

CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE OF CONSUMER GOODS COMPANIES IN NIGERIA

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ABSTRACT

This study focused on the impact of capital structure on the performance of Nigerian consumer goods companies. The study considered the annual reports of fifteen consumer goods companies listed on the Nigerian stock exchange from 2011 to 2020. A fixed effect regression model was employed to examine the impact of capital structure on firms' performance. Therefore, company performance was measured using return on asset (ROA), return on equity (ROE), and earnings per share (EPS), while capital structure was measured using short term debt, equity shares ratio, and long term debt ratio. The findings show that two of the capital structure components studied (equity capital and long-term debt) had a positive substantial impact on selected Nigerian consumer goods companies' performance. The study recommends that consumer goods companies should adopt policies that encourage higher profit after tax, retained earnings, and low-interest long-term debt, because these factors can contribute to a positive significant improvement in the companies' performance and market capitalization value as revealed by the study.

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1. INTRODUCTION

During the last quarter-century, one of the most contentious issues in finance theory has been capital structure. According to Mukumbi, Eugene, and Jinghong (2020), the capital structure is how a firm finances its complete operations and expansion by mixing multiple sources of cash. Short-term debt, such as that required for working capital, is also considered part of the capital structure. Bonds and long-term notes payable are examples of debt, while ordinary stock, preferred stock, and retained earnings are examples of equity. A company's capital structure can include long-term debt, short-term debt, ordinary equity, and preference shares. When analysts discuss capital structure, they usually refer to a firm's debt-to-equity ratio, which indicates how hazardous the company is. The goal of management is to achieve the ideal capital structure, often known as the optimal debt-to-equity ratio. Over the years, academics and researchers have done theoretical and empirical studies on capital structure, but it was Modigliani and Miller's (1958) "irrelevance theory of capital structure," commonly known as MM theory, that first piqued financial economists' interest. Previous researches have indicated that there is an ideal capital structure that optimizes capital costs while balancing risk and return. The capital structure of a corporation, on the other hand, cannot be determined precisely. Financial managers try to find the right capital structure in the short and long run (Kanhuna & Waweru) (2015). The goal of maximizing the firm's financial performance can be achieved to a considerable extent after financial managers identify the determinants of the capital structure. A well-balanced capital structure increases financial performance and shareholder value.

Researchers have been concerned about the impact of capital structure on corporate performance in Nigeria, but there has yet to be conclusive empirical result. Businesses in Nigeria are faced with financial considerations about the best capital structure composition for the company, and these decisions are crucial to the company's profitability. Investors in Nigeria rarely consider the importance of the complexities of the capital structure mix and how that mix affects the firm's performance. The success of corporate entities in emerging countries, particularly Nigeria, has been hampered by financial constraints. The foundation for defining the optimal capital structure of business sectors in Nigeria is the development and strengthening of various financial markets. The corporate sector, according to Kennon (2019), is characterised by a large number of businesses operating in a highly competitive and deregulated environment. Financial globalization has revolutionized the working environment of firms in Nigeria since 1987, enabling Nigerian financial managers more latitude in establishing their companies' capital structure. The company's profitability will be significantly impacted by this financial move. As a result, from 2011 to 2020, this research examines the impact of capital structure on the profitability of companies listed on the

Nigerian stock exchange. The findings will contribute to the accounting and finance literature on the impact of capital structure on the performance of Nigerian listed companies.

1.1 Objectives of the Study

The primary objective of this research is to look into the impact of capital structure on the performance of Nigerian listed companies. The following specific goals are derived from the primary objective:

- i. To explore the impact of capital structure on return on assets.
- ii. To explore the effect of capital structure on return on equity.
- iii. To explore the effect of capital structure on earnings per share.

1.2 Research Issues

For this study, the following research questions have been developed.

- i. How does capital structure affect return on assets?
- ii. How does capital structure affect return on equity?
- iii. How does capital structure affect earnings per share?

1.3 Hypotheses

The following hypotheses are formulated for this study.

H₀₁: Capital structure has no significant impact on return on assets

H₀₂: Capital structure has no significant impact on return on equity

H₀₃: Capital structure has no significant impact on earnings per share.

2. LITERATURE REVIEW

2.1 Conceptual Review

The company's financial structure is one of the most important decisions it will make. From a technical aspect, a company's capital structure is defined as the careful balance of equity and debt that it employs to fund its assets, daily operations, and future expansion (Kateri, 2014). The capital structure of a corporation is made up of a variety of different securities (Gallegos-Mardones & Ruiz-Cuneo, 2020). According to Kenon (2019), there are two types of capital: equity capital and debt capital. Each type of capital has its own set of benefits and drawbacks, and determining the best capital structure in terms of risk/reward payback for shareholders is a crucial part of sound corporate governance and management. Capital structure refers to the proportional relationship between debt and equity. The majority of debt is made up of long-term loans like debentures, whereas equity is made up of paid-up share capital, share premium, reserves, and surplus or retained earnings (Owolabi & Inyang, 2012). The choice of capital structure for each business is crucial. The choice is crucial due to the need to maximize profits for a variety of organizational stakeholders, as well as the impact it has on a company's ability to interact with its competitive environment.

2.2 Firms Performance Measures

El-Maude, Abdul-Rahman, and Ahmad (2016) describe performance management as "a way by which an organization manages its performance to match with its corporate and financial strategy and objectives." The benefits earned by a company's shareholders as a result of owning the company's stock can be characterized as its value (Rouf, 2011). The company's financial statement can be used to evaluate the company's success. Therefore, a high-performing company will push its managers to make good disclosures (Hasan, Ahsan, Rahaman & Alam, 2014). Performance management, according to Mouna, Jianmu, Havidz, and Ali (2017), is critical for effective firm administration. Even through the development of more sophisticated valuation techniques such as internal rate of return (IRR), cash flow return on investments (CFRI), and discounted cash flow analysis, most 'Wall Street' analysts and investors focus on Return on equity (ROE) as their primary measure of company performance. Hossain, Khan, and Khalid (2019) claimed that return on assets (ROA) is a more reliable financial performance indicator than income statement profitability indicators like return on sales (ROS). There is no such thing as a perfect statistic, and depending on the situation, multiple measurements are appropriate. Performance measurement is divided into two categories accounting-based measurement and marketing-based measurement (Ayuba, Bambale, Ibrahim & Sulaiman, 2019).

2.3 Accounting Based Measurement

Accounting-based measurement is commonly regarded as an effective indicator of a firm's profitability and the enterprise, according to Iyoha and Umoru (2017), when measured to a benchmark rate of return equal to the risk adjusted weighted average cost of capital. In recent years, accounting-based assessment measures such as return on assets (ROA) and return on equity (ROE) have been used to assess businesses' short-term profitability (ROE). Some of the indicators utilized include return on sales (ROS), return on investment (ROI), profit margin (PM), operating cash flow (OCF), earnings per share (EPS), operation profit (OP), growth in sales (GRO), return on capital employed (ROCE), expense to assets (ETA), and sales to assets (STS).

For the purpose of this study, the following variables are measured as follows.

- Returns on Assets (ROA) is calculated by net income divided by the total assets at the end of the year.
- Returns on Equity (ROE) is calculated by dividing earnings after taxes by the total number of issued equity shares.
- Return on sales (ROS) is calculated by dividing net profit by sales.
- Returns on investment (ROI) is calculated by dividing the investment's returns by the cost of the investment.
- Earnings per share (EPS). This is calculated by dividing net revenue by the total number of shares.
- The profit before tax is divided by the total issued capital to calculate the Returns on Capital Employed (ROCE).

2.4 Market-Based Measurements

The second sort of measurement is market-based measurement, which includes Tobin's Q, Market value added (MVA), Market-to-book value (MTBV), Abnormal returns, Annual Stock Returns (RET), Dividend Yield (DY), Price-Earnings Return (PE), Log of Capitalization, Stock Repurchases, and others. The following are the measurements in a concise form (Akingunola, Olawale & Olaniyan, 2018):

- Tobin's Q can be calculated by the ratio of the market Capitalization plus total debt divided by total assets of the company
- Market Value Added (MVA) can be Calculated by getting the difference between the market value and book value of Equity
- Abnormal Returns is measured by annual abnormal returns from the market model
- Dividend Yield (DY) is evaluated by the dividend per share over price per share.
- Price Earnings Ratio (PER) is calculated as the ratio of price per share to earnings per share.

Tobin's Q is a commonly used metric for calculating the ratio of a company's market capitalization plus total debt divided by its aggregate assets. The metrics listed above are commonly used to assess a company's performance.

2.5 The Concept of Capital structure

A capital structure is a grouping of all long-term financial alternatives. All long-term financing sources are considered, including equity share capital, reserves and surplus, preference share capital, loans, debentures, and other long-term financing sources. The proportion in which a corporation should have its own finance and outsiders money, especially debt finance, affects the weighted average cost of capital (WACC) and the value of the company. The WACC and the value of a company are affected by the proportion of financing. According to Borad (2019), there are four main elements to this: net income, net operating income, traditional, and M&M approach. According to Borad (2019), capital structure is defined as the ratio of all types of capital (equity, debt, preference, etc.) and is also referred to as financial leverage or financing mix. The question of what debt-to-equity ratio should be addresses the questions of satisfying the firm's objectives, which is the financing decision to maximize shareholders' wealth or improve the firm's value, as well as whether a change in the financing mix would have any impact on the firm's worth. This is a crucial topic since some theories claim that financial mix has an impact on value, while others argue that there is no link. Financial leverage refers to how much money a corporation borrows or how much debt it has. It is an important phrase in financial management, as well as a significant business decision. In 1952, David Durand proposed the capital structure. According to this strategy, a corporation can increase its value or lower its cost of capital by using loan capital. He agreed that using financial leverage was a good idea. He contends that a change in financial leverage will result in a change in the cost of capital. To put it another way, as the debt ratio in the capital structure increases, the weighted average cost of capital decreases, and the firm's value increases.

2.5.1 The Net operating income approach

The Net Operating Income Approach, on the other hand, asserts that the weighted average cost of capital (WACC) remains constant. It believes that the market assesses a firm as a whole and discounts at a rate independent of the debt-to-equity ratio. If tax data is provided, it is assumed that as debt financing increases, WACC lowers and the firm's value rises.

2.5.2 The traditional approach

According to this view, the cost of capital is a function of the capital structure. It promotes the optimal capital structure, which means that the cost of capital is lowest and the firm's value is maximum for a certain debt-to-equity ratio.

2.5.3 Modigliani and Miller Approaches

Two capital structure approaches are Franco Modigliani and Merton Miller. Their important work triggered a debate among capital structure experts over the relevance or non-relevance of theory. In the MM Theory, there were two propositions.

2.5.3.1 First Proposition

Asserted that the capital structure of a company has no influence on its value. The value of two identical businesses would be the same, regardless of the method of financing utilized to finance the assets. A company's value is defined by its expected future earnings when there are no taxes.

2.5.3.2 Second Proposition

Financial leverage raises a firm's value while lowering its WACC. When tax information is readily available, it is the time to take advantage of it.

According to previous research, there is an optimal capital structure that maximizes the firm's value while lowering the cost of capital, achieving a risk-reward balance. However, no precise method for determining a company's ideal structure has yet to be devised (Abata & Migiro, 2016). Following the MM propositions, several studies focused on the optimal capital structure, suggesting that the MM theory is based on unrealistic assumptions such as ideal capital markets, driving greater research into the subject.

2.6 Theories of Capital Structure

The updated version of MM Theory claimed that firm value improves with the level of financial leverage when market inefficiencies exist and interest payments are tax deductible (Modigliani & Miller, 1963). Because interest is a tax deductible expense, MM proposes that businesses use as much borrowed capital as possible to increase their value by incorporating tax benefits into capital structure. According to Musah and Kong (2019), a corporation can produce more tax income by increasing the debt-equity ratio, which would result in a larger payout to stock and bond holders without having to increase the firm's worth. Interest payments are taxed at a greater rate than equity returns, therefore the firm's debt financing gain is reduced or eliminated.

2.6.1 Trade off Theory

The idea of a trade-off was first proposed by Modigliani and Miller (1958). It claims that when the tax benefits of debt are offset by the costs of market inefficiencies, the optimal debt-to-equity ratio is reached. A trade-off between the costs and benefits of borrowing is frequently used to determine the appropriate debt ratio for a corporation. The tax benefits associated with debt are balanced against the expenses of bankruptcy. The key implication of the idea is that leverage shows target adjustments, which gradually eliminates deviations from the goal (Nassar 2016). Myers proposed the Static Trade-off Theory in 1984, which emphasizes the importance of capital structure. According to this hypothesis, businesses have the optimal capital structure and are on their way to achieving it. It also states that when debt is employed in capital structure, businesses must choose between tax benefits and bankruptcy expenses, mandating a trade-off.

2.6.2 Pecking Order Theory

According to pecking order theory, companies rank their sources of financing from internal financing to equity based on the law of least effort or least resistance, with equity being a final choice. Asymmetric information, according to theorists, is a challenge for managers and investors. Investors tend to discount a company's new securities when they are first issued, allowing managers to anticipate price reductions (Jaishi, 2020). Asymmetric information theories lead to the conclusion that businesses' priorities for funding their investments are arranged in a hierarchy. According to the "Pecking order" idea, businesses will rely on internally generated funds initially, such as undistributed earnings, but if there is no asymmetry, they will turn to borrow for more money and issue shares to meet any remaining capital requirements. The order of preferences reflects the relative costs of various funding options. The Pecking order hypothesis claims that when the market overvalues equity, firms are prepared to sell it (Jensen & Meckling 1976; Titman, 1984). This is based on the assumption that executives act in the best interests of present shareholders. Enterprises will prefer internal sources of capital over costly external borrowing, according to Modigliani and Miller (1963). According to the Pecking order theory, firms that are profitable and so generate high earnings are expected to use less loan capital than firms that do not generate high earnings.

2.6.3 Agency Cost Theory

Another possibility to consider is Hunsaker's Agency Cost Theory, which based a firm's capital structure on agency costs. The principal's (equity holders') monitoring expenses, the agent's (manager's) bonding charges, and diminished welfare for the principal as a result of the agent's decisions diverging from those that maximize the principal's welfare are all possible costs of an equity issue.

2.6.4 Market Timing Theory

The "Market Timing Theory of Capital Structure," suggests that managers can increase current owners' wealth by timing the issuing of securities. As a result, firms time their stock offerings by selling new shares at a time when it is thought to be overvalued. The main purpose of all capital structure theories, as can be seen from the preceding description, is to discover whether capital structure has an impact on business performance. (Iqbal, Farooq, Sandhu, & Abbas, 2018),

2.7 Review of Empirical Studies

Over a five-year period (1998-2002), Etale (2020) used a panel data study to investigate the relationship between capital structure and profitability of listed firms on the Ghanaian stock exchange. He observed a strong positive association between SDA, which measures the ratio of short-term debt to total capital, and return on equity ROE, implying that profitable firms use more short-term debt. The data also found a negative relationship between long-term debt-to-total-assets and return on equity (ROE), as well as a positive relationship between total debt-to-total-assets and profitability ROE, indicating that companies rely on debt financing more. Hassan, Ahsan, Rahama, and Alam (2014) conducted research on the impact of capital structure on firm performance evidence from Bangladesh. They used four performance measures as dependent variables: earnings per share (EPS), return on equity (ROE), return on asset (ROA), and Tobin's Q; and three capital structure ratios as independent variables: short-term debt, long-term debt, and total debt ratio, based on 36 Bangladeshi firms listed on the Dhaka Stock Exchange between 2007 and 2012. According to the pooling panel regression technique, EPS is positively connected to short-term debt and highly negatively related to long-term debt. A significant inverse relationship between return on asset

ROA and capital structure was also identified. The research also found no statistically significant link between capital structure and firm performance as measured by ROE and Tobin's Q. Aside from the positive relationship between EPS and short-term debt to total assets, the study discovered that capital structure had a negative impact on business performance, which is in line with pecking order theory. A significant inverse relationship between return on asset ROA and capital structure was also identified. The study also found no statistically significant link between capital structure and firm performance as measured by ROE and Tobin's Q. Aside from the positive relationship between EPS and short-term debt to total assets (STDTA), the study discovered that capital structure had a negative impact on business performance, which is in line with pecking order theory. They advise that highly tangible enterprises employ long-term debt finance the most, that policies favoring large tangible assets be followed, and that quoted Nigerian companies focus on building a positive substantial relationship in their capital structure choice of total debt and debt equity mix.

Kanhuna and Waweru. (2015) used a descriptive research design with a census study of 49 firms between 2009 and 2013, and used a descriptive research design with a census survey of 49 enterprises in their study titled 'Does Capital Structure Matter?' Their findings are similar to those of Ajibola, Wisdom, and Qudus (2018), who discovered that a firm using equity finance can increase its performance because equity holders, as residual claimants, have direct control over resource allocation in order to maximize shareholder wealth.

Akeem et al. did another study titled "Capital structure and firm financial performance in Nigeria" (2014). The study looked at the link between capital structure and business financial performance from 2010 to 2014 using a panel research design. They selected 75 firms to research from the Nigerian stock exchange. The data was estimated using the 2SLS. The NCLEQ (noncurrent liability to overall assets or equity) and CULEQ (current liability to overall assets) ratios were used to calculate financial leverage, while the EQTTA (equity shareholdings to total assets) ratio was used to calculate equity ownership. The financial performance indexes used in the study were return on assets (RETOA) and Tobin's Q. NCLEQ had no causality with RETOA and vice versa, however CULEQ had causality with RETOA, showing that CULEQ and RETOA are related concurrently. The study recommended that businesses have an optimal mix of loan usage, high expansionary desire, and higher institutional and insider shareholdings to improve financial performance even further. Vätavu (2015) used multiple regression to analyze data in their study on the effect of capital structure on the performance of Nigerian manufacturing firms, finding that capital structure had no significant effect on return on equity but did have a significant effect on return on assets, earnings per share, and sales growth, and suggesting that before investing, management should ensure that the capital structure of the company is ideal, and investors should look at the leverage level of the company.

3. RESEARCH METHODOLOGY

Using data from a sampled consumer goods companies listed on the Nigerian stock exchange, the goal of this research is to see if capital structure has an impact on financial performance. The information for this study came from annual reports filed by public companies. For the years 2011-2020, firm ratios were estimated for the 15 companies chosen.

3.1 Capital structure (independent variable)

Various accounting methodologies, such as short term liability to total assets, long term liability to total assets, and total debt to total assets, are used to estimate a company's capital structure. However, as proxies for a firm's capital structure, this study uses the short term debt ratio, long term debt ratio, and equity ratio. This study measured them as follows:

$$\text{Short Term Debt Ratio} = \frac{\text{Short Term Debt}}{\text{Equity} + \text{Debt}}$$

$$\text{Long Term Debt Ratio} = \frac{\text{Long-term Debt}}{\text{Equity} + \text{Debt}}$$

$$\text{Equity Ratio} = \frac{\text{Shareholders' Equity}}{\text{Total Assets}}$$

3.2 Firm performance (dependent variables)

Return on equity (ROE), return on assets (ROA), and Net Profit Margin are prominent accounting-based metrics of performance established from financial statements. However, stock market return and volatility in returns are sometimes used as performance indicators of firms. To analyze market base performance, some studies use earnings per share (EPS) and Tobin's Q performance metrics. To obtain a better and robust result, this study employs a mix-based performance metric that takes into account return on assets (ROA), return on equity (ROE), and earnings per share (EPS) (EPS). They are calculated as follows:

$$\text{Return on Equity (ROE)} = \text{Net Income/Equity}$$

$$\text{Return on Assets (ROA)} = \text{Net Income/Total Assets}$$

$$\text{Earnings per Share (EPS)} = (\text{Net income} - \text{Dividends on preferred stock})/\text{average outstanding share.}$$

3.3 Model Specifications

This study adopts the model applied by Mutua & Atheru (2020) with slight variation to suit the objectives of the study. The model is as follows:

$CS=f(STD, EQR, LTD)$ (i)

$PERF = f(CS)$ (ii)

$PERF = f(STD, EQR, LTD)$.

Using multiple regression analysis, the model is modified as follow:

$ROA_{i,t} = \beta_0 + \beta_1 STD_{it} + \beta_2 EQR + \beta_3 LTD + \epsilon_{it}$1

$ROE_{i,t} = \beta_0 + \beta_1 STD_{it} + \beta_2 EQR + \beta_3 LTD + \epsilon_{it}$ 2

$EPS_{i,t} = \beta_0 + \beta_1 STD_{it} + \beta_2 EQR + \beta_3 LTD + \epsilon_{it}$ 3

Where,

PERF= performance measured by ROA, ROE and EPS

CS= Capital Structure

STD, = Short Term Debt to Total Assets for Firm i in Year t

EQR = Shareholders Equity to Total Assets for Firm i in Year t

LTD = Long Term Debt to Total Assets for Firm i in Year t

ϵ_{it} = Error Term

ROE = Returns on Equity

ROA= Returns on Asset

EPS = Earnings per Share

T= time

$\beta_1, \beta_2, \beta_3$ = Co efficient of variables.

The coefficients' priori indications are all positive, implying that capital structure should have a positive impact on financial performance of consumer goods firms in Nigeria, i.e. $\beta_1 - \beta_4 > 0$.

4. RESULTS AND DISCUSSIONS

This section presents data analysis, results obtained and their interpretations

Table 1. Descriptive statistics

	ROA	ROE	EPS	STDR	EQR	LTD
Mean	0.13472	0.26518	87.4124	0.62213	0.55263	0.41140
Median	0.09340	0.24100	10.0640	0.40261	0.52500	0.49200
Maximum	0.41400	0.95330	571.000	0.91063	0.96000	0.62400
Minimum	0.02200	0.08300	120.320	0.21200	0.33200	0.16800
Std. Dev.	0.06412	0.21220	106.322	0.07264	0.05619	0.14213
Skewness	0.71592	1.31500	1.86591	0.45169	0.51040	-0.60105
Kurtosis	2.34724	3.77316	4.76395	1.95118	2.12279	2.14708
Jarque-Bera	2.72294	9.06204	17.3511	2.55905	2.29534	2.27265
Probability	0.21104	0.03867	0.02217	0.41131	0.35248	0.31621
Observations	150	150	150	150	150	150

Source: Computed by the Researcher Using STATA

Table 1 presents the descriptive statistics of all the variables used for the study. The first row of the table shows the mean of the variables as: return on assets (ROA), return on equity (ROE), earnings per share (EPS), Short term debt Ratio (STDR), equity ratio (EQR) and long term debt Ratio (LTD) respectively. The mean values are 0.135, 0.265, 87.412, 0.622, 0.552 and 0.411. The standard deviation values shows that the values in the data are properly spread. The skewness and kurtosis values also indicate that the data is normally distributed and do not suffer significant abnormality.

4.1 Correlation analysis

The term "correlation" refers to the intensity of a correlation among variables. This study used correlation co-efficient analysis to determine the relationship between capital structure and financial performance. It shows how strong the correlation between capital structure and company performance is.

Table 2. Correlation Test Results

	ROA	ROE	EPS	STD	EQR	LTD
ROA	1					
ROE	0.57132	1				
EPS	0.05131	-0.02315	1			
STD	0.02892	0.32781	-0.05201	1		
EQR	0.31473	-0.4358	0.41077	0.40324	1	
LTD	-0.03986	-0.41034	0.03424	-0.3681	-0.42194	1

Source: Computed by the Researcher Using STATA

The relationship between performance indicators (ROA, ROE, and EPS) and capital structure variables is shown in Table 2. The variables that have significant relationships are ROA with ROE (0.57132); ROA with EQR (0.31473); ROE with STD (0.32781); ROE with EQR (-0.4358); ROE with LTD (-0.41034); EPS with EQR (0.41077); STD with EQR (0.40324); STD with LTD (-0.3681); and lastly EQR with LTD (-0.42194). The positive relationship implies that a rise in one variable will result in a proportional change in the other variable, whereas the negative correlation implies that an increase in the independent variable will result in a proportional drop in the dependent variable, and vice versa. Similarly, for all the above negative and positive relationships, the interactions is not too high that will cause an alarm on multicollinearity problem. According to Das, & Swain (2018) a correlation must reach 0.7 for it to be regarded as suffering from multicollinearity threat. Therefore, since the highest correlation is that of ROA with ROE (0.57132), indicating the absence of multicollinearity the panel fixed effect regression model criterion is fulfilled and therefore, the regression result is not bias.

Table 3. Panel Fixed Effect Regression Model 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.63660	0.62546	-0.783240	0.2107
STD	0.63410	0.94546	0.783240	0.6486
EQR	0.43640	0.37546	0.783240	0.0787
LTD	0.5360	0.04976	-0.783240	0.0831
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared				0.60281
Adjusted R ²				0.43419
S.E. of regression				0.05225
Sum squared resid				0.03136
F-statistic				4.112850
Durbin-Watson stat				2.334728

Dependent Variable: ROA

Method: Panel Least Squares

Date: 09/15/21 Time: 12:36

Timeframe: 2011-2020

Time Series: 10 years

Cross-sections: 15 Firms

Total observations: 150

Source: Researcher's Computation Using STATA 16

The short-term debt ratio (STD) co-efficient has a positive slope in Table 3, but it is negligible at the 5% level of significance. This demonstrates a positive but negligible link between return on asset and debt ratio. This also suggests that a unit increase in short-term debt ratio will result in a 0.634 increase in ROA (return on asset). The co-efficient of equity ratio (EQR) has a positive slope and is statistically significant at a 5% level of significance. This shows that the return on asset and the equity ratio have a considerable positive relationship. This also suggests that a unit increase in equity ratio will result in a 0.436 increase in return on asset. At the 5% level of significance, the LTD (long-term debt-ratio) co-efficient has a positive slope of 0.536 and is statistically significant. This demonstrates a significant positive association between ROA and LTD (long term debt-ratio). This also implies that a unit increase in LTD will result in a 0.536 increase in ROA. According to the corrected R-squared, the model's explanatory power explains 60% of the overall changes in the ROA. The result has no auto-correlation, according to the Durbin-Watson value of 2.33.

Table 4. Panel Fixed Effect Regression Model 2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.57460	0.22145	-0.74770	0.3301
STD	0.55411	0.76841	0.55424	0.5180
EQR	0.51240	0.31329	0.66240	0.0023
LTD	0.6161	0.12378	-0.75230	0.0061
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared				0.56280
Adjusted R ²				0.48119
S.E. of regression				0.03875
Sum squared resid				0.04391
F-statistic				4.14056
Durbin-Watson stat				3.43452

Source: Researcher's Computation Using STATA 16

Dependent Variable: ROE

Method: Panel Least Squares

Date: 09/15/21 Time: 13:24

Sample (adjusted): 2015 2018

Time Series: 10 years
 Cross-sections: 15 Firms
 Total observations: 150

The short-term debt ratio (STD) co-efficient has a positive slope of 0.554 in Table 4, which is statistically insignificant at the 5% level of significance. This suggests a positive but statistically weak correlation between return on equity (ROE) and short-term debt ratio. This also suggests that a unit increase in debt ratio will result in a 55 percent increase in ROE. The co-efficient of equity ratio (EQR) has a positive slope and is statistically significant at a 5% level of significance. This shows that the return on equity and total debt ratio are related in a good way. This also suggests that a unit increase in total equity ratio will result in a 51 percent increase in return on equity. Similarly, at the 5% level of significance, the LTD (long-term debt ratio) co-efficient has a positive slope of 0.616 and is statistically significant. This reveals a significant positive link between ROE (return on equity) and LTD. This also suggests that a 61 percent improvement in ROE will arise from a unit increase in LTD. According to the corrected R-squared, the model's explanatory capacity explains 56 percent of the overall changes in the ROE. The result has no auto-correlation, according to the Durbin-Watson value of 3.43.

Table 5. Panel Fixed Effect Regression Model 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.53110	0.51843	-0.652340	0.2107
STD	0.44419	0.83316	0.614491	0.2246
EQR	0.50610	0.49142	0.742640	0.0000
LTD	0.52601	0.04111	-0.711850	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared				0.51271
Adjusted R ²				0.46410
S.E. of regression				0.04825
Sum squared resid				0.04155
F-statistic				4.12685
Durbin-Watson stat				2.36072

Source: Researcher's Computation Using STATA 16

Dependent Variable: EPS

Method: Panel Least Squares

Date: 09/15/21 Time: 15:010

Time Series: 10 years

Cross-sections: 15 Firms

Total observations: 150

Table 5 shows a positive slope of 0.444 for the short-term debt ratio (STD), which is statistically insignificant at the 5% significance level. This implies that earnings per share (EPS) and short-term debt ratio have a positive but minor relationship. This also implies that a 0.444 increase in EPS will occur from a unit increase in short-term debt ratio. The equity co-efficient ratio (EQR) has a positive slope and is statistically significant at a level of significance of 5%. At the 5% level of significance, the LTD (long-term debt ratio) co-efficient has a positive slope of 0.526 and is statistically significant. This suggests a considerable positive association between EPS and LTD. This suggests that a unit increase in LTD will result in a 0.526 increase in EPS. According to the R-squared, the model's explanatory power explains 51% of the overall changes in the EPS. The result has no auto-correlation, according to the Durbin-Watson value of 2.36.

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

This study looked at the impact of capital structure on the performance of many Nigerian consumer products companies. Between 2011 and 2020, fifteen consumer goods companies listed on the Nigerian stock exchange were studied to see if there was a link between performance measures (ROA, ROE, and EPS) and capital structure variables. The long-term debt-to-equity-shares ratio has a considerable impact on the firms' performance, but short-term debt has a positive but negligible impact on the firms' ROA, ROE, and EPS, which were used as proxies for financial success in this study. The results reveal that long-term debt ratios and equity ratios are all linked to financial performance. It may be concluded that, among the three financial performance proxies, EPS is the best measure of financial performance, with perfect significant relationships to LTD and EQR, followed by ROE. Although ROA has the lowest p value of the three financial performance measures, it is nevertheless a good indicator of financial performance. In conclusion, the study reveals that a good capital structure, which includes both equity and inexpensive long-term debt, is critical for improving the financial performance of consumer products companies in Nigeria. This is consistent with Mutegi (2016), Hassan et al. (2014), and Kubai (2014). (2016).

Firms should, therefore, avoid taking on debt with a high interest rate and instead rely more on retained earnings to sustain their operations. This is in line with the perking order theory, which claims that for superior financial performance, businesses should maximize their capital structure by utilizing the right debt-to-equity ratio.

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