in machinery, plants, and raw materials, making financing choices central to long-term survival (Uzliawati et al., 2018), thereby affecting capital structure and company performance decision in Nigerian industrial goods sector critical in making an optimum financing decision to achieve its goals.

There is no consensus among scholars on the determinants of capital structure (Fauziah, Kurniawan, & Amin, 2023; Le & Phan, 2017). Existing Nigerian studies focus mainly on all quoted firms, with limited attention to specific sectors, particularly manufacturing. Few studies examine the impact of capital structure on market firm performance in Nigeria's industrial goods sector. Therefore, this study assesses the influence of capital structure on the market firm performance of listed firms, specifically Nigerian industrial goods firms which has been underperforming for years to due to the microeconomic volatility and also very few research has been conducted in this sector, hence the need to investigate the effect of capital structure and market firm performance in listed industrial goods sector. The study used Tobin's Q as the market firm performance. Equity ratio, total debt ratio, long term debt ratio, age, and size are examined as capital structure determinants. This study therefore examines the effect of capital structure on the market-based performance of listed industrial goods firms in Nigeria, drawing on recent empirical evidence and established financial theories.

2. LITERATURE REVIEW

2.1 Review of prior literature and hypotheses development

Equity and Market Firm Performance

Equity financing is ownership capital provided by shareholders to fund firm assets without debt. A strong equity base lowers financial risk, boosts investor confidence, and is positively linked to market-based performance, especially Tobin's Q, as it signals stability and growth potential (Abdullah & Tursoy, 2021; Nguyen & Nguyen, 2020; Oganda, 2023). Evidence from Kenyan firms shows that higher equity improves market valuation due to lower bankruptcy risk and stronger governance (Oganda, 2023). However, frequent equity issuance may dilute ownership and signal overvaluation, reducing market performance (Oganda, 2023). Firms with equity ratios above 0.50 are considered conservative and reward shareholders through dividends. Although equity is the most expensive financing source, firms may prefer it when shares are overvalued or debt is constrained. Equity financing offers more flexibility but dilutes ownership and can be more expensive.

Okon and Clement (2025) examined the link between capital structure and company performance in Nigerian non-financial enterprises. The study used data from 70 non-financial companies listed on the Nigerian Exchange Group between 2012 and 2021. Capital structure and firm performance association was examined using debt-to-asset, equity to assets ratio and debt-to-equity ratios. According to the study, equity to asset ratio had a positive and significant impact on firm performance when measured by market value (Tobin's Q). This shows that the more EQTTA, the more the firm performance will improve and the less the EQTTA the

less the market firm performance will improve. Oganda (2023) examined the falling economic contribution of Kenya's manufacturing industry. Using secondary data spanning ten years (2010–2019), this study used Dynamic Unbalanced Panel analysis methodologies. Nine listed enterprises made up the sample population. Tobin's Q and EVA were used as proxies for business value, and the focus was on equity financing that was regulated by economic growth and earnings volatility. The investigation was governed by pecking order. The longitudinal research approach was employed and analyzed the data using STATA version 15. The impact of equity financing on business value (Tobin Q) was positive but not statistically significant. This indicated that the more EQTTA, slightly improve the market firm performance.

Ghardallou (2022) investigate the connection between Saudi Arabian firm's performance and financing choices. Using 120 sample firms from non-financial firms listed in the Tadawul stock exchange from 2017 to 2020, the study applies the quantile regression methodology. To evaluate accounting and market performance, financial performance was examined using ROA, ROE, and Tobin's Q factors. The annual reports of the companies provided the data. The results shows that there is a nonlinear link. The equity financing ratio showed that highly profitable businesses had a greater positive impact than less lucrative ones. The relationship between capital structure and firm performance is important, as firms with high operational costs and economic volatility need effective equity management to stay competitive. Firms with optimal capital structures experience lower financial distress and better access to finance, enhancing performance. Hence, hypothesis one is stated as:

H_1: There is no significant relationship equity to total assets and market based performance of listed industrial goods firms in Nigeria.

Total Debt to Total Asset and Market Firm Performance

Excessive leverage reduces market valuation among firms, as high borrowing costs and macroeconomic volatility discourage heavy debt use. Evidence from Nigerian listed firms by (Okon and Clement, 2025) shows that higher total debt is negatively associated with Tobin's Q, suggesting that excessive leverage erodes market value, reflecting investors' sensitivity to rising leverage under high interest rates. In contrast, evidence from Vietnam by (Nguyen, 2024) indicates a positive debt and Tobin's Q relationship, highlighting country and industry specific effects. While moderate leverage can enhance firm value through tax shields and managerial discipline, excessive debt increases financial distress risk and lowers Tobin's Q. The debt to performance relationship in Nigeria is therefore non-linear and shaped by macroeconomic conditions (Olowe & Oyetayo, 2022).

Ibhagui and Olokoyo (2018) examined the empirical link between leverage and firm performance. They used company size as a threshold variable. The study examined panel data from 101 Nigerian listed companies between 2003 and 2007. The results showed that Tobin's Q for Nigerian listed companies is positively impacted by TDTA. This indicated that the more TDTA, the less the firm performance will improve and the less the TDTA the less the market firm performance will improve Debt financing offers tax advantages, but also increases financial risk.

Yahaya (2026) used panel data from 152 publicly traded companies between 2015 and 2024 to and concludes that capital structure (Total Debt Ratio) significantly reduces firm value (Tobin's Q) using fixed effects regression analysis with robust standard errors. Pranata and Nugroho (2025) examined non-financial companies listed between 2020 and 2022 on the Indonesia Stock Exchange (IDX) provided the data. The findings showed that financial performance can be adversely affected by capital structure. Debt to Market Capitalization (DTMC) has a negative significance effect on Tobin's Q, whereas DTA has a positive significance impact, indicating a greater market valuation. (Kasasbeh, 2021).

Mahfirah et al., (2025) examined the impact of leverage on the performance of Indonesian non-financial sector companies listed on Stock Exchange between 2012 and 2021. The findings revealed that the firm's market performance (Tobin's Q) was positively and statistically significantly affected by the debt to total asset ratio (DAR) within the Sharia-compliant subset.

Oranefo and Egbunike (2022) investigated how debt financing affected Nigerian listed non-financial enterprises' firm valuations from selected 75 companies among quoted non-financial firms on the (NXG). The results from regression analysis indicated that TDTA had a positive and significant impact on Tobin's Q. The

trade-off theory is supported by the investigation. This indicated a high cost of debt, as the greater the debt the less value will be generated by the firm.

Njoku and Lee (2025) investigated manufacturing sector in Nigeria during the 2016–2020 economic crisis. Utilizing notions of trade-offs and signaling. The study uses panel data from 26 listed companies and employs fixed-effect models (FEM) and pooled ordinary least squares (POLS). The results showed that market performance is negatively impacted by TDTA on market performance (Tobin's q).

Hasan et al., (2014) investigated the effect of capital structure on firm's performance in Bangladesh. Data was extracted from a sample of listed 36 firms from Dhaka Stock Exchange from 2007 to 2012. The regression result shows that there is no statistically significant association exists among TDTA and TBQ. Firms with high operational costs and economic volatility need effective debt management, to stay competitive need optimal capital structures to avoid experiencing financial distress and also to have better access to finance for enhancing performance. Accordingly, the second hypothesis is stated as follows:

H_2: There is no a significant association between total debt to total assets and market based performance of listed industrial goods firms in Nigeria.

Long Term Debt to Total Asset and Market Firm Performance

Long-term debt consists of bonds and borrowings with extended maturities used to finance investment, with periodic interest payments. Its cost depends on a firm's financial strength and balance sheet position (Callistus et al., 2025). While long-term debt can support long-horizon investments and capital structure stability with lower refinancing risk than short-term debt, it increases interest obligations and reduces financial flexibility.

Empirical evidence on its effect is mixed and depends on cash-flow stability, sector risk, and macroeconomic conditions. Nigerian studies show that long-term debt often has insignificant or negative effects on Tobin's Q, suggesting that excessive long-term leverage may reduce market valuation (Adeyemi & Babajide, 2020) also (Seckanovic, 2021) in UK shows a negative effect. In contrast, evidence from other emerging markets indicates positive effects (Nguyen, 2024), long-term financing enhances performance in Asian manufacturing firms, and moderate leverage increases firm value in emerging economies, consistent with trade-off theory (Hassan & Akter, 2021; Zheng et al., 2023). For Nigeria, results remain sector-specific, with long-term debt improving firm value in industrial goods firms but short-term debt having negative effects (Chukwuma et al., 2021)

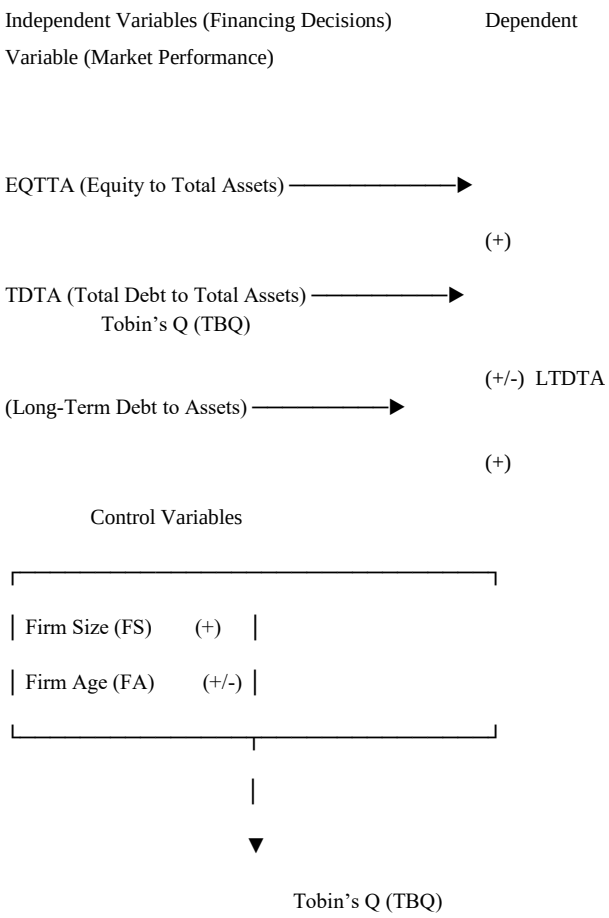
In Nigerian non-financial firms, long-term debt's effect on Tobin's Q is often insignificant or negative, indicating that excessive long-term leverage may not enhance market value. Oranefo and Egbunike (2022) investigated how debt financing affected Nigerian listed non-financial enterprises' firm valuations between 2011 and 2019. The ex post facto research design is used in this study. Non-probability sampling was used to select 75 companies among quoted non-financial firms on the (NXG). Panel regression analysis was used to examine the secondary data. The results indicated that LTDA had a positive and significant impact on Tobin's Q. The trade-off theory is supported by the investigation. A positive, LTDTA indicated that long-term debt enhance market value. The impact of leverage on the performance of non-financial sector companies listed on the Indonesia Stock Exchange between 2012 and 2021 was examined by (Mahfirah et al., 2025). The study uses data from publicly traded corporations and takes a quantitative approach. The results showed that the firm's market performance (Tobin's Q) was positively and significantly impacted by the long-term debt to total assets (LTD) which shows that LTDTA enhance market performance.

Ayange et al., (2021) investigated capital structure measures on firm's performance in Nigerian manufacturing firms. Using a panel data with a sample of 15 quoted firms from 1999-2018. Results indicate that performance (Tobin's Q) was positively and significantly influence by LDTA. Jaiswal and Elmarzouky (2025) examined the connection between capital structure and company performance in UK from 2018 – 2023. The study compared financial and non-financial. Tobin's Q, a market-based outcome, reveals more subtle, weaker connections. Non-financial firms are more negatively impacted by long-term debt, especially during and after COVID-19. This indicated that less debt enhance firm valeu and vice versa. Accordingly, the current study hypothesized that model-based statistical analysis. The results showed that the firm's market performance (Tobin's Q) positively and

statistically significantly impacted by the long-term debt to total assets (LTD) within the Sharia-compliant subset. On the other hand, long-term debt to total assets (LTD) has a positive and statistically significant impact on a firm's market performance inside the non-Sharia-compliant subset (Tobin's Q), which shows that LTDTA enhance market performance.

H_3: There is no significant association between long term debt to total assets t and market based performance of listed industrial goods firms in Nigeria.

2.2 Conceptual Framework Diagram (Based on Trade-Off Theory)



Expected Signs

EQTTA (+): Higher equity may improve firm value due to lower financial risk.

TDTA (+/-): Debt has benefits (tax shield) but also costs (financial distress).

LTDTA (+): Long-term debt is often seen as more stable and value improving.

Firm Size (+): Larger firms tend to have lower bankruptcy risk.

Firm Age (+/-): Older firms may be stable but could face slower growth.

3. RESEARCH METHODOLOGY

The study adopts a longitudinal research design, emphasizing the analysis of existing data on capital structure decisions. The population includes all the 12 industrial goods firms listed in the Nigerian Exchange Group (NXG). A sample of 9 firms were purposively selected using 2 criteria; exclude firms listed within the period of the study; exclude firms that does not have the availability of data on the variables of the study. Secondary data from annual reports, audited financial statements was collected through the official websites of the sampled firms and the Nigerian Exchange Group (NXG). The narrative methodology evaluates the relationship between capital structure and market performance using panel regression frameworks. This study adopted a confirmatory research, where the test on hypotheses are conducted on the dependent variables to examine their effects, the association between EQTTA, TDTA, LTDTA, AGE and SIZE to the dependent variable that is market firm performance (TBQ). The subject of research is industrial goods firms listed in Nigerian Exchange Group (NXG) from 2015 to 2024.

This research adopted the panel least squares models of the Random Effect Model and analyzed the influence of capital structure on market firm performance in Nigeria. Analysis of panel data is expedient method when longitudinal data is to be analyzed, since it tolerates for a range of regression analyses both in temporal (time) and spatial (units) dimensions (Olalekan, 2022). This study used industrial goods firms due to its capital intensiveness nature (Uzliawati et al., 2018). This study adopted Tobin's Q to measure market firm's performance and EQTTA, TDTA, LTD/TA and measure of capital structure. Firm Age and firm size are used as controlled variables. The estimation procedure followed an array of pre-estimation tests, Panel estimation, and diagnostic tests.

3.1 Variable Operationalization

This study examined the effect of EQTTA, TDTA, and LTDTA on market firm performance (TBQ). The sector research is industrial goods firms listed in Nigerian Exchange Group (NGX) from 2015 to 2024. The research adopted the panel data approach. This research adopted Tobin's Q to measure market firm's performance and equity to total assets, total debt to total assets, long Term debt to the total assets and measure of capital structure. Firm Age and firm size are used as control variables.

Table 1. variable measurement

Description	Acronyms	Source
Firm Performance at a certain year	TBQ = (BVD + MVE)/BVA	(Mahfirah et al., 2025) (Ghardallou, 2022) (Seckanovic, 2021) (Yahaya, 2026)
Equity proportion in Financing to Total Asset	EQT/TQ	(Oganda, 2023), (Ghardallou, 2022) (Okon and Clement, 2025)
Total Debt proportion in Financing to Total Asset	TD/TA	(Mahfirah et al., 2025) (Uzliawati et al., 2018) (Seckanovic, 2021) (Okon and Clement, 2025) (Yahaya, 2026) (Ayange et al., 2021)
Firm's ability to fulfill long-term debt proportion in Financing to Total Asset	LTD/TD	(Uzliawati et al., 2018) (Mahfirah et al., 2025), (Ayange et al., 2021) (Jaiswal & Elmarzouky, 2025)
Firm Age	year of listing	(Mahfirah et al., 2025)
Firm Size	Nat. Log of Assets	(Yahaya, 2026), (Okon & Clement, 2025), (Ghardallou, 2022)

Source: Authors' compilation (2026)

3.2 Model Specification

The research investigate the effect of capital structure on market firm performance. The model is thus given as:

$$BQit = \alpha\beta + \beta 1EFTAit + \beta 2TDTAit + \beta 3LTDTait + \beta 4AGEit + \beta 5SIZEit + eit \ldots.(1)$$

Where;

TBQ = Tobin's Q
EQTTA = Equity /Total Assets,
TDTA = Total Debt/ Total Assets
LTDTA = Long Term Debt/ Total Assets
AGE = Firm Age,
SIZE = (Nat. Log) Total Assets
eit = error term.

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Table 2 **Descriptive Statistics**

Variable |	Obs	Mean	Std. Dev.	Min	Max
tbq |	**90**	**.7999**	**.2666**	**.3783**	**2**
eqtta |	**90**	**.6011**	**.1913**	**.1270**	**.9717**
tdta |	**90**	**.5026**	**.2953**	**.0268**	**1.423**
ltdta |	**90**	**.1318**	**.1588**	**.0081**	**1**
age |	**90**	**37.05**	**13.46**	**5**	**65**
size |	**90**	**6.873**	**.8237**	**6.050**	**8.998**

Source: secondary data processed with STATA. 14.2 (2026)

Table 2 above shows the summary of descriptive statistics measurements of dependent and independent variables of the study. TBQ have a mean value of 79.99% with a minimum and maximum values of 37.83% and 200% respectively. Also from the findings, EQTTA shows that the sample firms have an average of 60.11% with a minimum and maximum of 12.70% and 97.17%. Also TDTA have a mean value of 50.26% with a minimum and maximum values of 2.68% and 100.42% respectively However, LTDTA have a mean value of 13.48% with the minimum percentage of 0.08% and a maximum of 100%. Regarding the control variable, table 2 reveals that Age have a mean value of averagely 37years and a minimum of five years and 65 years as maximum. The Firm Size observed to have an average value of 6.87 with a minimum value of 6.05 and a maximum of 8.99.

4.2 Variance Inflation Factor (VIF)

Table 3.VIF

Variable |	VIF	1/VIF
tdta |	**1.70**	**0.5875**
ltdta |	**1.44**	**0.6942**
eqtta |	**1.39**	**0.7185**
age |	**1.15**	**0 .8673**
size |	**1.10**	**0.9052**

Source: secondary data processed with STATA. 14.2 (2026)

Results Obtained from the VIF (Variance Inflation Factor) after Running OLS Model. If the VIF is less than ten, there is no multicollinearity (Habibniya et al., 2022).

Result from Table 3 above, indicated no multicollinearity, and appeared to be below ten which is the predictable value. This study determines the appropriate panel data model between fixed and random effects using Hausman test. From the result it indicates that random effects are the best model to be used. Since the probability is not significant. (chi2(5) = 1.52 ; Prob>chi2 = 0.9110)

4.3 Regression Analysis

Random-effects (Robust)

tbq |	Coef.	Std. Err.	z	P>|z|	
eqtta |	.6098	.2385	2.56	0.011	
tdta |	-.1732	.1314	-1.32	0.188	
ltdta |	.8926	.2518	3.54		0.000
age |	.0023	.0029	0.79		0.431
size |	-.0123	.0584	-0.21	0.833	
_cons |	.4001	.4360	0.92	0.359	
Wald chi2(5)	66.50				
Prob > chi2	0.0000				
Overall R^2	0.4467				

Source: secondary data processed with STATA. 14.2 (2026)

Fixed effect and Random Effect GLS analysis was conducted, also Hausman test was deducted and shows non-significant, and Robust Random Effect analysis was conducted. The results from Table4. above on the relationship between Tobin's Q (TBQ) and the independent variables (EQTTA, TDTA, LTDTA) and also the control variables (AGE, and SIZE), revealed an R-squared value of 0.45 this shows that the explanatory variables explain 45% of the dependent variable, while the remaining 55% is explain by other variable. The discussion based on the result presented in the Table 4. is on Random Effect a. Consistent with the hypothesis one, EQTTA has a coefficient of 0.61, z-statistic of 2.56, and a probability of 0.011, thus positive impact on TBQ and being positive and statistically significant at a 5% level. This result rejected the hypothesis one. The result indicates that having greater percentage of EQTTA. This also indicated that EQTTA contribute a greater % on firm value in the sector, also the higher the EQTTA the higher the TBQ.

The result is consistent with Okon and Clement (2025) finding and in line with the expected signs based on trade-off theory which suggested that higher equity may improve firm value due to lower financial risk. TDTA has a coefficient of -0.17, z-statistic of -1.32, and a probability of 0.19, hence no influence on TBQ since it is statistically non-significant. This result accepted the hypothesis two. In this regard, the result is in conformity with the study conducted by Hasan et al., (2014). LTDTA has a coefficient of approximately 0.89, z-statistic of 3.54, and a probability of 0.00, hence positively influencing TBQ and being statistically significant at 5% level. This result implies that the more the LTDTA fund the higher the market firm value generated (TBQ). This result rejected the hypothesis three. In this regard, the result is in conformity with a studies conducted by (Mahfirah et al., 2025; Oranefo & Egbunike, 2022). The positive sign is in line with the expected signs based on trade-off theory which suggested a positive result LTD is often seen as more stable and value improving. The results of the two control variables are also documented in Table 4. The results reveal that the coefficient firm age is 0.00, z-statistic of 0.79, and a probability of 0.43 indicating a non-significant relationship with TBQ. This non-significance indicating that firms' age is not a key determinant of market performance. Also, the result of the second control variable, firm size shows a coefficient of -0.01, z-statistic of -0.21, and a probability of 0.83 indicating that size has no significant effect on TBQ. Firm size do not significantly influence market performance, hence it is not a key determinant of market performance. This contrasts with trade-off theory expectations, where larger and firms are typically expected to sustain higher debt levels; however, equity financing appears to dominate in this sector.

The result confirms the prediction of the trade-off theory. With interest tax deductibility, tax based models of Modigliani and Miller, (1963) suggest that more profitable firms tend to use higher debt. The trade-off model (Kraus and Litzenberger, 1973) argues that leverage is beneficial only up to the point where tax gains

are offset by bankruptcy costs, implying an optimal capital structure. Findings from this study revealed that due to the high cost of debt, resulting from the volatile macroeconomic environments (high interest rate in Nigeria), using equity is cheaper in financing the firms.

5. CONCLUSION AND RECOMMENDATIONS

The primary aim of this study is to analyze the effect of capital structure on market firm performance on Nigerian listed industrial firms based on the available data from their annual reports and Nigeria Exchange Group (NXG) for the period 2015 - 2024. The effect of three explanatory variables and two control variables is measured on Tobin's Q. It is concluded based on the result discussed above that EQTTA has a positive significant impact on TBQ. TDTA has no statistical significant on TBQ. LTDTA has positively and significantly influence TBQ. The results of the control variables reveal that the both firm age and size have no significant effect on TBQ.

The study concludes that capital structure significantly influences the market-based performance of listed industrial goods firms in Nigeria. Long-term debt can enhance performance when used productively. EQTTA revealed a significant positive relationship with TBQ and remains a strong driver of positive market performance. Optimal capital structure decisions are therefore essential for enhancing firm value in Nigeria's industrial sector.

The study has recommended that; managers should consider equity financing when expanding operations as the more EQTTA the more the market firm performance improved. Also LTDTA hall be invested in productive activities specifically on industrial sector to improve market confidence. The study recommended that investors shall be monitoring debt indicators when evaluating firm value. The study recommended the regulators that strengthening capital market depth will help firms access equity financing. Finally, the study recommends that regulators to provide tax incentive and restructure policies particularly through development finance institutions to provide lower interest rates for industrial firms. This could reduce financing costs, enhance operations, and improve performance.

Although the study reports some significant findings, a number of limitations may affect their robustness and generalizability. The analysis is restricted to Nigerian listed industrial goods firms, with a relatively small sample of 9 firms (90 observations), which may limit the applicability of the results to other sectors or broader contexts. The study also relies solely on Tobin's Q (TBQ) as a measure of market performance. Despite the fact that it is useful, this single indicator may not sufficiently capture firm value, suggesting that future studies could incorporate additional proxies such as market-to-book ratio or stock prices.

Moreover, important macroeconomic variables such as inflation, interest rates, and exchange rates are not included, even though they could plausibly influence firm performance. Future research could address these limitations by using larger and more diverse samples, incorporating multiple performance measures, and including broader firm-specific and macroeconomic variables to enhance the depth and generalizability of findings.

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