

## CAPITAL STRUCTURE AND ECONOMIC PERFORMANCE OF LISTED CONSUMER GOODS FIRMS IN NIGERIA

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### ABSTRACT

The main objective of this study is to examine the effect of capital structure on the economic performance of listed consumer goods firms in Nigeria. The specific objectives are to ascertain the effect of the Debt-to-Equity Ratio, Debt-to-Capital Ratio, on Cash Flow Return on Investment (CFROI) of these firms. Data were collected from a sample of fourteen consumer goods firms from 2014 to 2023. Hypotheses were tested using Panel Estimated Generalized Least Squares. The findings revealed that the Debt-to-Equity Ratio significantly and negatively affects CFROI; whereas the Debt-to-Capital Ratio positively and significantly affect CFROI, all at the 5% significance level. In conclusion, a balanced and strategic approach to leveraging debt, coupled with maintaining strong operational earnings, is crucial for enhancing the economic outcomes of these firms. The study recommends that financial managers of listed consumer goods firms in Nigeria should aim to reduce their debts-to-equity ratio by seeking alternative financing options such as equity financing or retained earnings, as this can help decrease financial risk and improve cash flow stability, enhancing overall economic performance.

### 1. INTRODUCTION

The consumer goods industry in Nigeria plays a vital role in the country's economy, contributing significantly and importantly to employment, revenue generation, and overall economic growth of a given country, nation or state. This dynamic sector encompasses various products, including food and beverages, personal care items, household goods, and

clothing. With a large and growing population, increasing urbanization, and changing consumer preferences, consumer goods firms in Nigeria is faced with both opportunities and challenges in driving economic performance and meeting the demands of a diverse consumer base. How these companies arrange their capital is a critical component that greatly affects their economic performance as they navigate the complexity of the market (Zhang & Liu, 2017). The precise debt-to-equity ratio that is utilized to finance a company's operations is known as its capital structure. A company's capital structure is made up of its common equity, preferred equity, and long- and short-term debts (Kerim et al. (2019; Okudo, Mbonu, & Amahalu, 2022). According to Essel, (2024) the method a business employs to fund its assets through a mix of debt, equity, or hybrid securities is referred to as its capital structure. Making the best choices possible for the overall combination of funding options available for launching and continuing business operations is just as important as selecting the right funding source when it comes to capital structure economics. According to Stiglitz (2016), economic performance is the overall health and productivity of the firm, reflecting its ability to generate and distribute wealth among its participants. It includes a range of metrics and characteristics that assess the firm's effectiveness, expansion, and stability. Nigeria's consumer goods companies' financial performance has a big impact on the economy of the nation.

For Nigerian consumer products companies to operate as profitably as possible, their financial structure must remain optimal. Taking profitability, growth, and risk tolerance into account, a well-balanced debt and equity combination is essential (Kulikov, et al., 2023). These businesses currently struggle with different financing structures. Excessive debt limits growth and raises financial risk, while conservative frameworks impede prospects for expansion. Ineffective capital structures affect investor trust and shareholder value by causing financial distress, missed growth, and decreased profitability. Examining the impact of capital structure on these companies' financial performance is crucial. The study aims to comprehend the impact of capital structure on the financial performance of listed consumer goods companies in Nigeria, considering the dynamics in these companies' capital structure decisions.

### **1.1 Objectives**

The broad objective of the study is to ascertain the effect of capital structure on the economic performance of listed consumer goods firms in Nigeria. The specific objectives include;

1. to assess the effect of the Debts-to-Equity Ratio on CFROI of listed consumer goods firms in Nigeria.

2. to ascertain the effect of Debt-to-capital ratio on CFROI of listed consumer goods firms in Nigeria.

## **1.2 Hypotheses**

- H<sub>01</sub> There is no statistically significant effect of Debts-to-Equity Ratio on CFROI of listed consumer goods firms in Nigeria.
- H<sub>02</sub> There is no statistically significant effect of Debt-to-capital ratio on CFROI of listed consumer goods firms in Nigeria.

## **2. LITERATURE REVIEW**

### **2.1 Conceptual Review**

#### **2.1.1 Capital Structure**

One of the most important decisions in the field of corporate finance is the capital structure of the firm, which describes the mix of debt and equity used to finance the firm's assets (Mazanec, 2023). Mazanec, (2023) further described capital structure as a company's use of debt, equity, and hybrid securities to finance its operations. Creditors' claims increase when businesses issue debt securities to obtain capital, whereas owners' claims increase when equity securities are issued (Olusola et al., 2022). When it comes to appropriately assembling funding sources in terms of their size and percentage, capital structure considers the ratio of different long-term funding sources. The total amount of funds provided by owners and long-term creditors is referred to as the capital structure. As a result, capital structure is analysed in terms of debt and equity financing.

#### **2.1.2 Debt Financing**

Debt is a crucial component of a firm's financial framework since it offers a way for businesses to raise funds for investments by allowing them to borrow money (Naomi, 2023). Any arrangement or contract between a creditor and a debtor falls under this definition. The primary characteristic of long-term financing is the requirement that the principal amount, along with interest, be paid back to the creditors over a predetermined amount of time (Tian, 2024). Debt has some advantages over value financing, businesses frequently use it to develop their capital structure. All things being equal, using debt helps an organization keep money in-house and saves money on taxes (Richmond, & Richmond, 2024). According to Reinhart, et al., (2015), while discussing the difference between debt and equity stated that, debt is legally obligated to repay principal and interest over a predetermined period, it has lower

financing costs than equity. After then, the debt is settled. Conversely, equity has no boundaries. You will always owe the equity investor a piece of your profits after you sell their stake of the company.

### **2.1.3 Equity Financing**

An organization can raise funds with equity without taking on debt. This implies that there is no time restriction on the repayment of capital acquired through equity financing. When investors buy shares in a company, they do so with the hope of maximizing their wealth through future earnings. On the other hand, investors have limited liability, meaning that in the event of a loss, they stand to lose only the principal amount of their investment in the business (Rajabov, 2024). The difference between the cost of an owned item's liabilities and its asset or interest value is known as equity. Onyebuchi (2022) claims that the term "stockholders' equity" (also known as "stockholders' funds," "stockholders' capital," etc.) refers to the equity of a company that is divided among its individual common shareholders. Owners' equity is defined in financial accounting as the net asset, which is the difference between the entity's entire assets and all its liabilities. One of the four main financial statements, the statement of financial position, typically includes equity. Both tangible and intangible objects can be considered an entity's assets. Items like goodwill, copyrights, and brand names are examples of intangible assets. Cash, equipment, and land are examples of tangible assets (Horsfall, 2023).

### **2.1.4 Cost of Capital**

Debt and equity are the two parts of capital that comprise it. When a business uses debt to support its operations, it is borrowing money for a predetermined amount of time from a lender and agreeing to pay the money back with interest. The lender is compensated with loan interest payments. Through equity financing, the company's owners purchase shares, transform it into their own business, and get a cut of the profits. In general, cost of capital refers to the various expenses associated with the various forms of funding that an organization may get (Priem, & Gabellone, 2024).

### **2.1.5 Interest cover (Cost of Debt)**

The business had several options for raising debt, such as taking out loans from banks or issuing bonds (debentures) to the public at a fixed interest rate for a predetermined amount of time. This measure is helpful in providing a sense of the total rate that the firm pays for debt

financing, as the corporation can utilize bonds, loans, and other types of debt. Since riskier companies typically have higher debt costs, the metric can also help investors determine how risky the company is in relation to others.

### **2.1.6 Dividends (Cost of Equity)**

When investors donate equity money to the business, they also obtain a claim to the business's future profits, even though these distributions are not guaranteed from the start (Diwe-Tochukwu, et al., 2024). Companies can choose to keep their earnings to raise money internally. The minimum rate of return that shareholders demand on funds they supply by buying new shares to prevent a decline in the current market price of the equity share is known as the cost of external equity, and the opportunity cost of retained earnings is the rate of return on dividends forgone by equity holders (Diwe-Tochukwu, et al., 2024). Unlike debt capital, which the firm must eventually repay, equity capital remains invested in the firm indefinitely—it has no maturity date. The two basic sources of equity capital are (1) preferred stock and (2) common stock equity, which includes common stock and retained earnings. Common stock is typically the most expensive form of equity, followed by retained earnings and then preferred stock. In addition, a firm that increases its use of leverage significantly can see its cost of debt rise as lenders begin to worry about the firm's ability to repay its debts. According to Gitman & Zutter (2012), whether the firm borrows very little or a great deal, it is always true that the claims of common stockholders are riskier than those of lenders, so the cost of equity always exceeds the cost of debt.

### **2.1.7 Economic Performance**

According to Anwar and Abdullah, (2021), the word performance is a concept of two levels, such as efficiency and effectiveness. While efficiency is the proportion between input and output, effectiveness is the extent to which goals are achieved. According to motivation theory in management science, performance is interpreted as the extent of work completed by an employee (Usman, 2019). Abdullahi, (2023) asserts that performance is the strategic outcome a firm uses in achieving its objectives. Efficiency is the major concern of any corporate management. A firm's performance is the extent to which a firm can achieve its strategic objectives, as well as an indicator for the assessment of overall competitiveness. When properly evaluated, a firm's performance gives corporate management an idea of current financial and non-financial conditions (Usman, 2019). Olusola, (2022) defined economic performance as a firm's ability to maximize earnings from available assets and resources. The

term can also be used to mean the general measurement of an organization's overall financial strength over a given period (Nworie & Nwoye, 2023). Economic performance examines how effectively and efficiently an organization can meet its profit maximization objective and manage its assets, liabilities, and financial interests of shareholders. Olusola, (2022) stated that profitability-based accounting indicators such as return on assets (ROA) and return on equity (ROE) have been used by several scholars' measures of financial performance.

## **2.8 Capital structure and Economic performance**

Capital structure of a company, which represents the mix of debt and equity used to finance its operations, plays a crucial role in determining its economic performance. The way a company chooses to structure its capital can have significant implications for its profitability, risk profile, growth potential, and overall financial health. Understanding the relationship between capital structure and economic performance is essential for companies, investors, and financial analysts alike. The capital structure decision involves striking a balance between the benefits and costs associated with debt and equity financing. Debt financing typically offers lower costs of capital due to tax advantages and fixed interest payments (Kose, et al., 2020). However, it also increases financial risk, as interest expenses must be met regardless of the company's performance. Equity financing, on the other hand, involves higher costs but provides greater flexibility and reduces the risk of default.

## **2.2 Empirical Review**

Alabdullah, (2018). Investigated the relationship between capital structure and company performance across different industries using a sample of Jordanian manufacturing firm. For the study, which spanned the years 2005–2009, the annual financial statements of forty-five manufacturing firms listed on the Amman Stock Exchange were utilized. In addition to capital structure variables like short-term debt to total assets (STDTA), long-term debt to total assets (LTDTA), and total debt to equity (TDE), he employed multiple regression analysis on performance indicators like return on asset (ROA) and profit margin (PM). The findings demonstrated that, whilst TDE is favorably correlated with ROA and negatively correlated with PM, STDTA and LTDTA, ROA, and PM have a negative and significant association. STDTA is important when ROA and PM are used. While LTDTA is significant while using PM, STDTA is significant when employing ROA.

Appah and Tebepah (2020) carried out studies on the return on assets and capital structure optimization of Nigerian listed non-financial companies. between 2009 and 2018. The study's

data were taken from the sampled firms' annual reports, and multiple regression employing the ordinary least squares technique of pooled regression, fixed effects, and random effects was used in the research. The results showed that return on assets (ROA) (ECE) is adversely correlated with both debt to capital employed (DCE) and equity to capital employed (ECE).

Dang (2019) examined the connection between the capital structure and the operating results of sixty-one (61) Vietnamese food and beverage companies during the years 2000 and 2017. Debt ratio, including short- and long-term debt ratios, as well as EPS, ROA, and ROE (proxies for the company's performance). The results demonstrated that while debt ratio has no effect on ROA, it does affect ROE and EPS. This indicates that a company with a large debt load performs better according to ROE but worse according to ROA.

Dang and Do (2021) examined capital structure affect firm value in Vietnam. This study aims to examine whether the capital structure and several factors have significant influences on firm value in Vietnam. To achieve this objective, 435 nonfinancial listed companies have been selected from 2012 to 2019 on Vietnamese stock exchanges. Four groups of firms continue to be chosen from the total to investigate the differences in the outcomes among industries. The results altogether using the GMM method show that the impact of capital structure and other control variables on firm value is significant, yet different across industries: In the food and beverage industry, capital structure significantly increases firm value; however, it significantly decreases firm value in the wholesale trade, construction, and real estate industries. It has no effect on enterprise value when taking into account all industries. The impact of other control parameters on firm value, other from firm size, likewise shows inconsistent outcomes.

### **3. MATERIAL AND METHOD**

The research design adopted was the *ex-post facto* research design. The population of the study will consist of twenty (21) consumer goods firms listed on the Nigerian Exchange Group (NXG) from the period of 2014-2023 and are still on the Exchange as at 31st of December 2023. Purposive sampling techniques was employed in the determination of the sample size. Fourteen (14) consumer goods firms were purposively selected based on the availability and the completeness of data set for the study period (2014 - 2023). The data use in the study were collected mainly from secondary sources. These data were obtained from the company's annual report and the publication of the Nigerian exchange Group. In order to achieve the research objectives, the study adopted the model used by Kibrom (2010) who



examined the determinants of capital structure and the model is as specified below: Leverage = f (prof, tang, size, growth) (1) The equation (1) is translated into econometric model as follows: Leverage =  $\beta_0 + \beta_1 (\text{prof}) + \beta_2 (\text{Tang}) + \beta_3 (\text{size}) + \beta_4 (\text{growth}) + \varepsilon$  (2). In order to establish the uniqueness of the study, the model is modified and respecified by including non-debt tax shield and economic growth.

The model for the empirical investigation is specified as follows:

$$\text{CFROI}_{it} = \beta_1 \text{D-ER}_{it} + \beta_2 \text{DCR}_{it} + \beta_3 \text{FS}_{it} + \mu_{it} \dots \dots \dots \text{Eqn 1}$$

Where:

$\text{DER}_{it}$  = Debt – Equity ratio of firm i in year t

$\text{DCR}_{it}$  = Total debt to capital employed of firm i in Year t

FS = Firm Size (Control Variable)

$\mu_{it}$  = the error term

Table 1: Variables and their Proxies

Variable Type	Variable Name	Proxy	Operational definitions
Independent Variable (IV)	Capital Structure	Debts-Equity Ratio	Debt/ equity
		Interest Coverage Ratio	EBIT/interest expenses
		Debts-Capital Ratio	Debt/capital employed
		Debts-Asset Ratio	Debt/Asset
Dependent Variable (DV)	Economic Performance	CFROI	Net operating cashflow/capital employed

Source: Researcher's Concept (2024)



## 4. RESULT AND DISCUSSIONS

### 4.1 Data Analysis

#### 4.1.1 Descriptive Analysis of Data

The analysis of descriptive properties of the data is shown in table 4.1 below.

Table 2 Descriptive Analysis

	<i>CFROI</i>	<i>DER</i>	<i>DCR</i>	<i>FS</i>
Mean	0.252885	2.354245	1.367723	7.872517
Median	0.180113	1.469132	1.125051	7.974781
Maximum	4.410210	47.92299	9.627810	8.901636
Minimum	-0.642091	-8.455286	0.230863	6.240489
Std. Dev.	0.451076	4.528250	1.082713	0.598213
Skewness	5.718664	7.573383	4.193139	-0.413182
Kurtosis	52.95075	75.24494	28.71742	2.429870
Jarque-Bera	15317.69	31784.41	4268.338	5.879559
Probability	0.000000	0.000000	0.000000	0.052877
Sum	35.40389	329.5943	191.4813	1102.152
Sum Sq. Dev.	28.28221	2850.202	162.9452	49.74233
Observations	140	140	140	140

Source: E-views 10 Statistical Output (2024)

As revealed in Table 2, the descriptive analysis of Cash Flow Return on Investment (CFROI) shows a mean value of 0.252885, indicating that, on average, the consumer goods firms in the sample have a positive CFROI. The maximum CFROI is 4.410210, suggesting a highly profitable period for some firms, while the minimum CFROI is -0.642091, indicating periods of negative cash flow for others. The standard deviation of 0.451076 reflects moderate variability in CFROI among the firms. The skewness of 5.718664 indicates a right-skewed distribution, meaning most firms have CFROI below the mean, with a few firms having very high CFROI. The kurtosis of 52.95075 indicates a leptokurtic distribution, suggesting the presence of extreme values or outliers.

The Debt-to-Equity Ratio (DER) has a mean of 2.354245, showing that on average, the firms rely more on debt than equity in their capital structure. The maximum DER of 47.92299 indicates extremely high leverage for some firms, while the minimum of -8.455286 suggests negative equity for others, possibly due to accumulated losses. The high standard deviation

of 4.528250 indicates significant variability in DER across the firms. The skewness of 7.573383 shows a highly right-skewed distribution, meaning that most firms have lower DER, with a few having very high DER. The kurtosis of 75.24494 suggests a leptokurtic distribution, with extreme values much higher than the mean.

The Debt-to-Capital Ratio (DCR) has a mean value of 1.367723, implying that debt constitutes a significant portion of the firms' capital structures. The maximum DCR is 9.627810, indicating high leverage for some firms, while the minimum DCR of 0.230863 shows that some firms have relatively low debt. The standard deviation of 1.082713 points to notable variability in DCR among the firms. The skewness of 4.193139 indicates a right-skewed distribution, where most firms have DCR values lower than the mean. The kurtosis of 28.71742 further indicates a leptokurtic distribution, signifying the presence of extreme DCR values.

Firm size (FS), measured as the natural log of total assets, has a mean of 7.872517, indicating a generally large size of the firms in the sample. The maximum FS is 8.901636, representing the largest firm, while the minimum FS of 6.240489 indicates the smallest firm in the sample. The standard deviation of 0.598213 reflects moderate variability in firm size. The skewness of -0.413182 suggests a left-skewed distribution, meaning that most firms have FS values above the mean. The kurtosis of 2.429870 indicates a distribution that is slightly platykurtic, with fewer extreme values than a normal distribution.

#### **4.1.2. Heteroskedasticity**

The Likelihood Ratio (LR) test presented in Table 3 assesses the presence of heteroskedasticity in the residuals of a panel data model. The null hypothesis for this test posits that the residuals are homoskedastic, meaning they have a constant variance across observations. The opposite is heteroskedasticity which implies that the variability in the residual's changes with the level of an independent variable or over time (Pötscher & Preinerstorfer, 2023). Table 4.2 shows the test of heteroskedasticity.

Table 3 Panel Period Heteroskedasticity LR Test

Null hypothesis: Residuals are homoscedastic

Equation: UNTITLED

Specification: CFROI DER DCR ICR DAR FS C

	Value	df	Probability
Likelihood ratio	120.6782	14	0.0000

Source: E-views 10 Statistical Output (2024)

Table 3 shows that the probability value (p-value) associated with the LR test statistic is 0.0000, which is less than 5% significance level. This indicates that the residuals are heteroskedastic, meaning their variance is not constant across observations. In other words, the variability in the residual's changes with the level of an independent variable, which could impact the efficiency and validity of standard errors in the regression model. To correct this anomaly, the White period covariance method was used in the panel data settings since the assumption of homoskedasticity did not hold. By adjusting the covariance matrix, this method provides more reliable standard errors, leading to more accurate hypothesis tests and confidence intervals (Cribari-Neto & Zarkos, 2001). White period covariance ensures that the statistical inference remains valid even when the data exhibit different variances with the level of the independent variables.

#### 4.1.3 Cross-sectional Independence

The Residual Cross-Section Dependence Test was used to determine whether there is cross-sectional dependence in the residuals of the panel data regression model. The null hypothesis for this test states that there is no cross-sectional dependence (correlation) among the residuals. This means that under the null hypothesis, the residuals from different consumer goods firms are assumed to be independent of each other. The presence of cross-sectional dependence implies that standard errors may need to be adjusted to account for this dependence to avoid biased statistical inference (Sarafidis & Wansbeek, 2012). Table 4 shows the test result as conducted using Breusch-Pagan LM test.

Table 4 Residual Cross-Section Dependence Test

Null hypothesis: No cross-section dependence (correlation) in residuals

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	115.0763	91	0.0449

Source: Eviews 10 Statistical Output (2024)

In Table 4, the Breusch-Pagan LM test statistic has a corresponding p-value of 0.0449. Since this p-value is less than the common significance level of 0.05, we reject the null hypothesis of no cross-sectional dependence. This result indicates that there is significant evidence to suggest that the residuals from different cross-sectional units are correlated. This cross-sectional dependence can arise due to unobserved common factors affecting multiple units or due to interactions between units (Basak & Das, 2018). Since there is cross-sectional dependence issue in the model, Period Seemingly Unrelated Regression approach was adopted in order to adjust the standard errors in a way that accounts for this dependence to avoid biased statistical inference (Sarafidis & Wansbeek, 2012).

## 4.2 Test of Hypotheses

Hypothesis testing was conducted using Panel Estimated Generalized Least Squares (EGLS). Before selecting this model for hypothesis testing, we performed tests for heteroskedasticity and cross-sectional dependence. The results indicated the necessity of using Panel EGLS to account for the issues of heteroskedasticity and cross-sectional dependence, thereby enhancing the validity of the regression estimates. To ensure robustness, we incorporated White period and Period Seemingly Unrelated Regression (SUR) methods into the Panel EGLS framework, as shown in Table 5 below.

Table 5 Panel EGLS (Period SUR) with White Period Covariance

Dependent Variable: CFROI

Method: Panel EGLS (Period SUR)

Date: 06/22/24 Time: 12:44

Sample: 2014 2023

Periods included: 10

Cross-sections included: 14

Total panel (balanced) observations: 140

Linear estimation after one-step weighting matrix

White period standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DER	-0.004766	0.001548	-3.079127	0.0025
DCR	0.068822	0.016632	4.137912	0.0001
FS	-0.068450	0.017893	-3.825571	0.0002
C	0.590611	0.162835	3.627057	0.0004
Weighted Statistics				
R-squared	0.343392	Mean dependent var		0.574071
Adjusted R-squared	0.318891	S.D. dependent var		1.362814
S.E. of regression	1.019322	Sum squared resid		139.2284
F-statistic	14.01581	Durbin-Watson stat		1.948516
Prob(F-statistic)	0.000000			

Source: Eviews 10 Statistical Output (2024)

In Table 5, the results from the Panel Estimated Generalized Least Squares (EGLS) regression using Period Seemingly Unrelated Regression (SUR) with White Period Covariance adjustments are presented. The Adjusted R-squared value is 0.318891, indicating that approximately 31.89% of the variability in CFROI is explained by the independent variables (Debt-to-Equity Ratio, Debt-to-Capital Ratio, Interest Coverage Ratio, Debt-to-Asset Ratio, and firm size). This suggests a moderate fit of the model to the data, meaning that the capital structure variables and firm size collectively provide a reasonable explanation of the variations in CFROI among the listed consumer goods firms in Nigeria.

The Prob(F-statistic) value is 0.000000, which is highly significant. This indicates that the overall regression model is statistically significant at 5% significance level. The low p-value suggests that the independent variables, as a group, significantly explain the variations in CFROI. In other words, the combined effect of the Debt-to-Equity Ratio, Debt-to-Capital Ratio and firm size on CFROI is statistically significant, affirming the relevance of the model in understanding the effect of capital structure on the economic performance of these firms. The constant term (C) has a coefficient of 0.590611 with a p-value of 0.0004, indicating that when all independent variables are zero, the CFROI is 0.590611 units.

Firm size (FS), measured as the natural log of total assets, has a coefficient of -0.068450 with a p-value of 0.0002. This negative and statistically significant coefficient suggests that larger firm size is associated with lower CFROI. For every one unit increase in the natural log of total assets, the CFROI decreases by approximately 0.0685 units. This implies that larger firms may face diminishing returns on investment, possibly due to inefficiencies, bureaucratic hurdles, or challenges in managing larger operations effectively.

#### **4.2.1 Hypothesis I**

H<sub>0</sub>: Debts-to-Equity Ratio has no significant effect on CFROI of listed consumer goods firms in Nigeria.

The Debt-to-Equity Ratio (DER) has a coefficient of -0.004766 with a p-value of 0.0025. This negative and statistically significant coefficient suggests that an increase in the DER leads to a decrease in the Cash Flow Return on Investment (CFROI) for listed consumer goods firms in Nigeria. Specifically, for every one unit increase in the DER, the CFROI decreases by approximately 0.0048 units. This implies that higher leverage, in terms of more debt relative to equity, adversely affects the firm's cash flow performance, potentially due to higher financial risk and associated costs of debt. Since the p-value is less than 0.05, we accept the alternate hypothesis that debts-to-Equity Ratio has a significant negative effect on CFROI of listed consumer goods firms in Nigeria (p-value = 0.0025).

This negative relationship suggests that as these firms increase their debt relative to equity, their ability to generate cash flow from their investments diminishes. This can be attributed to the increased financial risk and burden of debt servicing costs. High levels of debt lead to higher interest payments, which can erode the firm's cash flows and reduce the funds available for reinvestment. Additionally, excessive debt can lead to financial distress, making it harder for firms to operate efficiently and potentially leading to a decline in investor confidence and market value.

#### **4.2.2 Hypothesis II**

H<sub>0</sub>: Debts-to-capital ratio has no significant effect on CFROI of listed consumer goods firms in Nigeria.

The Debt-to-Capital Ratio (DCR) has a coefficient of 0.068822 with a p-value of 0.0001. This positive and statistically significant coefficient indicates that an increase in the DCR leads to an increase in CFROI. For every one unit increase in the DCR, the CFROI increases by approximately 0.0688 units. This implies that a higher proportion of debt in the firm's capital structure relative to its total capital can enhance cash flow returns, possibly due to the tax shield benefits of debt and the optimal use of leverage. Since the p-value is less than 0.05, we accept the alternate hypothesis that debts-to-capital ratio has a significant positive effect on CFROI of listed consumer goods firms in Nigeria (p-value = 0.0001).

A positive effect indicates that a moderate level of debt financing, when compared to total capital, can enhance the firm's cash flow returns. This might be because debt can be a cheaper source of capital compared to equity, due to tax deductibility of interest payments. Additionally, leveraging debt can amplify returns on investment as long as the cost of debt is lower than the return on investment generated by the firm's assets. Thus, a balanced approach to debt financing can contribute positively to economic performance.

#### **CONCLUSION AND RECOMMENDATION**

The finding of the study implies that while high debts-to-equity ratios may pose risks and negatively impact cash flow returns, debts-to-capital can positively contribute to firm economic performance. Thus, a balanced and strategic approach to leveraging debt, coupled with maintaining strong operational earnings, is crucial for enhancing the economic outcomes of these firms. The debts-to-equity ratio has been found to have a negative effect on the CFROI of listed consumer goods firms in Nigeria as a result of increased financial risk and cost associated with higher debt levels relative to equity. Contrarily, the debts-to-capital ratio has a positive effect on the CFROI of these firms. This suggests that a balanced approach to leveraging debt within the total capital structure can enhance firm performance. A moderate level of debt can provide tax advantages through interest deductibility and can signal confidence to investors about the firm's growth prospects.

Financial managers of listed consumer goods firms in Nigeria should aim to reduce their debts-to-equity ratio by seeking alternative financing options such as equity financing or retained earnings. This can help decrease financial risk and improve cash flow stability,



enhancing overall economic performance. The Board of Directors should adopt a balanced approach to leveraging debt within the total capital structure, ensuring that the debts-to-capital ratio remains at an optimal level. This can be achieved by setting clear debt management policies that support sustainable growth and maximize CFROI.

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