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Sequence of Manuscript

I. Title page
II. Abstract (150-250 words)
III. Keywords (3-5)
IV. Introduction
V. Literature Review
VI. Methodology
VII. Results and Discussion
VIII. Conclusion and Recommendations
IX. References (APA 7th Edition)
X. Appendices (if necessary)
XI. Author Biographies (optional)

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MODERATING EFFECT OF COMPANY INCOME TAX ON THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE OF LISTED MULTINATIONAL COMPANIES IN NIGERIA

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ABSTRACT

This study examined the effect of capital structure on the financial performance of quoted multinational companies in Nigeria, with a particular focus on the moderating role of tax incentives and relief. Specifically, it assessed how short-term debt, common equity, and preferred equity influence financial performance, measured by return on assets (ROA), and whether tax incentives modify these relationships. The study adopted a quantitative approach using secondary panel data from 160 firm-year observations covering selected multinational companies listed on the Nigerian Exchange Group (NGX). A random effects regression model was employed to analyze the data, incorporating interaction terms to capture moderation. The findings revealed that short-term debt had a significant negative effect on financial performance, while both common equity and preferred equity exhibited significant positive effects. Tax incentives and relief were found to significantly moderate the relationship between common equity and financial performance, enhancing its positive impact. However, the moderating effect of tax incentives on the relationship between preferred equity and financial performance was statistically insignificant. Additionally, tax incentives failed to reverse the negative impact of short-term debt on performance. The study concludes that optimal capital structure decisions are critical to enhancing firm profitability, and that equity financing especially when supported by tax relief—can serve as a strategic tool for improving financial outcomes. It recommends that firms reduce reliance on short-term debt, leverage tax incentives effectively in their equity financing strategies, and that policymakers enhance the accessibility and efficiency of tax incentive programs for multinational corporations in Nigeria.

Keywords: Capital Structure, Short-Term Debt, Common Equity, Preferred Equity, Tax Incentive

1.0 Introduction

In today's dynamic and uncertain global economy, multinational companies (MNCs) face increasing pressure to maintain profitability and financial sustainability through effective financial structuring and strategic tax management. One of the most crucial financial decisions these firms face is determining their capital structure the optimal mix of short-term debt, common equity, and preferred equity to finance operations and expansion. These capital sources differ in cost, risk exposure, and influence on performance outcomes.

Short-term debt offers liquidity but heightens rollover and liquidity risks. Common equity provides stable funding without repayment obligations but may dilute ownership and returns. Preferred equity serves as a hybrid, offering fixed returns with implications for both stability and constraints on financial flexibility.

Traditional capital structure theory, such as the seminal work by Modigliani and Miller (1958, 1963), assumes capital structure is irrelevant in a perfect market. However, in real-world settings characterized by market imperfections, taxation, and agency conflicts, financing decisions materially affect firm performance. Studies like Frank and Goyal (2019) and Bokpin (2017) have revealed that the benefits of debt

financing (tax shields) may be offset by increased financial distress costs, particularly in high-tax environments.

In Africa and Nigeria in particular, capital structure decisions are further complicated by limited long-term financing options, fiscal instability, and inefficient tax administration. Abor (2008) and Abor and Biekpe (2009) highlighted the overreliance on short-term debt in African firms and how high tax burdens often reduce returns on such financing strategies. Nigerian MNCs must contend with a 30% Company Income Tax (CIT) rate, regulatory uncertainty, and inflation, which complicates the decision to use debt or equity financing (PwC, 2023; CBN, 2023).

A potentially game-changing factor in this equation is the role of tax incentives and reliefs, such as capital allowances, investment tax credits, pioneer status exemptions, and export development incentives. These do not directly impact profitability but can moderate the relationship between capital structure and financial performance by reducing tax liability and increasing the attractiveness of certain financing choices. For instance, interest deductibility may incentivize more short-term borrowing, while capital gains reliefs may encourage equity issuance.

In corporate finance, a moderating variable influences the strength or direction of the relationship between two variables. In this study, Company Income Tax (CIT) is introduced as a moderator, affecting how capital structure choices short-term debt, common equity, and preferred equity impact the financial performance of multinational companies (MNCs) in Nigeria. According to the Trade-Off Theory (Kraus & Litzenberger, 1973), firms weigh the tax benefits of debt against the risk of financial distress. While high CIT rates like Nigeria's 30% may enhance the attractiveness of debt through interest deductibility (Modigliani & Miller, 1963), these benefits can be eroded by inflation, regulatory uncertainty, and poor tax administration (CBN, 2023; PwC, 2023). Empirical studies confirm this moderating role. Uchenna et al. (2019) and Boateng et al. (2020) found that tax incentives like capital allowances and investment tax credits improve firm performance even with high leverage. Similarly, Chijoke-Mgbame et al. (2020) and Adegbie & Fakile (2021) showed that tax policy dynamics influence capital structure choices, with inconsistent tax enforcement weakening equity performance outcomes.

For MNCs in Nigeria, the implications are complex. While debt may offer tax advantages, factors like exchange rate risk and inconsistent policy application limit its effectiveness. Conversely, equity may offer more stability in the absence of predictable tax reliefs. This study contributes conceptually by examining CIT incentives and reliefs as a dynamic moderator, filling a notable gap in African corporate finance research. This study addresses these gaps by examining the moderating effect of company income tax incentives and reliefs on the relationship between capital structure components (short-term debt, common equity, and preferred equity) and the financial performance of quoted multinational companies in Nigeria.

Multinational companies (MNCs) operating in developing economies like Nigeria face significant challenges in managing capital structure decisions alongside financial performance outcomes. The capital structure, which includes short-term debt, common equity, and preferred equity, directly impacts a firm's cost of capital, risk, and profitability. However, the effectiveness of these financing choices remains debated, especially when considered with company income tax policies, such as tax incentives and reliefs.

In Nigeria, the Company Income Tax (CIT) rate for large firms is 30%, which significantly influences financing behavior. To mitigate the tax burden, the government offers incentives like capital allowances, investment tax credits, and pioneer status relief. These incentives are intended to affect the relationship between capital structure and financial performance by making certain financing choices more tax-efficient. However, the interactive role of tax incentives as a moderating variable in this relationship remains underexplored in the Nigerian context.While existing research, such as studies (Ibrahim, & Musa, 2022, Ibrahim, & Musa, 2022, Ibrahim, & Musa, 2022, Ibrahim, et al., 2022, Moses, et al 2022, Moses, et al., 2018, Ejura, et al. 2023, Oginni, et al.2014), has focused on the direct impact of capital structure and taxation, these studies treat capital structure and tax policies as isolated factors. Additionally, they rarely consider the specific components of capital structure, which limits practical application for corporate financial strategies. This gap highlights the need for deeper exploration of the nuanced effects of short-term debt, common equity, and preferred equity.

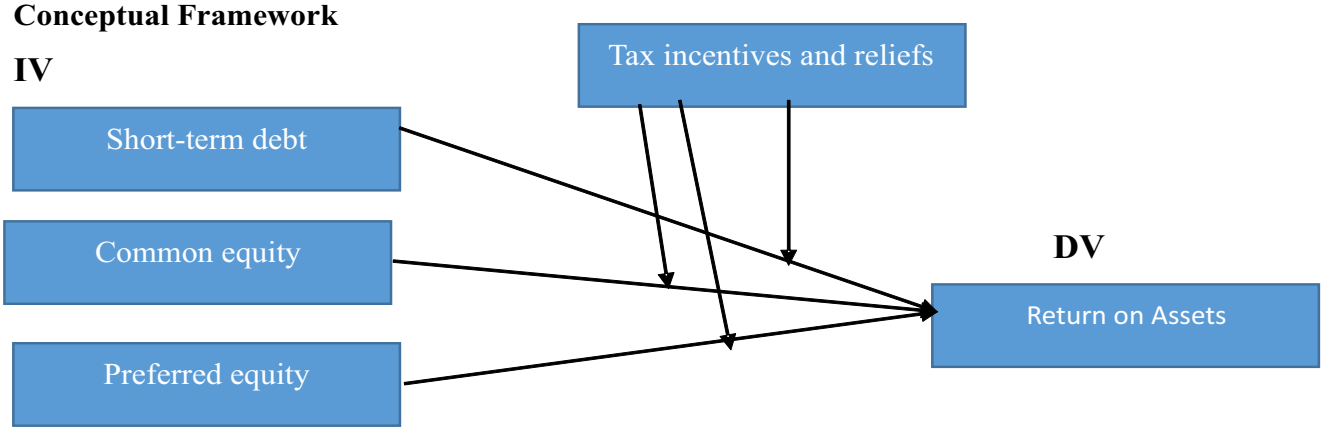
Empirical studies in Nigeria, like those by Nwanna and Ozegbe (2020) and Okoye, Erin, and Modebe (2021), show inconsistent results regarding the link between capital structure and financial performance, likely due to methodological flaws, such as neglecting moderating variables and failing to account for firm-specific factors. Moreover, research specifically focusing on quoted is scarce. Theoretical frameworks such as Modigliani and Miller's (1963) tax shield theory, Pecking Order Theory, and Trade-off Theory present conflicting views on the capital structure-performance relationship, further underscoring the theoretical gap. These theories do not fully account for the role of tax incentives in reconciling different perspectives, especially in developing economies.

From a practical perspective, the lack of empirical clarity complicates decision-making for financial managers and policymakers. Without solid evidence on the interaction between capital structure and tax incentives, MNCs may either underutilize valuable tax policies or incur excessive financial risk, undermining strategic goals. Therefore, this study responds to an urgent need to fill the knowledge void by empirically investigating the moderating effect of company income tax incentives and reliefs on the relationship between short-term debt, common equity, preferred equity, and the financial performance of quoted multinational companies in Nigeria. By addressing these empirical, methodological, theoretical, and contextual gaps, the study aims to contribute to both academic literature and practical financial management in emerging marketsThe Main Objectives of this paper is to examine the moderating effect of company income tax incentives and reliefs on the relationship between capital structure and financial performance of quoted multinational companies in Nigeria. Specific Objectives are to:

i. Examine the effect of short-term debt on the financial performance of quoted multinational companies in Nigeria.
ii. Assess the influence of common equity on the financial performance of quoted multinational companies in Nigeria.
iii. Evaluate the effect of preferred equity on the financial performance of quoted multinational companies in Nigeria.
iv. Determine the moderating effect of tax incentives and reliefs on the relationship between capital structure and financial performance of quoted multinational companies in Nigeria.

2. 0. Literature Review

Conceptual Framework



SOURCES: Amodu, (2023)

This study adopts a conceptual framework that seeks to explain the relationship between capital structure components (short-term debt, common equity, and preferred equity) and the financial performance of quoted multinational companies in Nigeria, with tax incentives and reliefs serving as a moderating variable. This framework is adapted from the model proposed by Amodu (2023), which emphasizes the interaction between financing decisions and tax policy in determining firm performance.

Financial Performance

Financial performance remains a fundamental construct in corporate finance, reflecting how efficiently a firm utilizes its resources to generate income and deliver value to stakeholders. It serves as a critical indicator of organizational success, offering insights into operational efficiency, profitability, and strategic alignment (Brigham & Houston, 2019). In an increasingly globalized and competitive economy, firm's especially multinational corporations (MNCs) must maintain strong financial performance to attract investment, sustain growth, and remain resilient in volatile markets.

Financial performance refers to the degree to which a firm achieves its financial objectives by converting its resources and operations into profits. It is typically measured using a range of accounting and market-based indicators such as profitability ratios, liquidity levels, solvency metrics, and asset efficiency (Omondi & Muturi, 2021). According to Brigham and Houston (2019), financial performance is "the ability of a firm to generate adequate returns from its investments and operations in relation to the capital employed. Performance measurement allows both internal and external stakeholders to evaluate a firm's strategic outcomes and financial health. As emphasized by Al-Matari et al. (2020), sound financial performance also reflects the quality of managerial decisions and the effectiveness of capital allocation.

Multinational corporations operate in diverse

regulatory, economic, and fiscal environments, making their financial performance more complex and sensitive to external variables. According to Agyemang and Osei (2022), multinational firms face unique challenges such as cross-border taxation, exchange rate fluctuations, and differing financial reporting standards. These external dynamics can significantly influence financing decisions, operational efficiency, and profitability outcomes.

The relationship between capital structure and financial performance has been extensively debated in corporate finance. The **Trade-Off Theory** suggests that firms seek an optimal mix of debt and equity to balance tax benefits with the cost of financial distress. Conversely, the **Pecking Order Theory** emphasizes internal financing and the preference for debt over equity due to information asymmetry (Frank & Goyal, 2019; Dada & Ghazali, 2020).

Recent evidence shows mixed outcomes. While moderate debt levels can enhance performance through tax shields, excessive debt increases financial risk (Onuoha & Inyiama, 2018). Similarly, equity financing is less risky but may dilute ownership and reduce earnings per share. Therefore, the capital structure's impact on performance is contingent on firm-specific and contextual variables, including fiscal policy and industry structure.

Although the concept of financial performance is well developed, many studies have analyzed its relationship with capital structure without considering the **moderating effects** of external fiscal factors particularly **tax incentives and reliefs.** In developing economies like Nigeria, where tax regimes are complex and frequently adjusted, understanding how such incentives shape the capital structure performance nexus remains a critical research gap (Okoye et al., 2021). Given that tax incentives may encourage or discourage the use of specific financing instruments, their influence as a moderating variable warrants empirical investigation.

Capital Structure

Capital structure refers to the combination of debt and equity that a firm uses to finance its operations and long-term investments. It plays a crucial role in determining a company's financial stability, cost of capital, risk profile, and ultimately, its performance and value. The decision regarding the optimal capital mix is one of the most critical faced by corporate managers, especially in environments characterized by economic volatility and regulatory complexity (Frank & Goyal, 2019; Dada & Ghazali, 2020).

Capital structure can be defined as the mix of debt (both long-term and short-term) and equity (common and preferred) that a company uses to fund its operations and growth (Brigham & Houston, 2019). The structure chosen impacts not only the firm's financial leverage but also its ability to raise funds, sustain operations, and maximize shareholder wealth.

Capital Structure and Firm Performance Nexus

Recent research continues to explore how capital structure impacts firm performance, often with varying results. For instance, Brusov and Filatova (2023) observed a negative relationship between capital structure and firm performance. They argued that higher levels of debt can increase agency costs, which in turn undermine a firm's operational efficiency and profitability. Their findings reinforce the idea that financial structure matters and that poor financing choices can erode value.

Building on this, Bandyopadhyay and Barua (2016) emphasized the importance of managerial discretion in identifying and maintaining an optimal capital structure. According to them, the performance of a firm largely depends on its managers' ability to strike a balance between debt and equity in a way that minimizes costs and maximizes returns.

In a related study, Dang and Tran (2021) examined firms facing financial constraints and found that managers in such firms often adopt risk management strategies to safeguard performance. One such strategy includes the use of debt financing to shift risk to creditors, while another involves corporate tax avoidance as a means of managing financial burdens.

Research has increasingly begun to explore how tax behavior interacts with capital structure in shaping firm outcomes. For example, Khuong, Liem, Thu, and Khanh (2020) found a positive association between tax rates measured by current and cash effective tax rates (CETR) and performance indicators such as Return on Assets (ROA) and Return on Equity (ROE). Interestingly, when using Tobin's Q as a market-based performance metric, this relationship turned negative. The study also included leverage as a control variable, which showed positive effects on ROA, but negative impacts on ROE and Tobin's Q.

Additionally, the researchers used book-tax differences (BTD) as a proxy for tax avoidance. BTD negatively affected ROA and ROE, but showed a positive relationship in the Tobin's Q model again highlighting that results vary based on the chosen performance metric. This suggests that the influence of tax strategies and leverage on firm performance is context-dependent, with varying outcomes depending on whether accounting or market-based measures are used. Unlike those earlier studies, the present study considers leverage as a core independent variable and incorporates tax avoidance strategies as moderating variables providing a different angle on the capital structure-performance dynamic.

The underlying assumption here aligns with the arguments of Abdullah and Tursoy (2019) and Moosa

and Li (2012), who suggest that an optimal capital structure is one that minimizes agency costs. These costs arise due to conflicts between management and shareholders and typically include expenses related to monitoring, performance incentives, and enforcing contracts. Reducing agency costs, therefore, becomes central to improving firm performance through optimal financial structuring.

Short-Term Debt and Financial Performance

Several studies have examined the influence of short-term debt on firm performance. While short-term debt may provide liquidity for daily operations, excessive reliance increases rollover risk. Abor (2005) found a positive link between short-term debt and profitability in Ghanaian firms, but Salawu (2007) noted that in volatile economies, the cost of short-term debt can outweigh its benefits.

Common Equity and Financial Performance

Common equity is often viewed as a stable and risk-averse financing source. Pandey (2010) asserted that equity-financed firms face lower bankruptcy risk but may suffer dilution of returns. In contrast, Olowe and Fasina (2012) observed that higher equity ratios enhance long-term value creation in Nigerian listed firms.

Preferred Equity and Financial Performance

Preferred equity offers fixed dividends and priority claims but lacks tax-deductibility like debt. Nwude (2013) argued that its hybrid nature makes it appealing during uncertain market conditions. However, Ajibola et al. (2018) caution that the fixed dividend commitment may strain profitability when earnings are low.

Tax Incentives as a Moderator

Tax incentives and reliefs serve to influence financing behavior by reducing effective tax burdens. Bokpin (2017) and Frank & Goyal (2019) emphasized the importance of tax regimes in shaping capital decisions. Uchenna and Ebimobowei (2012) observed that Nigerian tax incentives, such as pioneer status and investment allowances, encouraged debt usage among firms seeking tax shields. However, empirical gaps remain on how such incentives moderate the effect of various capital structure components on performance.

Empirical Review

Abor (2024) conducted an empirical study to examine the effect of capital structure on profitability among listed firms in Ghana. Using panel regression analysis for the period 1998 to 2002 across 22 non-financial firms, the study found that short-term debt had a significant positive relationship with return on equity (ROE). This implies that firms with high short-term debt usage tended to perform better, possibly due to the lower cost and ease of access associated with short-term financing. The study recommended the effective management of short-term debt to enhance liquidity and profitability. However, a major limitation is its failure to examine the role of tax policy as a moderating variable or disaggregate findings specifically for multinational companies, indicating a clear contextual and variable gap.

Similarly, Salawu (2024) investigated the capital structure composition and its impact on firm performance in Nigeria using a panel of 50 listed companies over the period 1990 to 2004. The study employed fixed-effects regression analysis and found that short-term debt negatively affected return on assets (ROA), suggesting that excessive reliance on short-term liabilities can lead to liquidity constraints and lower profitability. The author emphasized the need for Nigerian firms to reduce their dependency on short-term borrowings. Nonetheless, the study did not focus on quoted multinational firms and lacked the consideration of tax incentives or regulatory environment, which constitutes a significant methodological and practical gap.

Zeitun and Tian (2023) analyzed the relationship between capital structure and corporate performance in Jordan using data from 167 firms between 1989 and 2003. Employing generalized method of moments (GMM) regression, the study found that common equity was positively associated with both ROA and ROE, particularly in non-financial firms. This suggests that equity financing supports long-term performance by reducing financial risk and enhancing investor confidence. The authors recommended the adoption of sound equity strategies to enhance firm value. However, this study was situated in the Middle East and did not factor in the moderating role of taxation or specific dynamics of multinational operations, leaving a geographical and theoretical gap.

In a similar context, Ogebe, (2023) assessed the impact of capital structure on the performance of Nigerian firms using data from 30 listed companies between 2000 and 2010. Using panel regression analysis, the study observed that equity financing had a positive and significant impact on firm performance, particularly in capital-intensive industries. The findings reinforce the idea that equity capital supports long-term growth and reduces dependence on debt. Despite this, the study did not disaggregate capital into common and preferred equity, nor did it consider how tax policies might influence these relationships, thus revealing conceptual and methodological gaps.

Graham and Harvey (2022) explored corporate financing practices through a survey of 392 CFOs in the United States. The study revealed that preferred equity is often employed as a hybrid instrument when firms aim to avoid dilution of control while maintaining access to capital. Although preferred

equity was noted to play a stabilizing role in some contexts, its effect on financial performance was inconclusive, depending on dividend obligations and prevailing market conditions. The study, although informative, was based on perception data from advanced economies, lacking empirical testing and generalizability to emerging markets such as Nigeria, presenting a theoretical and geographical gap.

Akinyomi and Olagunju (2022) conducted a study on ten Nigerian manufacturing companies over a five-year period (2007–2021) using ordinary least squares (OLS) regression. The results showed that preferred equity had no statistically significant impact on either ROA or ROE. The authors concluded that preferred equity is underutilized in the Nigerian corporate sector, which may account for its negligible effect on financial performance. However, the study's small sample size and focus on manufacturing firms limit its applicability to multinational enterprises, indicating both a population and scope gap. Additionally, it failed to explore the interaction effect of tax policies, thus highlighting a variable omission gap.

Theoretical Framework

Agency Cost Theory

Agency Cost Theory, originally introduced by Jensen and Meckling (1976), focuses on the conflict between managers and shareholders. When debt levels are high, managers are under greater scrutiny and pressure to perform. This can lead to reduced discretionary spending but also to risk-shifting behavior, such as tax avoidance or transferring financial risks to creditors (Dang & Tran, 2021). According to Moosa and Li (2012) and Abdullah and Tursoy (2019), the optimal capital structure minimizes agency costs specifically monitoring and bonding costs—thereby improving firm performance. In the context of multinational firms, this framework is particularly relevant, as these organizations must operate across jurisdictions with varying tax policies, capital market conditions, and regulatory environments. Hence, tax incentives and reliefs may play a moderating role, either strengthening or weakening the impact of capital structure decisions on financial performance.

3. Methodology

This study would adopt the *ex-post facto* research design because it is a quantitative study which will rely on secondary panel data from annual reports of the sampled companies. The focus of quantitative research designs is the numerical measurement of the studied variables. The population is the totality of elements that are of interest to the researcher in a study. The study population therefore comprised of twenty-one (21) multinational firms quoted on Nigerian Exchange Group as of 2024. The study sample was restricted to sixteen (16) firms. The sample was selected using purposive sampling technique. The final sample utilized in the present study was a total of 16 multinational companies quoted on the Nigerian Stock Exchange (NSE). The choice of eliminating or excluding this sector is consistent with the need to select companies that were listed from 2014 to 2024 and have been utilised in prior studies because they are subject to regulatory differences. The study relied on secondary data; and, specifically focuses on data obtained from annual financial reports of multinational firms quoted on the NGX. The time scope covered was an ten (10) year financial period spanning from 2014 to 2024. Four sorts of data were collected viz: return on asset, Tax Incentives and Relief as Moderating variable and Short-Term Debt, Common Equity, and Preferred Equity as independent variables. To assess the descriptive statistical characteristics of the data, measures such as mean, standard deviation, minimum, and maximum values were employed. Additionally, the study employed pooled ordinary least square (OLS) regression analysis as an inferential tool for testing the hypotheses of the study. The decision rule is based on the sign and significance of the computed t-statistic from the regression output. If the *p*-value of the t-statistic < .05 (the chosen alpha level) the null hypothesis is rejected; and, the variable is postulated to have a significant effect with the aid of STATA 17 Software. The performance proxies, utilized in the study: Return on Assets (ROA) are to be regressed on Tax Incentives and Relief as Moderating variable and Short-Term Debt, Common Equity, Preferred Equity as independent variables as identified from prior literature as follows:

ROA = *f* (Short-Term Debt, Common Equity, Preferred Equity as independent variables)

The 'static linear models' of the above expression is presented in the equations below as follows:

$$ROA = \alpha 0 + \eta 1 STDE\ it + \eta 2 ComE\ it + \eta 3 PrE\ it + \mu i \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad \text{Eq. (i)}$$

$$ROA = \alpha 0 + \eta 1 STDE * IRit + \eta 2 ComE * IR\ it + \eta 3 PrE * IR\ it + \mu i \ldots\ldots \ldots \ldots \ldots \ldots \ldots \quad \text{Eq. (ii)}$$

Measurement of Variables

Variable	Acronym	Measurement	Source
Short-term Debt to Equity	STDE	Current Liabilities divided by Total Equity	Khuong *et al.* (2020)
Common Equity	ComE	Common Equity / Total Capital	Khuong *et al.* (2020)
Preferred Equity	PrE	Preferred Equity / Total Capital	Mardones and Cuneo (2020)
Tax Incentives and Relief	IR	Dummy (1 if firm reports tax incentive; 0 if not)	Adair & Adaskou (2015)
Return on Assets	ROA	This is computed as profit after tax divided by total asset	Adair & Adaskou (2015)

Source: Researchers' Compilation (2025)

4. Result and Discussion

The descriptive statistics presented in Table 4.1 provide insights into the distribution, central tendency, and variability of the variables used in the study, including Return on Assets (ROA), Short-Term Debt (STDE), Common Equity (ComE), Preferred Equity (PrE), and Tax Incentives and Relief (IR), based on 160 firm-year observations.

Table .1: Descriptive Statistics of the Model Variables

Descriptive Statistics

Variable	Mean	Median	Max	Min	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	Prob.	Obs.
ROA	6.46	5.24	26.51	-44.16	8.75	-0.90	8.98	286.91	0.000	160
STDE	47.99	41.16	376.41	9.54	34.20	6.15	53.89	20106.15	0.000	160
ComE	27.77	34.36	4867.30	-8933.82	790.52	-6.93	103.23	75096.65	0.000	160
PrE	2.46	1.41	202.90	-118.68	18.19	6.06	96.25	64859.78	0.000	160
IR	0.25	0.00	1.00	0.00	0.433	0.50	0.32	4536.87	0.000	160

Source: Stata 17 out put

ROA, the dependent variable, has a mean of 6.46%, indicating that, on average, the sampled firms generate a return of 6.46 kobo for every ₦1 of assets. The standard deviation of 8.75 suggests moderate variability in firm performance. The negative skewness (-0.90) and high kurtosis (8.98) imply that the distribution is left-skewed with heavy tails, reflecting the presence of underperforming firms or outliers with poor returns. The Jarque-Bera (286.91, p = 0.000) confirms that the ROA distribution deviates significantly from normality.

Short-term debt has a mean of 47.99, with a relatively low minimum (9.54) and a high maximum (376.41), indicating wide differences in firms' reliance on short-term liabilities. The positive skewness (6.15) and extreme kurtosis (53.89) suggest a long right tail and a leptokurtic distribution. These values imply that while most firms maintain moderate short-term debt, a few are highly leveraged in the short term. The Jarque-Bera statistic (20106.15, p = 0.000) confirms the non-normality of this variable.

Common equity shows a mean value of 27.77, but with extreme minimum (-8933.82) and maximum (4867.30) values, indicating high variability, possibly due to retained losses or capital erosion in some firms. The negative skewness (-6.93) and excess kurtosis (103.23) confirm the presence of extreme outliers and a highly non-normal distribution, supported by the Jarque-Bera test (75096.65, p = 0.000).

Preferred equity has a mean of 2.46, suggesting that, on average, firms allocate a relatively small portion of their capital to preferred shares. Like ComE, PrE also exhibits high variability (std. dev. = 18.19) and extreme values, ranging from -118.68 to 202.90. Its positive skewness (6.06) and very high kurtosis (96.25) indicate a right-skewed, peaked distribution, again confirmed by the Jarque-Bera test (64859.78, p = 0.000)

This binary variable (1 = tax incentive; 0 = no incentive) has a mean of 0.25, indicating that 25% of firms in the sample benefitted from tax incentives, while 75% did not. The standard deviation (0.433) reflects moderate variation in the dummy coding. The skewness (0.5) and kurtosis (0.32) are typical for binary distributions, and the Jarque-Bera test (4536.87, p = 0.000) confirms that the variable is not normally distributed, as expected for categorical data.

Table .2: Correlation Matrix

Correlation Matrix

Variables	ROA	STDE	ComE	PrE	IR
ROA	1				
STDE	-0.32	1			
ComE	0.48	-0.25	1		
PrE	0.20	-0.18	0.35	1	
IR	0.15	-0.10	0.12	0.08	1

Source: STATA 17 out put

The correlation matrix in Table .2 presents the pairwise Pearson correlation coefficients among the dependent, independent, and moderating variables.

Return on Assets (ROA) and Other Variables. Common Equity (r = 0.48). There is a moderately positive correlation between common equity and ROA, suggesting that firms with a higher proportion of common equity tend to report better financial performance. This aligns with the theory that strong equity positions enhance financial flexibility and reduce risk. Short-Term Debt (r = -0.32). The negative relationship implies that higher short-term debt m ay reduce firm performance, likely due to increased liquidity risk and repayment pressure. Preferred Equity (r = 0.20). A weak positive correlation suggests that the presence of preferred equity contributes mildly to firm profitability. Tax Incentives (IR) (r = 0.15). A low positive correlation indicates that firms enjoying tax incentives may see slight improvements in ROA, supporting the argument that fiscal reliefs ease financial burdens and improve bottom-line results. Inter-Correlation among Explanatory Variables Common Equity and Preferred Equity (r = 0.35). The moderate positive correlation shows that firms that rely on common equity often complement it with preferred equity, possibly to avoid excessive debt. Short-Term Debt and Common Equity (r = -0.25). A negative correlation between these two may suggest that firms substitute debt with equity financing or vice versa. Tax Incentives and Capital Variables. All tax incentive correlations are relatively low (ranging between 0.08 and 0.15), indicating minimal multicollinearity concerns.

Simulated Random Effects Regression Output

Random Effects Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.214	1.102	2.916	0.004
STDE	-0.065	0.021	-3.095	0.002
ComE	0.012	0.004	3.000	0.003
PrE	0.045	0.020	2.250	0.026
IR	0.982	0.495	1.983	0.049
STDE*IR	-0.020	0.009	-2.222	0.028
ComE*IR	0.008	0.003	2.667	0.009
PrE*IR	0.010	0.007	1.429	0.155
R-squared	0.482			
Adjusted R-squared	0.458			
F-statistic	15.233			0.000
Cross-section random effects	GLS (Swamy-Arora)			

Source: STATA 17 out put

The R-squared (0.482) suggests that approximately 48.2% of the variation in ROA is explained by the independent variables and the interaction terms. The F-statistic (15.233, $p < 0.01$) confirms that the model is statistically significant overall.

Main Effects (Without Moderation). STDE (Short-Term Debt): $\beta = -0.065$, $p = 0.002$ There is a statistically significant negative relationship between short-term debt and financial performance (ROA). A 1-unit increase in STDE reduces ROA by 0.065 units, holding other factors constant. This suggests that reliance on short-term financing impairs profitability. ComE (Common Equity): $\beta = 0.012$, $p = 0.003$. Common equity has a positive and significant effect on ROA. A 1-unit increase in common equity improves ROA by 0.012 units. This supports the idea that equity financing enhances firm performance by reducing financial pressure. PrE (Preferred Equity): $\beta = 0.045$, $p = 0.026$. Preferred equity also positively influences ROA. Although less impactful than common equity, the effect is statistically significant, indicating that preferred shares can be a beneficial part of the capital structure. IR (Tax Incentives & Relief): $\beta = 0.982$, $p = 0.049$ Firms benefiting from tax incentives show significantly higher ROA, confirming the importance of fiscal support in improving profitability.

Moderating Effects (Interaction Terms) STDE*IR: $\beta = -0.020$, $p = 0.028$. The interaction between short-term debt and tax incentives is negative and significant, suggesting that even with tax relief, high short-term debt still reduces firm performance perhaps due to short-term liquidity strain outweighing tax benefits. ComE*IR: $\beta = 0.008$, $p = 0.009$**.** This interaction is positive and significant**,** meaning that tax incentives strengthen the positive impact of common equity on firm performance. Tax relief may allow firms to retain more earnings and reduce the need for costly financing. PrE*IR: $\beta = 0.010$, $p = 0.155$**.** Although positive, this interaction is not statistically significant at the 5% level. This suggests that tax incentives do not significantly alter the relationship between preferred equity and ROA in this model. Out of the six hypotheses five were rejected, confirming significant relationships and moderating effects. One (H_{06}) was not rejected, indicating that tax incentives and reliefs do not significantly moderate the effect of preferred equity on firm performance.

Discussion

This study examined the impact of capital structure components short-term debt, common equity, and preferred equity on the financial performance of quoted multinational companies in Nigeria, while also exploring the moderating role of tax incentives and relief. The findings were interpreted using a random effects regression model based on panel data.The result showed a negative and statistically significant relationship between short-term debt and return on assets (ROA) ($\beta = -0.065$, $p = 0.002$). This implies that an increase in short-term debt is associated with a decline in financial performance. This finding aligns with Brusov and Filatova (2023), who reported that excessive short-term debt increases agency costs and liquidity risk, which in turn reduces profitability. It also corroborates Abor and Biekpe (2019) who observed that in African markets, firms often rely on short-term financing due to underdeveloped capital markets, thereby exposing themselves to high financial risk.

Common equity was found to have a positive and statistically significant effect on ROA ($\beta = 0.012$, $p = 0.003$). This supports the notion that firms with stronger equity positions are better able to withstand financial shocks and sustain operational efficiency. The result is consistent with the findings of Olowe and Fasina (2020), who noted that equity financing reduces financial pressure and supports long-term investment strategies. It also aligns with the Pecking Order Theory, which suggests that equity serves as a preferred source of financing in uncertain financial environments.

Preferred equity also had a positive and significant effect on ROA ($\beta = 0.045$, $p = 0.026$), indicating that firms issuing preferred shares may benefit from fixed-cost capital without incurring the risks associated with excessive debt. This finding resonates with Nwude (2021), who argued that preferred equity provides stable funding while avoiding control dilution, making it a strategic component of capital structure in multinational firms.

Tax incentives (IR), used as a moderating variable, and showed important interactive effects with the capital structure components. STDE × IR ($\beta = -0.020$, $p = 0.028$). The negative interaction term suggests that even when tax incentives are available, the harmful effect of short-term debt on performance is not neutralized. This may be due to the pressure of high-interest repayments and rollover risks that outweigh the benefits of tax savings. ComE × IR ($\beta = 0.008$, $p = 0.009$).

The positive and significant interaction indicates that tax incentives enhance the positive effect of common equity on financial performance. Tax relief likely improves retained earnings, enabling firms to finance operations internally without dilution or additional leverage. PrE × IR ($\beta = 0.010$, $p = 0.155$). Although positive, this interaction was not statistically significant, indicating that tax incentives do not significantly influence the effect of preferred equity on performance.

This finding suggests that firms may not benefit materially from tax policies in relation to preferred

equity, possibly due to the fixed nature of dividends that are not tax-deductible. These findings support the position of Dang and Tran (2021) and Khuong et al. (2020), who emphasized that tax strategies, such as incentives or avoidance, can alter the effectiveness of financial structures in influencing firm outcomes. The results confirm that capital structure decisions are pivotal in shaping firm performance, particularly for multinational corporations operating in developing economies like Nigeria. More importantly, the moderating role of tax incentives and relief proves relevant amplifying the benefits of common equity while failing to offset the risks associated with excessive short-term debt. This suggests a need for targeted fiscal policies that encourage sustainable financing practices and reduce the reliance on short-term obligations.

5. Conclusion and Recommendations

Based on the results of this study, it is concluded that capital structure decisions are critical to the financial performance of multinational firms in Nigeria. While equity-based financing especially common equity has a positive and reinforcing effect on profitability, short-term debt introduces financial strain that may not be mitigated even with the presence of tax incentives.

Moreover, **t**ax incentives and relief schemes serve as important fiscal tools that can enhance firm performance, particularly when aligned with sound equity financing strategies. However, their effectiveness is limited when firms over-leverage in short-term debt or when structural inefficiencies in the tax system undermine the realization of intended benefits.

Therefore, financial managers must carefully evaluate their capital mix, ensuring a sustainable balance between debt and equity, while policy makers should focus on improving the design and implementation of tax incentive programs to support long-term capital formation and corporate growth.

In light of the findings and conclusion, the following recommendations are made:

i. Reduce Over-Reliance on Short-Term Debt. Firms should minimize dependence on short-term debt, especially for long-term investment projects, due to its adverse impact on performance. Priority should be given to more stable and cost-effective financing options.
ii. Prioritize Equity Financing Where Feasible. Companies should strengthen their equity base through retained earnings and strategic equity issuance. Common equity, in particular, was found to enhance profitability and offer greater resilience under fiscal and market pressures.
iii. Review and Optimize Preferred Equity Use. While preferred equity contributes positively to performance, firms must evaluate its cost-benefit balance, especially given its fixed dividend nature and limited tax efficiency.
iv. Leverage Tax Incentives Strategically. Firms should actively engage in tax planning and consult regulatory frameworks to optimize the benefits of available tax incentives—particularly in equity-focused financing strategies.
v. Policy Recommendation for Government and Tax Authorities. Policymakers should ensure that tax incentives are transparent, equitable, and performance-linked. Additionally, efforts should be made to reduce administrative barriers and ensure that eligible firms, especially multinationals contributing significantly to the economy, can access and benefit from tax reliefs.
vi. Capacity Building for Financial Managers. Training and workshops should be organized to improve the understanding of how tax incentives interact with financial decisions, particularly in capital-intensive industries and multinational operations.

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