

## EVALUATION OF THE IMPACT OF CAPITAL STRUCTURE ON THE PROFITABILITY OF MANUFACTURING COMPANIES IN NIGERIA.

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### **Abstract**

*This study evaluates how capital structure affects the profitability of Nigerian-listed manufacturing companies. It also aims to prove the hypothesis regarding the relationship between capital structure variables and profitability. The study employs both descriptive and inferential statistics and data were analysed using a multiple regression model. The finding shows a noticeably inverse relationship between overall debt and profitability. This research indicates that a higher debt position will result in lower profitability; the more debt, the less profitable the company will be. It was suggested that to boost the profitability of manufacturing enterprises, a suitable mix of capital structures should be adjusted. Results show that debt and profitability are negatively correlated. Because of the high-interest rates, profitability tends to decrease in cases of increased debt.*

**JEL Classification:** G32; L60; O16

**Keywords:** Capital Structure, Debt-Equity Ratio, Financial Performance, Manufacturing Companies, Profitability.

### **1. Introduction**

The debate over determining the optimal capital structure for companies has been a contentious issue, with financial performance critically influenced by this choice. Capital structure, encompassing the mix of debt and equity, plays a pivotal role in strategic management decisions, affecting a company's ability to meet stakeholder expectations. Efficient capital structure planning enhances shareholder value and is a tool for managers to control the cost of capital, ultimately impacting a firm's competitiveness. The complex relationship between debt usage and profitability highlights the importance of selecting an ideal capital structure, as demonstrated by conflicting empirical studies in various contexts.

Since Modigliani and Miller's seminal work in 1958, the quest for an optimum capital structure persists, challenging assumptions and exploring determinants. This study aims to contribute to the understanding of capital structure, aiding managers in optimizing returns, guiding owners in capital decisions, and assisting creditors in assessing credit quality. The government and its agencies can utilize the findings to formulate favourable financial policies, particularly for unlisted manufacturing firms in Nigeria.

## **Literature Review**

### **2.1 Conceptual Review**

#### **2.1.1 Capital Structure**

The term 'capital structure' encompasses the financial approach used to fund a company's assets, denoting the mix of securities issued by a company. As defined by James (2023), the optimal capital structure represents the proportions maximising a firm's total value, comprising debts and equity securities. Capital structure involves long-term financing, encompassing long-term debt, preferred stock, and net value (O'Brien, 2003). Basic and complex capital structures exist, ranging from simple equity and preference shares to intricate compositions involving various assets like debentures and bonds.

Effective utilization of limited capital resources is crucial for optimal business operations and maximum returns. Capital structure, the combination of loans and equity for long-term functioning, requires careful consideration of its composition. Various financial instruments, such as debt, equity, and preference shares, serve as funding sources, each entailing specific rights and risks for investors and debtors (Barges, 2009). Financing current and permanent assets involves short-term or long-term funding categorized as debt or equity, shaping the firm's financial structure. Achieving an optimal capital structure involves balancing leverage's impact on the cost of capital and overall firm value. This mix of debt and stock aims to minimize the weighted average cost of capital, reflecting a proportional blend of long-term funding sources, including loans, preferred equity, common stock, and retained profits (Abor, 2005).

#### **2.1.2 Company Profitability**

This is the direct result of managing various financial resources and making effective use of them in financing, investing, and operating activities. Since every business aims to maximize its profit, profitability has always been given priority in the literature on finance and accounting. This is because it is the main goal of financial management. As Jensen (2002) notes, in actuality, it is considered a moral obligation to optimize the return on investment for its investors. A business cannot exist if it is not profitable; only a highly profitable enterprise can provide a substantial return on investment for its proprietor. The ability of a company to bring in money is known as profitability, and the inability to do so is known as a loss. He continues by saying that it is only lucrative if the money generated is greater than the input cost, and that bad performance is indicated if the income is less (Hall & Weiss, 1967).

For investors, stakeholders, and the industry at large, a company's performance is crucial. The yield on investment is very significant to investors, and a profitable business

can provide large profits over an extended period. A financially successful company will pay its employees more, provide clients with goods of higher calibre, and operate a more ecologically friendly production facility. Increased profits will also lead to increased job opportunities and income growth for individuals.

## **2.2 Theoretical Review**

The impact of financial leverage decisions on the capital structure of the company should be examined. To show how the capital structure and the firm's value are related, there are two competing theories. While (Modigliani and Miller, 1958) contend that capital structure has no bearing on business value, traditionalists maintain that decisions about capital structure have an impact on firm value. Applicability theory and irrelevancy theory are the two main theories. Relevance theory states that the decision about how to allocate debt and equity affects the firm's value; as a result, the firm's value fluctuates depending on how debt and equity are allocated. The irrelevancy argument, on the other hand, asserts that the decisions made regarding loans and equity have no bearing on the firm's value.

### **2.2.1 Net Income Approach**

Because the choice of capital structure affects the firm's value, it is often referred to as the relevance hypothesis of capital structure. This theory states that variations in the leverage ratio affect the market value and overall cost of capital for the company. Neither debt holders nor shareholders alter their views regarding the required rate of return in response to a change in the firm's debt-to-equity allocation. This theory states that since the costs of debt and equity are fixed, the cost of debt decreases and the firm's value grows as the proportion of debt increases. The cost of debt is also higher than the cost of equity. The cost of loan capital and the cost of equity capital do not alter when the leverage ratio does. The required rate of return for debt holders is less than that of stock because of the low degree of risk. Additionally, when the proportion of debt in the capital structure rises, the total cost of capital falls at a constant cost of debt and equity, increasing firm value and lowering the overall cost of capital (Brigham & Houston, 2013).

### **2.2.2 Net Operating Income Approach**

According to the irrelevancy theory of capital structure, choices made about a company's capital structure have little bearing on its total worth. This hypothesis states that changes in the leverage ratio do not affect the overall cost of capital or the value of the company. It makes the argument that even if debt has fixed costs and is more expensive than equity, the firm's value and total cost of capital stay the same. According to the hypothesis, changing the capital structure does not affect the firm's value because increasing debt exposes owners to greater risk, which raises the cost of stock (Al-Kahtani & Al-Eraji, 2018). The reduced loan costs are balanced by higher stock costs, maintaining the total cost of capital and firm worth. Conditions for net running income apply, including fixed debt costs and a linear variation of equity costs with changes in debt. Under this theory, both earnings per share and the equity capitalization rate increase proportionally with the rising debt ratio, keeping the stock market price and total market worth unchanged.

### **2.2.3 Traditional Approach**

Solomon (1963) is credited with creating the standard approach. The term "middle method" is also used to describe it, as it falls between the net revenue and net operating approaches. It is considered that there is an ideal capital structure and that a company can increase its value by making the best use of its leverage (Van Horn, 1999). This is a cross between the approaches for net running revenue and net income. According to this strategy, the overall cost of capital is reduced when the percentage of debt in total capital is increased to a specific extent. If the proportion of debt increased above the predetermined threshold and up to the subsequent level, the overall cost of capital would remain unchanged. Because of the extremely high cost of debt, the total cost of capital tends to increase as the percentage increases. This method states that a company can use debt to lower its cost of capital and boost its total value at first. But even if investors raise the required rate of return on shares, the increase in capital costs will still outweigh the benefit of employing a less expensive debt fund. Investors penalize a firm's required equity return as leverage increases until the impact of this eventually balances the usage of less expensive borrowed funds (Aryal, 2017).

### **2.2.4 Trade-off theory**

Businesses use the trade-off theory to assess the advantages and disadvantages of debt financing. Borrowing costs, including interest and potential bankruptcy expenses, are evaluated against benefits like tax deductibility. Excessive debt increases the risk of insolvency, requiring a higher risk premium. The theory advises against exceeding the point where debt costs outweigh financial benefits. Debt offers a tax advantage, reducing taxable income, but raises bankruptcy-related expenses. The optimal capital structure occurs when the marginal tax benefit equals the marginal bankruptcy costs. Larger, more profitable firms may favour debt until the risk of bankruptcy becomes significant, while small firms might not choose debt for the tax shield. Firms with stable income and a solid asset base can accommodate higher leverage in their capital structure (Hackbarth et al., 2007).

### **2.2.5 Agency Cost Theory**

Agency theory focuses on the behavioural relationship between owners (principals) and agents (managers) hired to execute duties on behalf of the owners. Conflict arises when managers resist high levels of oversight that could jeopardize their employment and income, while shareholders, able to diversify risks, favour riskier initiatives. Agency cost theory suggests that leveraged businesses are beneficial as debt levels serve as a monitoring tool, minimizing agency costs. The first conflict arises when managers do not retain all leftover claims, potentially leading to less effort in value development activities. The second conflict involves the interests of loan holders and stockholders, with equity holders benefiting from high-risk projects even if their value declines. Increasing dependence on debt funding can reduce agency costs, but the risk of financial trouble and dilution of current shareholders' claims limit a company's ability to do so. These factors contribute to the firm's higher cost of capital (Kochahar, 1996).

### 3.0 Methodology

This research conducts critical analyses of Nigerian-listed manufacturing firms and also examines linked businesses' debt and equity situations in capital investments. Secondary material has been used to accomplish the study's predetermined goals. Three manufacturing firms were chosen as examples using the convenience selection technique. Which are:

1. NNPC stands for Nigerian National Petroleum Company
2. DCP stands for Dangote Cement PLC.
3. FMNP stands for Flour Mills of Nigeria PLC.

Secondary data was gathered from the annual reports that were acquired by contacting the pertinent businesses in the area. Financial statements for each subject as well as a range of related journals, magazines, newspapers, and articles were also looked at. Financial tools were used for evaluating the success of the subjects, the tools are stated below;

1. Debt to total assets ratio

The debt-to-total asset ratio, which displays the proportion of total assets financed by debt, liabilities, and creditors, is a measure of financial leverage. It's computed as

$$DebttoTotalAssets = \frac{TotalDebts}{TotalAssets}$$

2. Debt to equity ratio

A company's loan-to-stock ratio is used to calculate its financial leverage. It displays the ratio of the amount of debt used by a company to finance its assets to the amount of value represented by shareholders' equity. It is calculated in this way:

$$Debttoequityratio = \frac{TotalDebts}{Shareholder'sEquity}$$

3. Return on Sales (ROS)

It's a sales-based revenue metric. It evaluates the overall profitability of the company as well as the combined effects of asset and debt management. It indicates how net profit compares to total revenue. It is calculated in this way:

$$ReturnonSales = \frac{Netincome}{sales}$$

4. Return on total assets (ROA)

This figure represents the profitability of a business relative to its total assets. Return on assets gauges how well management makes use of all of the company's resources to turn a profit. By comparing net income to assets, the ROA—which is expressed as a percentage—is ascertained.

$$Returnontotalassets = \frac{Netincome}{totalAssets}$$

5. Return on equity (ROE)

This ratio assesses a company's profitability by comparing its net revenue to the average wealth of its shareholders. The amount that a shareholder makes on their investment in the company is measured by the return on equity, or ROI. An increase in the proportion indicates that management is using its equity base more effectively, which raises investor returns. It is calculated in this way:

$$\text{Returnnonequity} = \frac{\text{Netincome}}{\text{Shareholder'sEquity}}$$

A combination of descriptive and inferential statistical techniques, such as regression and correlation analysis, were used for the data analysis to look at the relationship between the dependent and independent variables and determine how the independent variable affected the dependent variable. Descriptive techniques included measures like average, standard deviation, and coefficient of variance. The influence of capital structure on the revenue of publicly traded industrial enterprises was also examined using multiple regression models.

**3.1 Model Specification**

For ROA

$$y = c + \beta_1TDit + \beta_2EQit + \mu it$$

For ROE

$$y = c + \beta_1TDit + \beta_2EQit + \mu it$$

For ROS

$$y = c + \beta_1TDit + \beta_2EQit + \mu it$$

Where,

C = Constant Coefficient (intercept)

B = Slope Coefficient of Independent variables

i = number of firms (5)

t = Time period

μ = Error Term

Statistics Pack System Software (SPSS) 20 was used to achieve the goal of analyzing the secondary data.

**4.1 Research Findings/Results**

Variables	ROA	ROE	ROS	TDE	TDA
ROA	1	0.828** (0.000)	0.671** (0.000)		
ROE	0.828** (0.000)	1	0.848** (0.000)		
ROS	0.671** (0.000)	0.848** (0.000)	1		

TDE		-0.584* (0.034)		1	
TDA	0.075 (0.791)			0.243 (0.383)	1

**Table 4.1.1 Correlation analysis****Source: Author's computation, 2023**

\*\* Correlation is significant at the 0.01 level (2-tailed)

\* Correlation is significant at the 0.05 level (2-tailed)

A significant positive relationship between Return on Assets (ROA) and Return on Equity (ROE) (0.828) as well as between ROA and Return on Sales (ROS) (0.671) is shown by the correlation analysis results in Table 4.1.1. Furthermore, there is a strong positive connection (0.848) between ROE and ROS, meaning that rising ROE levels are correlated with rising ROS levels. At the 0.01 level, these associations are statistically significant. It is clear from Table 4.1.1 that ROA, ROE and ROS have a positive relationship. Nonetheless, there is a lesser association between these variables, as evidenced by the Total Debt to Assets ratio's relatively low positive correlation (0.243) with Debt to Equity.

**Table 4.1.2: ROE Model Summary**

Model	R	R square	Adjusted R square	Standard error of estimate	Sig.
1	0.602	0.363	0.256	0.2187	0.046

**Source: Author's computation, 2023**

Independent variable – total debt to equity, total debt to assets

Key variables for assessing the regression model's prediction quality are provided in Table 4.1.2. R, which measures the degree of prediction quality, is 0.602, which is a good level of prediction. The dependent variable's (ROA) R square, which expresses how much of its variance is accounted for by the independent variables, is 0.363. This indicates that other factors account for 63.7% of the variation in ROA, with the total debt to equity and total debt to assets ratios accounting for 36.3% of the variation. With the degree of freedom taken into account, the modified R square comes to 0.256, meaning that distinct behavioural factors account for 25.6% of the variation in ROA, with other factors accounting for the remaining 74.4% of the variation. The range of the measured ROA values from the regression line is indicated by the standard error of the estimate, which is 0.2187 units.

**Table 4.1.3: ROE ANOVA'S Table**

Model	Sum of squares	Degree of freedom	Mean Square	F	Sig.
Regression	.326	2	.163	3.412	0.046
Residual	.574	12	.048		
Total	.901	14			

**Source: Author's computation, 2023**

The observed P value in Table 4.1.3 of the ANOVA analysis is 0.046, which is below the predefined alpha threshold of 0.05. This shows statistical significance and shows that total debt to equity and total debt to assets, the independent variables, have a statistically significant predictive impact on ROE, the dependent variable. As a result, the model shows effectiveness in predicting how the independent and dependent variables will relate to one another. Therefore, it may be concluded that the independent factors are important in explaining the variation in ROE that is shown.

**Table 4.1.4 ROE Coefficient Matrix**

Model	Unstandardized Coefficient		Sig (P value )
	B	Standard Error	
(Constant)	0.626	0.133	0.001
Total debt to assets	-0.123	0.114	0.013
Total debt to equity	-0.225	0.110	0.046

**Source: Author's computation, 2023**

The dependent variable's variation with an independent variable, with other independent variables being held constant, is shown by the standardized coefficients in Table 4.1.4. When comparing total debt to assets from Table 4.1.4, a negative relationship is shown by the standardized coefficient (B), which is -0.123. This suggests that Return on Equity (ROE) decreases with each rise in total debt to assets. Similarly, the standardized coefficient (B) is -0.025 when examining the effect of total debt to equity from the same table, indicating a negative correlation between ROE and the debt to equity ratio. This implies that ROE decreases with each increase in the debt to equity ratio. The standard error that corresponds with each of these beta values shows how much these values could differ between samples. The standard error is 0.114 for total debt to equity and 0.110 for total debt to assets.

**Table 4.1.5 ROA Model Summary**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Standard error of estimate	Sig.
1	0.753	0.567	0.494	0.1136	0.007

**Source: Author's computation, 2023**

Independent variable – total debt to equity, total debt to assets

Key indicators for evaluating the regression model's prediction quality are shown in Table 4.1.5. A high degree of prediction is indicated by the R-value of 0.753, which gauges the quality of the forecast. The dependent variable's (ROA) R<sup>2</sup>, which shows how much of its variance is explained by the independent factors, is 0.567. This indicates that the total debt to equity and total debt to assets ratios account for 56.7% of the variation in ROA, with other factors accounting for 43.3% of the variation. With the degree of freedom taken into consideration, the corrected R square comes out to 0.494, which



indicates that behavioural factors account for 49.4% of the variation in ROA. Additionally, the model summary shows a standard error of estimate of 0.1136, meaning that there are 0.1136 units of deviation in the observed ROA values from the regression line.

**Table 4.1.6 ROA ANOVA's Table**

Model	Sum of squares	Degree of freedom	Mean Square	F	Sig.
Regression	.203	2	.101	7.845	0.007
Residual	.155	12	.013		
Total	.357	14			

**Source: Author's computation, 2023**

The dependent variable ROA is statistically significantly predicted by the independent variables total debt to equity and total debt to assets, as indicated by the P value in ANOVA table 4.1.6, which is smaller than the alpha value of 0.05. As a result, the connection between the dependent and independent variables can be accurately predicted by the model. Consequently, the variance in ROA can be significantly explained by the independent factors.

**Table 4.1.7 ROA Coefficient Matrix**

Model	Unstandardized Coefficient		Sig(P value )
	B	Standard Error	
(Constant)	0.394	0.069	0.000
Total debt to assets	0.079	0.059	0.025
Total debt to equity	-0.225	0.057	0.002

**Source: Author's computation, 2023**

Return on Assets (ROA), the dependent variable, and several other variables, including total debt to equity and total debt to assets, are shown in Table 4.1.7. Total debt to assets has an unstandardized coefficient (B) of 0.079, suggesting a positive link whereby an increase in total debt to assets is accompanied by an increase in ROA.

On the other hand, the total debt to equity has an unstandardized coefficient (B) of -0.225, indicating a negative association. This implies that ROA decreases with each increase in the debt to equity ratio. A standard error is attached to each of these beta values, indicating the potential range of variation in these values between samples. Total

debt to equity has a standard error of 0.057, while total debt to assets has a standard error of 0.059.

**Table 4.1.8 ROS Model Summary**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Standard error of estimate	Sig.
1	0.723	0.523	0.444	0.0687	0.015

**Source: Author's computation, 2023**

Independent variable – total debt to equity, total debt to assets

The R column in Table 4.1.8 displays the value of R, which is regarded as one indicator of how well the dependent variable was predicted. In this case, a good degree of prediction is indicated by the R-value of 0.723. The coefficient of determination, or the percentage of the dependent variable's variance that the independent variable can account for, is shown by the R square column. The R square value in this case is 0.523, meaning that the ratios of total debt to equity and total debt to assets account for 52.3% of the variation in ROS, with other factors accounting for the remaining 47.70%.

After controlling for the degree of freedom, the similarly adjusted R<sup>2</sup> is 0.444, meaning that 44.4% of the variation in ROS is explained by distinct behavioural factors. The standard error of estimate of the model summary is 0.0687, indicating that the observed value of ROS from the regression line is variable by 0.0687 units.

**Table 4.1.9 ROS ANOVA's Table**

Model	Sum of squares	Degree of freedom	Mean Square	F	Sig.
Regression	.062	2	.031	6.582	0.015
Residual Total	.057	12	.005		
	.119	14			

**Source: Author's computation, 2023**

The p-value in ANOVA Table 4.1.9 is 0.015, which is below the 0.05 alpha threshold. This suggests that Return on Sales (ROS), the dependent variable, is significantly predicted by the independent variables total debt to equity and total debt to assets. Consequently, the independent factors significantly contribute to the explanation of the variance in ROS, and the model is thought to be a good predictor of the link between the dependent and independent variables.

When comparing total debt to assets, Table 4.1.9's unstandardized coefficient (B) shows a negative connection (-0.067). This implies that ROS increases in proportion to each rise in total debt to assets.

**Table 4.1.10 ROS Coefficient Matrix**

Model	Unstandardized Coefficient		Sig(P value )
	B	Standard Error	
(Constant)	0.254	0.042	0.001
Total debt to assets	-0.067	0.036	0.015
Total debt to Equity	-0.089	0.035	0.025

**Source: Author's computation, 2023**

Similarly this, when looking at the effect of total debt to equity in Table 4.15, the standardized coefficient of B is equal to -0.089. This indicates that ROS and debt to equity ratio have a negative association, with ROS decreasing with each increase in debt to equity ratio. There is a standard error attached to each of these beta values that shows how much these values might differ between samples. The overall debt to equity standard error is 0.035, while the total debt to asset standard error is 0.036.

#### **4.2 Discussion of Result**

For the three manufacturing companies that were chosen—NNPC, DCP, and FMNP—the typical ratios of total debt to stockholders equity are 130%, 58%, and 118%. Of the companies that were chosen, FMNP has the highest mean ratio. A high ratio means that the amount of total debt is greater than the equity held by shareholders. When compared to comparable corporations, NNPC's debt-to-equity ratio is pretty excellent. A high percentage of debt in the capital structure would be associated with a firm's inability to adapt, as creditors would exert pressure and meddle in management decisions. Additionally, such a company would only be able to borrow money under extremely tight terms and conditions, and they would also have to pay a hefty interest load. For NNPC, DCP, and FMNP, the corresponding mean average ratios of total debt to total assets are 58%, 36%, and 113%. The ratio of FMNP's total debt to assets is extremely high. A high ratio implies a very narrow margin of safety for creditors, indicating a high level of risk and a large total value of claims made by creditors against all assets. The mean average ratio of DCP's total debt to assets is 36%. Less than 50% of the total assets, according to the creditors, indicate that the company is doing better than NNPC and FMNP.

Nonetheless, the analysis discovered that since DCP's condition concerning net profit is trending upward, ROE is trending upward as well. The company's average ROE for DCP is 318.83. Compared to other manufacturing companies, its ROE is higher. NNPC's fiscal

year ROE for the study period is negative, indicating no return on equity. Its positive ROE in other fiscal years is beneficial to shareholders. Throughout the research period, the average ratio was 9.18%. Similarly, FMNP's ROE was positive throughout the entire research period, indicating a good return on equity. For the duration of the study, the average ratio is 15.27%. Furthermore, the research indicates that DCP's return on assets is trending upwards despite asset fluctuations and rising net profit. In the fiscal year, the ROA was 17.21%; it grew to 24.62%. Throughout the research period, the average ratio was 27.27%. However, DCP's profit margin, or return on sale, displayed a varying pattern. Throughout the research period, the average ratio was 0.154. NNPC had an average ratio of -0.39 for the course of the study.

When viewed at value, it indicates that the NNPC's profit margin ratio fluctuates considerably. The profit margin for FMNP indicates a tendency toward rising revenues throughout the research period. Throughout the period, FMNP's average profit margin was 0.08. The results of the study showed that there is a negative association between debt to equity and the computed correlation value of return on assets, and a positive correlation between return on equity, net profit, and total debt to assets. Similarly, there is a negative relationship between total debt to equity and total debt to assets for return on equity and net profit. The findings of Adesina et al. (2015) further support the notion that there is a substantial inverse link between total debt and profitability. Shah (2016) also confirms our findings with his research, which shows a negative relationship between capital structure and firm profitability. In contrast, Bhattarai (2017) finds a positive relationship between total debt ratio and profitability in his study on the impact of capital structure on profitability, which runs counter to our findings. The results of multiple regression analysis indicate that the relationships between total debt to equity and ROE and total debt to assets and ROE are negative.

Total debt to assets and ROA have a positive connection, meaning that as total debt to assets rises, ROA also rises. Likewise, there is a negative correlation between ROA and the debt to equity ratio, meaning that as the ratio rises, ROA falls. Total debt to equity and total debt to assets are negatively correlated with net profit. The conclusion drawn by Kayode (2014) and Mireku (2014) is supported by this outcome. In his research, Kayode (2014) showed a negative correlation between debt and return on equity. Similarly, Mireku (2014) discovered a positive correlation between total debt to assets and ROA and a negative correlation between total debt to equity and ROA.

## **5. Conclusion and Recommendations**

In this essay, the five years from 2015 to 2020 are used to examine how capital structure affects the profitability of three listed manufacturing businesses (DCP, NNPC, and FMNP). With low debt ratios, a healthy profit margin, and profitable returns for investors, DCP stands out as the best performer. On the other hand, NNPC mostly relies on short-term loans, whereas FMNP has a significant debt load. The study finds that the variables related to profitability and capital structure have a mixed connection. Total debt to assets and ROA have a favourable association; however, the link between total debt and equity is significantly negative. ROE shows a broad negative relationship with total debt to assets as well as a large negative relationship with equity. Total equity debt

and total debt to assets show a negative link with ROS. The results show a statistically significant negative correlation between total debt and profitability, implying that higher debt levels are linked to lower profitability. The study highlights the significance of making wise financial decisions and suggests that to reduce risk and boost profitability, manufacturing organizations should rely more on internal financing. According to the report, Nigerian manufacturing companies should carefully weigh their options when it comes to debt and equity, prioritizing internal finance above debt as a risk-reduction strategy. Before investing, investors should carefully examine a company's capital structure, keeping in mind that the capital mix affects the rate of return. And urge more businesses to use the Nigerian Stock Exchange (NSE) to publish financial data to attract investors and enable a capital structure review.

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