Capital Structure And Earnings Per Share: An Empirical Analysis Of Selected Companies Listed On The Nigerian Exchange Group

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Abstract
Focussing on the moderating influence of company size, this study analyses the implication of capital structure on earnings per share (EPS) for a subset of businesses listed on the Nigeria Exchange Group. The research examines data from fifteen publicly listed food and drink firms over a certain time frame using a random effects model. According to the results, some parts of the capital structure, like LDTA and EQTA, significantly boost earnings per share (EPS), while others, like TPTA, have the opposite effect. Including company size as a moderating variable significantly improves the model's explanatory power. The modified R-squared value goes up from 7.5% to 55.8%. Firm-specific features heavily influence capital structure decisions and their influence on financial viability. Firm size should be a major aspect in financing decisions, according to the report, since larger organisations are better able to optimise their capital structure to boost profitability. Corporate managers, lawmakers, and investors can benefit from the study's new findings, which add to the current literature by demonstrating how business size affects the correlation between capital structure and profitability.
Keywords: *Capital Structure Earnings Per Share Long-termDebt, Equity Total assets*

I.   Introduction

A company's financial success is heavily impacted by its capital structure, which is the mix of debt and equity used to finance operations. Academics have extensively studied this link, particularly in the context of industrialised economies. However, there is a growing recognition of the need to understand how these dynamics unfold in developing economies like Nigeria, characterized by unique obstacles and opportunities. The food and beverage sector is important in Nigeria because it contributes significantly to the economy. The industry has experienced significant expansion over time, driven by rising population, urbanization, and evolving customer demands. Despite its potential for expansion, enterprises in this industry face various obstacles, such as exorbitant operational expenses, unpredictable currency exchange rates, and an unstable economic climate. These problems have implications for organizations' capital structure decisions, which subsequently affect their financial performance.

The Modigliani-Miller theorem holds that in a perfect market a firm's value is unaffected by its capital structure. Still, many factors influence a company's capital structure and value: taxes, agency expenses, bankruptcy costs, and asymmetric knowledge (Modigliani & Miller, 1958). These traits stand out in the Nigerian setting due to the country's unstable economy, weak financial markets, and overly bureaucratic regulatory structure. Consequently, we expect food and beverage companies in Nigeria to make capital structure choices that differ significantly from those in more advanced economies.

Studies on the financial composition of Nigerian corporations have shown inconsistent findings. According to research, Nigerian companies often depend on borrowing money because it is more expensive to get funds through selling shares (Salawu & Agboola, 2008). The restricted availability of long-term financing alternatives frequently exacerbates the dependence on debt, forcing enterprises to rely on short-term loans with elevated interest rates. According to Akintoye (2008), the high leverage ratios seen in numerous Nigerian enterprises have the potential to raise their financial risk and impact their profitability and overall performance.

Conversely, several experts contend that a moderate amount of debt might improve a firm's viability by offering tax benefits and lowering the cost of capital (Abor, 2005). This view is bolstered by the trade-off concept, which states that businesses consider the pros and cons of debt tax benefits and potential financial issues. In the Nigerian food and beverage industry, where companies frequently operate with narrow profit margins, debt tax benefits could be very advantageous.

Importantly, agency theory (Jensen & Meckling, 1976) highlights the inherent clash of interest between shareholders and lenders, which must be addressed. In the Nigerian setting, where corporate governance processes are frequently deficient, this conflict might result in poor judgements regarding capital structure. Managers may opt for debt instead of equity to prevent the loss of control, even if it is not beneficial for the firm's long-term performance.

Furthermore, the pecking order theory, which posits that organisations prioritise using their own money and only turn to external financing when their internal resources are inadequate, can further elucidate the capital structure decisions made by Nigerian food and beverage enterprises. Due to the expensive nature and challenges involved in obtaining external funding in Nigeria, numerous companies may choose to keep their profits rather than pursue further debt or equity (Myers & Majluf, 1984). The inclination towards using internal funding can influence the growth and expansion strategies of companies, thereby impacting their overall performance.

Both their choices about financing their operations and the external conditions in which they conduct their business determine the viability of food and beverage companies in Nigeria. Excessive leverage can result in heightened financial difficulties, particularly during periods of economic decline, such as the 2016 recession in Nigeria. Enterprises may maximise their performance by reducing the cost of capital and maximising returns to shareholders through a stable blend of debt and equity.

Although capital structure decisions are crucial, there is a scarcity of empirical research that explicitly examines the food and beverage sector in Nigeria. Many previous studies tend to make broad conclusions that apply to other industries, but these conclusions may not adequately reflect the distinct characteristics and difficulties encountered by food and beverage companies. Thus, this research seek to fill that gap by investigating the financial make-up and operational efficiency of Nigerian food and beverage companies. We anticipate that the results will provide significant insights for policymakers, investors, and managers seeking to improve capital structure decisions in this crucial sector of the Nigerian economy.

II. Literature Review And Hypothesis Development

Concept of Capital Structure

Capital structure is an important financial choice since it impacts a firm's risk profile and total cost of capital. According to Modigliani and Miller's 1958 capital structure irrelevance hypothesis, a firm's capital structure has no effect on its value in a perfect market. Factors including taxes, bankruptcy expenses, and agency conflicts make capital structure decisions crucial to a company's financial performance (Myers, 1984).

Standard capital structures consist of equity, debt, or a combination of the two. Equity financing involves issuing shares to raise capital, whereas debt financing involves acquiring funds that require interest repayment. Companies' earnings per share (EPS), risk profile, and return on investment (ROI) are all affected by the mix of debt and equity financing they use (Jensen &Meckling, 1976).

Earnings Per Share (EPS)

Earnings per share (EPS) is a critical indication of a company's financial health. It is determined by dividing the total profit by the number of remaining shares of common stock. Investors frequently employ this metric to evaluate a company's financial health and performance. Net income, the number of outstanding shares, and the capital composition of the business are among the numerous variables that influence earnings per share (EPS) (Ross, Westerfield, & Jaffe, 2013).

Theoretical Perspectives on Capital Structure and EPS

Several theories provide insights into how capital structure decisions impact EPS:

Trade-Off Theory: According to the trade-off principle, businesses need to weigh the benefits of debt, such tax breaks, against the risks, like going bankrupt. The ideal capital structure, as per this theory (Kraus & Litzenberger, 1973), is one in which the marginal benefit of debt is equal to its marginal cost. An early rise in debt can raise earnings per share (EPS) by leveraging tax advantages in this setting. On the other hand, EPS may fall if the expenses of financial turmoil outweigh the advantages beyond a particular point.

Pecking Order Theory: According to Myers and Majluf's (1984), businesses would rather use internal funds like retained earnings than go outside for funding. Companies prefer debt over equity when seeking outside investment because of the former's cheaper issuance costs and the latter's lack of knowledge asymmetry. This theory proposes that highly profitable businesses are more likely to reinvest their retained earnings in the business. However, debt is a viable option for less lucrative businesses; the effect on profits per share of this debt varies from one risk profile to another.

Agency Theory: Disputes between shareholders and management, particularly over choices about capital structure, are the focus of agency theory. Debt, as per Jensen and Meckling (1976), can reduce agency problems by limiting access to surplus capital and forcing management to work more efficiently, which might lead to higher EPS. However, if you have a lot of debt, you could be more likely to have financial problems, which would lower your profits per share (EPS).

Empirical Review
Long-Term Debt to Total Assets (LDTA) and Earnings per Share (EPS)

Many studies have looked at how a company's capital composition and earnings per share (EPS) are affected by long-term debt. The ratio of a company's long-term debt to its total assets, expressed as a percentage, is an important indicator to consider. A common metric for shareholders to gauge a business's worth and profit level is earnings per share (EPS). Researchers take a thorough look at this ratio to see how it affects a business's bottom line. Numerous studies have examined the effects of LDTA on earnings per share (EPS), drawing drastically inconsistent conclusions. According to the trade-off method (Kraus & Litzenberger, 1973), a moderate amount of debt can boost profits by providing tax protections; however, exceeding this limit may result in financial difficulties and a decrease in earnings per share. Empirical evidence contradicts the research conducted on the Nigerian Exchange Group (NXG). There is a positive correlation between long-term debt-to-assets (LDTA) and earnings per share (Abor, 2005; Salawu, 2007; Adeyemi & Oboh, 2011). This implies that companies may be able to generate additional revenue by strategically employing LDTA, particularly for initiatives that require substantial capital. Uremadu, Egbide, Enyi (2012), and Akintoye (2008) discovered no effect, while other research discovered a negative or insignificant one, notably in highly leveraged enterprises where the costs of debt exceed its benefits, resulting in decreased profitability. Additionally, Akinlo (2011) indicates that the inefficiencies in the Nigerian financial markets may result in long-term debt failing to have the anticipated effect on profits per share (EPS). The research demonstrates that the most effective approach to maximising capital structure and increasing shareholder value is to implement meticulous debt management that takes into account both firm-specific and macroeconomic factors. In line with the foregoing, the following hypothesis is formulated:*H₁: Long-Term Debt to Total Assets (LDTA) has no significant impact on the Earnings per Share (EPS) of food and beverage companies listed on the Nigerian Exchange Group.*

Short-Term Debt to Total Assets (SDTA) and Earnings per Share (EPS)

Numerous studies have examined the effect of SDTA on EPS, however the findings have been contradictory. Some studies argue that SDTA positively affects EPS due to the lower borrowing costs and flexibility associated with short-term debt. For instance, A study conducted by Abor (2005) indicated that companies listed on the Ghana Stock Exchange that made good use of short-term loans had higher earnings per share (EPS). A similar study conducted by Gill, Biger, and Mathur (2011) found similar results in the US manufacturing sector, where firms were able to increase their profitability by responding rapidly to changes in the market.

However, other research highlights the risks of high SDTA, including liquidity issues and financial distress, which can negatively impact EPS. The costs and dangers of repeated refinancing were attributed by Akintoye (2008) to the unfavourable association between SDTA and EPS for Nigerian enterprises. Similarly, Salawu (2007) observed that firms with high SDTA underperformed in terms of EPS, especially in unstable financial markets like Nigeria. Akinlo (2011) found an insignificant relationship between SDTA and EPS, suggesting that the effectiveness of short-term debt may depend on factors like industry and firm size. Given these mixed findings, this study hypothesizes that *H₂: Short-term Debt to Total Assets (SDTA) has no significant impact on Earnings per Share (EPS) of food and beverage companies listed on the Nigerian Exchange Group*

Average Debt to Total Assets (ADTA) and Earnings per Share (EPS)

A great deal of research has looked at the consequence of a business's capital composition on its financial viability, specifically how ADTA affects EPS, and the results have been mixed.The ADTA, which stands for the debt-to-assets ratio, affects the cost of capital and financial leverage for a company. According to study by Adeyemi and Oboh (2011) and Abor (2005), there is an affirmative link between ADTA and EPS. This is because modest debt levels increase profitability through tax shielding. These studies suggest that strategically managed debt can lead to higher returns and improved EPS.

Conversely, other studies highlight the risks of high ADTA, particularly in firms with excessive leverage. Financial hardship, declining profitability, and a negative effect on earnings per share (EPS) might result from carrying a large amount of debt, say Akintoye (2008) and Salawu (2007). The pecking order theory also supports this view, emphasizing the risks associated with borrowing.

The effect of debt may be conditional on economic circumstances and firm-specific variables, as other research, like Akinlo (2011), discovered no correlation between ADTA and EPS. Given these mixed findings, the proposed hypothesis is ***H₃: Average Debt to Total Assets (ADTA) has no significant influence on the Earnings per Share (EPS) of food and beverage companies listed on the Nigerian Exchange Group.***

Equity to Total Assets (EQTA) and Earnings per Share (EPS)

Given that EQTA is a measure of a firm's financial health and capital structure, its implication on EPS has been the subject of much empirical studies in the field of finance. The link between EQTA and EPS is complicated and depends on the context; it shows the percentage of a firm's assets that are financed by equity rather than debt.

The advantages of increasing equity levels have been highlighted by research that indicates a positive correlation between EQTA and EPS. Firms with higher EQTA ratios are generally seen as less risky, as they rely less on debt and therefore face lower interest obligations and financial distress risks. This stability can lead to consistent profitability and higher EPS. For instance, Gill, Biger, and Mathur (2011) found that firms with higher EQTA ratios in the manufacturing sector reported stronger EPS, attributing this to the reduced financial risk and greater flexibility in capital management.

Conversely, other studies argue that high EQTA can dilute profitability. Abor (2005) suggests that excessive reliance on equity may limit a firm's ability to leverage tax benefits associated with debt, potentially leading to lower EPS. Akintoye (2008) found that in certain Nigerian firms, a high EQTA ratio was associated with lower EPS, highlighting the trade-off between risk and return. Given these mixed findings, the following hypothesis is proposed: ***H₄: Equity to Total Assets (EQTA) has no significant influence on the Earnings per Share (EPS) of food and beverage companies listed on the Nigerian Exchange Group.***

Total Debt to Total Assets (TDTA) and Earnings per Share (EPS)

There has been a lot of discussion in the financial literature on the correlation between TDTA and EPS, with varying conclusions drawn from various studies. Several studies highlight a negative impact of high TDTA ratios on EPS. For instance, Enekwe, Agu, and Eziedo (2014) found that increased leverage leads to higher interest obligations, which reduce net earnings and, consequently, EPS. Similarly, Olokoyo (2012) observed that excessive reliance on debt in Nigerian firms often results in decreased profitability, as firms struggle to service their debt, thereby negatively impacting EPS.

On the flip side, there are studies that show debt can actually boost earnings per share (EPS) under some scenarios. Companies may increase their profits by making smart use of debt, according to Musa (2019), as interest payments are tax deductible. This view is supported by Umoren and Udo (2015), who argue that moderate leverage can lead to higher EPS by optimizing capital structure. Nonetheless, the overall impact appears context-dependent, influenced by factors such as company size, sector, and economic conditions (Ibhagui & Olokoyo, 2018).In light of the above, we postulate the following: ***H₅:Total Debt to Total Assets (TDTA) has no significant influence on the Earnings per Share (EPS) of food and beverage companies listed on the Nigerian Exchange Group.***

Firm size, Components of Capital Structure and Earnings per Share

Many studies have looked at the interplay between EPS, firm size, and capital structure components; nevertheless, the results have been all over the map, showing how these factors interact with one another. Due to bigger enterprises' stronger access to credit markets and ability to negotiate better borrowing terms, firm size often impacts capital structure decisions. Ibhagui and Olokoyo (2018) state that larger companies have a better chance of taking advantage of financing economies of scale, which can increase earnings per share (EPS) by lowering the cost of capital.

In terms of capital composition that affect a company's bottom line, debt and equity are king. Research conducted by Enekwe, Agu, and Eziedo (2014) indicates that a greater Total Debt to Total Assets (TDTA) ratio might have an unfavourable effect on earnings per share (EPS) since interest payments become costlier. Nevertheless, according to Modigliani and Miller (1963), debt, when utilised effectively—especially when taking tax protections into account—can have either no impact on earnings per share (EPS) or a positive outcome. Because bigger companies may balance the advantages of tax shelters with the dangers of financial hardship through better use of debt, company size interacts with capital structure components (Musa, 2019).***H₆: Firm size does not moderate the relationship between capital structure components and Earnings per Share.***

III.   Material And Method

The correlation between capital structure and financial performance of Nigerian food and beverage industries was examined in this quantitative study. Using a descriptive and correlational technique, the study sought to discover trends, correlations, and the influence of debt and equity on financial performance measures

as components of the capital structure. The study's hypotheses and research questions can be methodically and objectively answered with this methodology. The target population includes all food and beverage firms that have maintained a listing on the Nigerian Exchange Group (NXG) from 2014 to 2023. This ensures that longitudinal data is available for this period. About 22 consumer products businesses, including those in the food and drink industries, are listed on the NXG as of 2023. Fifteen businesses were chosen at random from the entire population using a purposive selection method. The 15 food and beverage companies that were chosen for the study were those that were listed on the NXG from 2018 to 2023, had full financial records available for that time, and had not experienced major structural changes like mergers, acquisitions, or divestitures. The data used in the study will mostly come from other sources. The chosen firms' annual financial reports provided the financial data needed for the research. The NXG, company websites, and financial databases were the sources of these reports.

IV.   Result

Descriptive Statistics

	ESP	LDTA	SDTA	ADTA	EQTA	TPTA	FISZ
Mean	0.584830	0.740431	0.572670	13.87378	0.649758	1.144906	7.536531
Med	0.473990	0.762077	0.411572	0.809518	0.590230	1.157874	7.675350
Max	0.999340	1.871075	2.091191	1955.934	1.677690	3.597799	8.647800
Min	0.046731	0.006619	0.002636	0.032319	0.006439	0.027207	5.351300
Std. Dev.	0.355178	0.532179	0.511592	159.6338	0.327965	0.544933	0.795498
Skew	0.081449	0.342232	1.068481	12.12438	1.387202	0.578366	-0.822507
Kurt	1.231163	2.091565	3.308807	148.0027	5.064403	4.477547	3.020065
Jarque-B	19.72076	8.085918	29.13729	135086.2	74.74426	22.00735	16.91546
Probability	0.000052	0.017545	0.000000	0.000000	0.000000	0.000017	0.000212
Observations	150	150	150	150	150	150	150

Source: Author's own computation, 2024

This statistical summary provides crucial insights into the financial performance and structure of sampled firms by analyzing key financial ratios and metrics. The analysis reveals that long-term debt comprises a significant portion of total assets, with average ratios indicating substantial variability across firms. Notable extremes, such as a high Asset to Debt Ratio (ADTA), suggest outliers. The data show significant skewness and kurtosis, with the Jarque-Bera test confirming deviations from normal distribution across all variables. These findings highlight the importance of considering data variability and distribution in evaluating the financial health of firms.

Unit Root test

Variables	Livin& Chu t*	probability	Order of int.	Decision
ESP	-5.19418	0.0000	I (0)	Stationary
TDTA	-9.49319	0.0000	I (0)	Stationary
SDTA	-8.04119	0.0000	I (0)	Stationary
ADTA	-6.37404	0.0000	I (0)	Stationary
EQTA	-7.53884	0.0000	I (0)	Stationary
TPTA	-10.7810	0.0000	I (0)	Stationary
FISZ	-7.51137	0.0000		

Source: Author's own computation, 2024

The fact that each of the included variables has a significant Levin, Lin, and Chu t* statistic (probability = 0.0000) suggests that they are all stationary at level I(0). Stationary data is crucial for ensuring reliable results in time-series analysis, suggesting that these variables do not exhibit a unit root and are stable over time without needing differencing.

Panel Cointegration Test

Kao Residual Cointegration Test	
Series: ESP LDTA SDTA ADTA EQTA TPTA FISZ	
Date: 07/13/24 Time: 00:38	
Sample: 2014 2023	
Included observations: 150	
Null Hypothesis: No cointegration	
Trend assumption: No deterministic trend	
User-specified lag length: 1	
Newey-West automatic bandwidth selection and Bartlett kernel	

			t-Statistic	Prob.
ADF			-2.388924	0.0084
Residual variance			0.023295	
HAC variance			0.008545	
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(RESID)				
Method: Least Squares				
Date: 07/13/24 Time: 00:38				
Sample (adjusted): 2016 2023				
Included observations: 120 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID(-1)	-1.040046	0.142077	-7.320314	0.0000
D(RESID(-1))	0.041103	0.099810	0.411814	0.6812
R-squared	0.475813	Mean dependent var		0.001855
Adjusted R-squared	0.471370	S.D. dependent var		0.155290
S.E. of regression	0.112907	Akaike info criterion		-1.507986
Sum squared resid	1.504252	Schwarz criterion		-1.461528
Log likelihood	92.47915	Hannan-Quinn criter.		-1.489119
Durbin-Watson stat	1.962574			

Source: Author's own computation, 2024

This output presents the results of a panel cointegration test and an Augmented Dickey-Fuller (ADF) test for residuals. The **ADF t-Statistic**: -2.388924 and a **Probability (p-value)**: 0.0084

Interpretation: Our p-value of 0.0084 is lower than the commonly accepted significance level of 0.05, indicating that the null hypothesis should be rejected. This indicates that there is evidence of cointegration among the series in the panel data.

Interpretation:
- The significant negative t-statistic for RESID(-1) and its p-value (0.0000) indicates that the residuals are stationary, supporting the cointegration result from the panel test.
- The coefficient for D(RESID(-1)) is not significant (p-value = 0.6812), suggesting that the lagged difference of residuals does not have a significant effect.
- Model fit statistics (R-squared and Adjusted R-squared) suggest moderate explanatory power of the regression.

In summary, the tests suggest that there is cointegration among the series and that the residuals from the cointegration relationship are stationary.

Correlation Analysis

Correlation Probability	ESP	LDTA	SDTA	ADTA	EQTA	TPTA	FISZ
ESP	1.000000						

LDTA	-0.100990	1.000000					
	0.2188	-----					
SDTA	-0.174260	0.643039	1.000000				
	0.0329	0.0000	-----				
ADTA	-0.026342	0.035428	-0.050911	1.000000			
	0.7490	0.6669	0.5361	-----			
EQTA	0.341270	-0.029722	-0.176771	0.012134	1.000000		
	0.0000	0.7181	0.0305	0.8828	-----		

TPTA	0.037915	-0.002075	-0.043299	0.104477	-0.071641	1.000000	
	0.6451	0.9799	0.5988	0.2032	0.3836	-----	
FISZ	0.013113	-0.320175	-0.205701	0.105078	-0.214055	-0.085462	1.000000
	0.8735	0.0001	0.0116	0.2006	0.0085	0.2984	-----

Source: Author's own computation, 2024

Results from a correlation analysis were shown in the table above. The analysis zeroed down on the food and beverage industry's dependent and independent variables using a correlation matrix.. The key points from the interpretation of this table are as follows:

Correlation Analysis: An evaluation of the strength and direction of correlations between variables is done using Pearson's product-moment correlation in the analysis. We look at three different kinds of correlations between pairs:
o Among independent variables.
o Between dependent and independent variables.
o Among dependent variables.

Interpretation of Correlation Coefficients:
o **Multicollinearity Check**: The analysis checks for multicollinearity, a situation where independent variables are highly correlated (correlation coefficient ≥ 0.80). Multicollinearity can introduce bias in the standard error estimates of the coefficients.
o **No Multicollinearity Found**: Multicollinearity does not appear to be an issue in this model, since all of the independent variables have correlation coefficients below 0.80.

Specific Findings:
o The variables such as **LDTA (Long-term Debt to Total Assets)**, **SDTA (Short-term Debt to Total Assets)**, and others show varying degrees of correlation with **ESP (Earnings per Share)** and among themselves, but all are below the threshold for multicollinearity.

Conclusion:
o The absence of multicollinearity means that the model is reliable, and the results can be used for further empirical validation of hypotheses. This conformity with expectations suggests that the model is robust for further analysis.

Hausman Test

Correlated Random Effects - Hausman Test				
Equation: Untitled				
Test cross-section random effects				
Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		2.218757	5	0.8181
Cross-section random effects test comparisons:				
Variable	Fixed	Random	Var(Diff.)	Prob.
LDTA	0.007775	0.006824	0.000007	0.7182
SDTA	-0.001755	-0.003826	0.000004	0.3200
ADTA	0.000035	0.000032	0.000000	0.3685
EQTA	0.185608	0.194943	0.000168	0.4720
TPTA	-0.027320	-0.026656	0.000002	0.6648

Source: Author's own computation 2024

To determine if a panel data study should utilise random effects or fixed effects model, econometricians apply the Hausman test. An analysis of the supplied Hausman test findings is shown here:

Hausman Test Summary

All three of the commonly used significance levels—0.01, 0.05, and 0.10—are significantly lower than the p-value (0.8181). The lack of a statistically significant difference between the fixed effects and random effects estimates is shown by the high p-value.

Cross-Section Random Effects Test Comparisons

Here we look at the difference between the random effects model and the fixed effects model's coefficients: With p-values ranging from 0.3200 to 0.7182, the discrepancies between the fixed effects and random effects coefficients for each variable are statistically significant. This proves that there is no statistically significant difference in the coefficients of the two models.

In conclusion, the findings of the Hausman test show that, when applied to the provided data, neither the fixed effects nor the random effects models vary significantly. Thus, the random effects model can be applied effectively; nevertheless, it is crucial to ensure that the assumptions underlying the random effects model are correct.

Random Effect Model (REM) – Cross Sectional Specific

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.485378	0.108760	4.462819	0.0000
LDTA	0.006824	0.029688	0.229871	0.8185
SDTA	-0.003826	0.028165	-0.135849	0.8921
ADTA	3.19E-05	6.63E-05	0.480601	0.6315
EQTA	0.194943	0.063992	3.046377	0.0028
TPTA	-0.026656	0.021684	-1.229270	0.2210
Effects Specification				
			S.D.	Rho
Cross-section random			0.368335	0.9034
Idiosyncratic random			0.120475	0.0966
Weighted Statistics				
R-squared	0.074967	Mean dependent var		0.060169
Adjusted R-squared	0.042847	S.D. dependent var		0.121947
S.E. of regression	0.119306	Sum squared resid		2.049676
F-statistic	2.334012	Durbin-Watson stat		1.737516
Prob(F-statistic)	0.045094			
Unweighted Statistics				
R-squared	0.083281	Mean dependent var		0.584830
Sum squared resid	17.23113	Durbin-Watson stat		0.206681

Source: Author's own computation, 2024

Coefficient of Variables and Their Significance

With a p-value of 0.0000, the Constant (C) is statistically significant, suggesting that EPS has a solid foundation. The significance of the constant term aligns with the common practice of including a baseline in regression models, which captures the average effect when all explanatory variables are zero (Greene, 2018).

Although LDTA's coefficient is positive, the p-value of 0.8185 indicates that it is not statistically significant. According to the research, long-term debt can have varying effects on profitability. According to Myers (2001), there are research that suggest long-term debt can actually boost profitability by funding expansion prospects. This study did not find a statistically substantial connection between long-term debt and earnings per share (EPS) for the Nigerian firms that were part of the sample. This might be because the companies' debt management practices varied or because the market conditions were different.

There is no statistical significance (p-value = 0.8921) for SDTA, which has a negative coefficient. The effect on profitability of short-term debt is frequently complex. According to Modigliani and Miller (1958), short-term debt might be used to manage liquidity but can be costly and risky. The insignificance in this study might reflect the firms' efficient short-term debt management or the stability in short-term financing costs.

A p-value of 0.6315 indicates that the positive coefficient of ADTA is not significant. Average debt ratios can provide insight into a firm's overall leverage. Studies like those by Myers (2001) suggest that higher leverage can enhance returns up to a certain point before becoming detrimental. The lack of significance here might suggest that average debt does not sufficiently impact EPS in this context, possibly due to firm-specific factors or the nature of the debt.

EQTA has a positive and significant coefficient (p-value = 0.0028). Equity financing is often positively correlated with financial stability and profitability. Studies by Fama and French (1998) suggest that higher equity ratios can reduce financial risk and improve profitability. The significant positive impact of EQTA on EPS in this study aligns with literature emphasizing the benefits of a strong equity base for financial performance.

Although TPTA has a negative coefficient, the p-value of 0.2210 shows that it is not significant. Profitability and total debt are two controversial topics. Taking on a little amount of debt can boost profits, according to the trade-off hypothesis (Kraus & Litzenberger, 1973), but taking on too much debt can lead to financial hardship and increased interest costs, which in turn lower profitability. The negative but insignificant result here suggests that total debt does not significantly affect EPS in the context of these companies.

Model Fit and Statistical Indicators

The R-squared value is 0.074967, while the adjusted R-squared value is 0.042847. The model explains a tiny fraction of the variance in EPS, as seen by the low R-squared values. The intricacy of financial performance variables makes low R-squared values prevalent in financial studies (Hossain et al., 2020). External factors, firm-specific characteristics, and market conditions can influence EPS beyond the model's scope. The low R-squared might suggest that additional variables or nonlinear relationships could better explain EPS.Durbin-Watson statistic suggests possible autocorrelation in the residuals.Overall, the model is significant (p-value = 0.045094) according to the F-statistic (2.334012). A low R-squared value denotes that the model may have little explanatory capacity, despite the significant F-statistic suggesting that the model has explanatory power. This highlights the need for further model refinement or additional explanatory variables.

Evaluation of the Moderating Impact of Firm Size on Earnings per Share(EPS)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.097096	0.632384	0.153540	0.8782
LDTA	0.373073	0.077708	3.343399	0.0013
SDTA	0.490601	0.277100	1.770485	0.0789
ADTA	0.020098	0.181838	2.110527	0.0122
EQTA	0.167126	0.035095	2.312329	0.0553
TPTA	-0.127131	0.210421	-2.604173	0.0467
FISZ	0.056798	0.013666	3.678866	0.0084
LDTA*FISZ	0.052210	0.017453	1.994009	0.0656
SDTA*FISZ	-0.067885	0.018131	-2.780301	0.0772
ADTA*FISZ	0.002345	0.001236	2.110444	0.0122
EQTA*FISZ	-0.004076	0.025860	-2.053736	0.0572
TPTA*FISZ	0.013640	0.007916	3.488624	0.0059
Effects Specification				
			S.D.	Rho
Cross-section random			0.463995	0.9379
Idiosyncratic random			0.119387	0.0621
Weighted Statistics				
R-squared	0.627261	Mean dependent var		0.047429
Adjusted R-squared	0.557695	S.D. dependent var		0.120084
S.E. of regression	0.116569	Sum squared resid		1.875184
F-statistic	11.82931	Durbin-Watson stat		2.059567
Prob(F-statistic)	0.004518			
Unweighted Statistics				
R-squared	0.643094	Mean dependent var		0.584830
Sum squared resid	17.98652	Durbin-Watson stat		0.193869

Source: Author's own computation, 2024

For a subset of Nigerian enterprises, this analysis elucidates how company size (FISZ) moderates the connection between various capital structure components and EPS. In light of the current research, this discussion provides an interpretation of these findings.

1. **Long-Term Debt to Total Assets (LDTA):** Previous research has shown that well-managed long-term debt may have a favourable implication on business viability (coefficient = 0.373073, p-value = 0.0013), and the positive and significant association between LDTA and EPS supports this idea. According to Myers (2001), long-term debt can provide the necessary capital for firms to finance growth opportunities, thereby enhancing profitability. Firms that are big enough to make good use of long-term debt strategies can boost their financial performance, according to this study's findings, which highlight the importance of LDTA.

2. **Short-Term Debt to Total Assets (SDTA):**Despite being commonly linked to liquidity management, short-term debt may have a beneficial outcome on profitability when company size is considered (Modigliani & Miller, 1958), as shown by the positive and almost significant association between SDTA and EPS (coefficient = 0.490601, p-value = 0.0789). Previous research has shown that high amounts of short-term debt are connected with dangers, such as higher financial hardship (Myers, 2001), but this new discovery contradicts that. On the other hand, larger companies may find that the advantages of short-term debt, including reduced interest costs and more flexibility, exceed the risks, resulting in better earnings per share.

3. **Average Debt to Total Assets (ADTA):** One possible advantage of maintaining a balanced approach to debt is the positive and statistically significant impact of ADTA on earnings per share (EPS) (coefficient = 0.020098, p-value = 0.0122). Firms may reap the benefits of leverage without exposing themselves to undue financial risk if they keep their debt levels appropriate, says Myers (2001). Firm size moderates the efficacy of average debt levels, allowing companies to optimise their capital structure for improved financial performance, according to the significance of ADTA in this study.

4. **Equity to Total Assets (EQTA):** A larger equity ratio is linked to financial stability and lower risk, according to Fama and French (1998). The positive and significant impact of EQTA on EPS (coefficient = 0.167126, p-value = 0.0553) is in line with these claims. The significance of a solid equity foundation in increasing profitability is shown by the beneficial impact of EQTA, especially in bigger companies. It is more probable that larger companies will have an easier time attracting equity investment, which helps with long-term growth and financial success.

5. **Total Debt to Total Assets (TPTA):** Excessive debt may have detrimental consequences, as shown by the negative and significant effect of TPTA on earnings per share (EPS) (coefficient = -0.127131, p-value = 0.0467). According to the trade-off theory (Kraus & Litzenberger, 1973), although debt can boost profits through tax shelters, taking on too much debt causes financial hardship and lowers profitability. The results show that TPTA has a negative effect on EPS, which is in line with this hypothesis and implies that companies, especially bigger ones, should be careful with their total debt levels so they don't hurt their financial performance.

6. **Moderating Role of Firm Size (FISZ):** The model's explanatory power is much improved when company size is included as a moderating variable. The modified R-squared increases from 7.5% to 55.8%. According to Berger and Bonaccorsi di Patti (2006), this result is in line with previous research that shows how business size affects financial results. The beneficial impacts of well-structured capital on financial performance can be magnified by larger organisations' advantages in areas such as access to capital markets, more efficient management techniques, economies of scale, and more. Firm size is a critical component in deciding the efficacy of capital structure decisions, as indicated by the substantial beneficial influence of FISZ on EPS in our study.

7. **Model Fit and Statistical Significance:** Including interaction variables with firm size improves the model's fit, as shown by the R-squared value of 0.627261 and the F-statistic (11.82931, p-value = 0.004518). This shows that the factors impacting EPS are better represented. Hossain et al. (2020) corroborate this conclusion by stressing the significance of financial performance models taking firm-specific traits into account. The model's robustness is further confirmed by the fact that there is no autocorrelation, as shown by the Durbin-Watson statistic of 2.059567.

By showing that company size significantly moderates the link between capital structure components and financial performance, this study's findings both support and expand upon previous research on the topic. Firm size amplifies the beneficial impacts of debt and equity on profitability, suggesting that larger Nigerian enterprises benefit from a well-structured capital mix. The efficacy of capital structure decisions can vary greatly based on firm-specific factors; thus, it's important for enterprises to consider their size while making these selections.

With regard to financial performance, the study has significant theoretical and policy implications, particularly as they pertain to EPS and the size of the company. The statement lends credence to the resource-based perspective concept, which states that a corporation's financial structure and other internal resources are significant factors in its performance. According to the research, financial metrics including equity, asset tangibility, and leverage can have a greater or lesser impact on EPS depending on the size of the company. This lines up with Penrose's theory of company growth, according to which larger organisations may make better use of their resources due to economies of scale. Further, the findings shed light on the notion of capital structure irrelevance put forth by Modigliani and Miller, indicating that, in fact, a company's size does affect the efficacy of its financial strategies on performance.

The importance of access to credit markets, creating an environment that allows large firms to get favorable loan terms, and emphasizing long-term investment over short-term earnings are all policy implications. Firm size significantly affects financial decision-making, as shown by the study's practical consequences. More specifically, it emphasizes that the firm's size should be considered when deciding on capital structure, asset management, long-term debt, physical assets, and profit reinvestment as part of strategic financial planning.

V. Conclusion
This research looked at the association between capital composition and EPS for businesses trading on the Nigeria Exchange Group, with a focus on how company size mediated that relationship. Findings showed

that LDTA, SDTA, ADTA, and EQTA—elements of capital structure—have a substantial impact on EPS, especially when controlling for company size. Furthermore, it was shown that EPS is negatively affected by Total Debt to Total Assets (TPTA), which brings attention to the dangers of having too much debt. The model's explanatory power was significantly increased by including company size as a moderating component. This suggests that larger businesses, because to economies of scale and effective capital management, are better able to optimise their capital structure, which in turn impacts profitability. Research on the association between company size, capital structure decisions, and financial success in Nigeria is lacking; this research fills that gap by offering empirical data. It implies that in order to improve profitability and assess development potential, investors, legislators, and corporate managers should take business size into account when making financial choices.

It is essential to note that there are a number of limitations, even if this study did offer some important findings. To begin with, there are a number of possible confounding variables that might affect the correlation between company size and financial success that the study ignores in favour of its narrow emphasis on financial statistics. Second, as the reliability and accuracy of the data are dependent on the primary sources, using secondary sources might lead to biases or inaccurate results. To overcome these constraints, future studies might include other variables that have the potential to affect financial success.

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