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Financial Leverage and Financial Performance of Quoted Firms in Nigeria: Evidence from Oil and Gas and Agriculture Sectors

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Abstract

This study investigated the relationship between financial leverage and financial performance of fIrms in Nigeria: Evidence from the oil and gas and agriculture sectors. The specific aims of the study are to; analyse the effect of debt to asset ratio on financial performance of manufacturing companies; examine the effect of interest coverage ratio on financial performance of manufacturing companies; and establish the effect of debt-equity ratio on financial performance of manufacturing companies. This study adopted a multistage sample technique, and a simple random technique was employed to choose the oil and gas sector and agriculture sectors, while purposive sampling was employed to select 10 firms from the two sectors. The study employed descriptive and inferential analysis. The study made use of panel secondary data, which were gathered from the financial reports of the selected firms for the period of 10 years spanning from 2013 to 2022. Data were analysed with the use of correlation analysis and panel regression estimation procedures. The Hausman test was conducted, and the result found that the fixed effect estimation technique was the most appropriate and consistent for the study. The result of the fixed estimation technique then revealed a regression coefficient of DER of 0.3237 and a t-statistical value of 1.4375 at a p value of 0.0057 (p > 0.05). This indicates that the debt-to-equity ratio has a significant effect on the financial performance of firms in Nigeria. The study further revealed the regression coefficient of ICR of -0.1397 and a t-statistical value of 2.8473 at a p value of 0.0730 (p > 0.05). The study also showed that the regression coefficient of DAR of 0.1027 and a t-statistical value of 3.1283 at a p value of 0.0000 (p < 0.05) indicate that the relationship between DAR and ROI was positive and significant. The study concluded that the debt-to-equity ratio and

debt-to-assets ratio have a significant effect on the financial performance of firms in Nigeria, while the interest coverage ratio has a negative influence on the ROI of the selected firms. Hence, this study recommended among others that manufacturing firms should take on the strategy of reducing their debt and increasing their equity so as to maintain a good debt-to-equity ratio. The study also recommends that firms in Nigeria should always improve their interest coverage ratio by increasing earnings before interest and tax (EBIT) and reducing finance costs and even interest expenses so as to maintain a higher interest coverage ratio.

Keywords: *Financial Leverage, Financial Performance, Debt-to-Asset Ratio, Interest Coverage Ratio, Debt-to-Equity Ratio, Return on Investment.*

1.1 Introduction

A company's financial success is greatly impacted by the proper amount of debt it uses to create an ideal capital structure (Akhtar *et al*., 2021). Financial leverage entails corporations borrowing money to fund their operating activities. Debt financing offers several benefits for corporate operations, such as a steady interest rate, greater financial flexibility, and tax deductions (Santos *et al*., 2023).

Numerous studies have investigated the influence of financial leverage on organizations' financial performance (Akhtar *et al*., 2021; Zahoor *et al*., 2015; Ibrahim & Isiaka, 2020; Iqbal & Usman, 2018; Kenn-Ndubuisi & Joel, 2019). Numerous of these studies used different variables for financial leverage, including the ratios of long-term debt to total assets, total debt to total assets, long-term debt to capitalization, and total debt to capitalisation. However, it is crucial to highlight that there has been inconsistent conclusions regarding the impact of financial leverage on financial performance. Some studies have indicated a considerable effect, whereas others have reported an inconsequential effect (Zahoor *et al*. 2015). This gap in findings may be related to discrepancies in the metrics and proxies utilised, as well as changes in study techniques and data sources. There has been a limited number of studies on how financial leverage variables affect the returns on assets and return on investments of Oil and Gas and Agriculture sectors in Nigeria. Hence, this study focuses on the effect of financial leverage on the financial performance of oil and gas and agriculture sectors in Nigeria.

This study is intended to address three major questions: To what extent do debt ratios affect the financial performance of firms? To what extent does the interest coverage ratio impact financial performance of firms, and to what extent does the debt-equity ratio affect financial performance of firms in Nigeria? The following objectives were raised in the study:

- To analyse the effect of debt to asset ratio on financial performance of manufacturing companies.
- To examine the effect of interest coverage ratio on financial performance of manufacturing companies.

- To establish the effect of debt-equity-ratio on financial performance of manufacturing companies.

The objectives of the study are hypothesized In Null form.

- Debt to asset ratio has no significant effect on financial performance.
- Interest Coverage ratio has no significant effect on financial performance.
- Debt to equity ratio has no significant effect on financial performance.

2.0 Literature Review

Conceptual Review

Financial Leverage:

Leverage in the financial sector occurs when a borrower uses borrowed funds to purchase an asset, expecting a higher return than the loan's cost (Adenugba *et al*., 2016). Therefore, financial leverage is an investment strategy that encourages business expansion and growth. Financial leverage is borrowing debt to enhance one's asset base. Leverage is a strategy to gain a higher rate of return on money that has been invested (Demiraj *et al*., 2023). There is a higher likelihood of failure if too much financial leverage is employed, as servicing the debt becomes more onerous.

Leverage also refers to the amount of debt a corporation uses to finance assets. Leverage occurs when borrowed cash is used as a funding source when investing to expand the firm's asset base and generate returns on risk capital. Financial leverage, which is also known as leverage or trading on equity, refers to the use of debt to purchase extra assets (Hayes, 2021). Financial leverage is the use of debt to buy more assets.

Leverage is not only a significant indicator; it also increases a firm's wealth and provides borrowing advantages. For instance, as leverage develops, the cost of finance is also increased, and consequently, a high cost indicates a negative effect owing to earnings per share (Ullah, 2019).

The debt-to-equity ratio

The debt-to-equity ratio (D/E) is a financial ratio representing the relative amount of shareholders' equity and debt used to finance a company's assets (Hayes, 2020). The debt-equity ratio is a measure of the proportional contribution of the creditors and shareholders or owner in the capital employed in business. It is called the debt-equity ratio (Adam, 2020). The debt-to equity ratio (sometimes referred to as the debt-to-equity ratio) is a long-term solvency measure that indicates the soundness of the long-term financial policies of a corporation. It displays the ratio between the portion of assets financed by creditors and the portion of assets financed by stockholders. As the debt-to-equity ratio expresses the link between external equity (liabilities) and internal equity (stockholder's equity), it is also known as the external-internal equity ratio (Grunert, 2020). The debt-to-equity ratio is computed as long-term debt divided by common shareholders' equity.

$$\text{Debt-to-Equity Ratio (D/E)} = \frac{\text{Long Term Debt}}{\text{Equity}}$$

Interest Coverage Ratio

The frequency with which operational income can be used to pay debt interest is determined by this ratio. Decisions about finances are made using this knowledge. The interest coverage ratio evaluates how well a corporation can use its profits from operations to cover interest payments. It shows the amount of buffer the business has to cover its set obligation to pay interest on its debt. The ratio can be used as a stand-in for the company's capacity to pay its debts and continue operating. Interest coverage plays a crucial role in determining a company's creditworthiness because the rating indicates the company's ability to make repayments (Kim *et al*., 2013). In order to pay its interest, the business must make enough money. A high interest coverage ratio increases a company's likelihood of being able to pay its debts (Palomino *et al*., 2019). The degree of gearing, the cost of borrowings, and the company's profitability all affect the corporation's ability to pay its interest costs.

A company's ability to pay its interest debts is assessed using its interest coverage ratio. It is a ratio that contrasts earnings (before taxes and interest) for the company with interest costs. In essence, it shows the number of times an organization may use operational profit to cover interest payments. A company's ability to manage its debt is indicated by a greater ICR, whereas a lower ICR may indicate impending financial issues. Earnings before interest and taxes (EBIT) is divided by the entire amount of interest expense on all of the company's outstanding obligations to get the interest coverage ratio.

$$\text{ICR} = \frac{\text{EBITDA}}{\text{Interest Expense}}$$

EBITDA = Earnings before Interest, Taxes, Depreciation and Amortization.

Debt to Asset Ratio

The amount of corporate assets that can be utilised to fund company debt is determined by the debt-to-asset ratio. Financial risk increases with the debt to total asset ratio. Because the corporation is financing too many assets with debt, there is an elevated danger of default (Purnamasari, 2017). A highly high DAR raises the chance of default and interest expenses, which lowers the company's profitability. However, if DAR rises organically, the business's operational finance capacity will be able to achieve more profitability.

The debt ratio of a business can be computed by dividing its total debt by its total assets. A corporation has more debt than assets if its debt ratio is larger than 1.0, or 100%, and more assets than debt if its debt ratio is smaller than 100%.

$$\text{DAR} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

Financial Performance

Financial performance is measured by a company's ability to earn from its principal business activity (Gofwan, 2022). A company's financial performance over a certain time period can be viewed as a general measure of its overall financial health. The business's stakeholders include trade creditors, bondholders, investors, employees, and management. All of these stakeholders are focused on the company's bottom line. Financial performance demonstrates how well a company generates revenue and allocates resources to suit the needs of its investors and other stakeholders (Man & Wong, 2013). A business's financial health can be assessed using a variety of metrics. Cash flow from operations, operational income, and other comparable indicators can be used. The quantity of units sold could also be considered (Griffin & Mahajan, 2019). Financial performance is the determination of certain indicators that can be used to assess a company's profitability (Tjahjono, 2014). The company's financial success can be measured using the ratios presented in its periodic financial statements (Solechan, 2017). Return on investment (ROI) was used as a proxy for financial performance in this study. Return on investment is defined as the ratio of net income to investment. A high ROI indicates that the investment's profits compare favourably to its cost. ROI is a performance metric used to assess the efficiency of an investment or to compare the efficiencies of multiple investments. It can be estimated using these formulas.

$$\text{ROI} = \frac{\text{Net Profit}}{\text{Cost of investment}} \text{ x } 100$$

Theoretical Review

The study was underpinned by Trade-off Theory.

Trade-off Theory

Modigliani and Miller introduced this idea in 1958. The best amount of leverage, according to Copeland *et al*. (2003), is a trade-off between the tax benefits of debt and the bankruptcy's dead weight. Cook and Campbell (1979) state that companies using the trade-off approach establish a target debt-to-value ratio and take action to reach it. A balanced approach to debt tax protection and bankruptcy expenses is used to set goals. Several aspects of Myers' theory have drawn criticism (Brealey *et al*., 2003).

Empirical Review

A study by Oke *et al*. (2024) examined the impact of leverage on the financial results of Nigerian consumer products companies that are publicly traded. Samples of 11 organisations were analysed utilising secondary data from published financial statements on the Nigeria Exchange Group (NGX) for a period of eight years (2015–2022). Leverage was assessed using Long Term Debt Ratio (LTDR), Short Term Debt Ratio (STDR), and Interest Coverage Ratio (INCOV), and financial performance was measured as Return on Equity (ROE). It was revealed that the long-term debt ratio had a positive and significant effect on the financial performance of the mentioned consumer goods corporations in Nigeria. The short-term debt ratio and interest coverage ratio have a positive and minor effect on the financial performance of the aforementioned consumer goods

corporations in Nigeria. The study indicated that leverage has considerable effect on the financial performance of listed consumer goods firms in Nigeria.

Syed (2023) examines the relationship between financial leverage and financial success using empirical data from Pakistan's publicly traded sugar companies. The dependent variables are return on assets, return on equity, and earnings per share after tax, net profit margin, and sales growth, whereas the independent variable is debt-to-equity ratio. The data show that the debt-to-equity ratio is positively associated with return on assets and sales growth, but negatively associated with earnings per share, net profit margin, and return on equity.

Wajid *et al*. (2022) evaluated the influence of leverage on financial performance. The study evaluates the impact of leverage on the firm's performance in the fertilizers sector, in which operating leverage, financial leverage, and combined leverage are considered. The sample size for the study is based on five companies' annual reports and 25 observations. The data was collected from 2016 to 2020. A descriptive research was conducted as well as a as a regression analysis to assess the influence of leverage on profitability. The conclusion indicated that a company's leverage has significant results with return on asset, as companies should follow the return on asset for analysing the financial performance. While companies do not exhibit substantial links with return on equity. It signifies that the debt ratio increased, and it will create the lowest profit for enterprises. Results demonstrate a negative relationship with operating leverage as well as a positive relationship with finance leverage and combined leverage of listed enterprises in the fertiliser sector of Pakistan.

Senan *et al*. (2021) evaluated the drivers of financial performance, company liquidity, and leverage ratio of Indian listed firms on the Bombay Stock Exchange. The study focused on balanced panel data for 1,333 Indian enterprises collected over a 12-year period from 2007 to 2018. The study used both static models (pooled, fixed, and random effects) and the Generalised Moment Method (GMM). It is found that the current ratio and the quick ratio have a substantial impact on the financial leverage of Indian listed firms.

3.0 Methodology

The study utilised an ex-post facto and correlation research design. This was chosen because the study entailed collecting quantitative data from the chosen firms' annual financial reports, and the investigation was focused on determining the causal relationship between variables. The study's population consists of all Nigerian manufacturing enterprises that are listed in the Nigeria Exchange Group (NGX). As of December 31, 2022, there were 156 manufacturing companies listed on the Nigeria Exchange Group. This study adopted multi stage sample technique and simple random technique was employed to choose the oil and gas sector and agriculture sectors. Oil and gas industry and Agriculture sector which comprises of 13 firms were utilised for this study since these two sectors plays sensitive and substantial role in the economy of Nigeria. However, purposive sampling was employed to select 10 firms from the 13 listed firms. This selection is based on the fact that the interest of this study was on specific information and only firms having

the relevant criteria were examined. Panel data were gathered from the financial reports of the selected companies for the period of 10 years spanning from 2013-2022. The choice of 10 years was to acquire enough data for the study and have a substantial sample size.

Table 3.1 List of oil and gas sector and agriculture sector in Nigeria.

COMPANY	TICKER	SECTOR
Capital Oil Plc [DIP]	CAPOIL	OIL AND GAS
Conoil Plc	CONOIL	OIL AND GAS
Eterna Plc.	ETERNA	OIL AND GAS
Japaul Gold & Ventures Plc	JAPAULGOLD	OIL AND GAS
MRS Oil Nigeria Plc.	MRS	OIL AND GAS
Oando Plc [Mrf]	OANDO	OIL AND GAS
Seplat Energy Plc [Cg+]	SEPLAT	OIL AND GAS
Totalenergies Marketing Nigeria Plc	TOTAL	OIL AND GAS
Ellah Lakes Plc.	ELLAHLAKES	AGRICULTURE
Ftn Cocoa Processors Plc [Rst]	FTNCOCOA	AGRICULTURE
Livestock Feeds Plc.	LIVESTOCK	AGRICULTURE
Okomu Oil Palm Plc.	OKOMUOIL	AGRICULTURE
Presco Plc	PRESCO	AGRICULTURE

Source: Nigeria Exchange Group, 2024.

Model Specification.

The study adapted the model used by Ofulue *et al*., (2022) on financial leverage and financial performance of quoted industrial goods firms in Nigeria in which financial performance was expressed as function of debt-to-equity ratio, short-term-debt ratio and long-term-debt ratio. Cash value was used as a proxy for financial performance. The model was specified as;

$$CVA_{it} = \beta_0 + \beta_1 DER_{it} + \beta_2 STDR_{it} + \beta_3 LTDR_{it} + \mu_{it} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.. \quad 3.1$$

This study however modified the model by using return on investments as proxy for financial performance while Debt-assets ratio, interest covered and Debt-equity ratio were used as proxies for financial leverage. Hence, the model for this study is specified as:

ROI = *f*(DAR,ICR,DER)

The regression model was specified as:

$$ROI_{it} = \beta_0 + \beta_1 DAR_{it} + \beta_2 ICR_t + \beta_3 DER_{it} + \mu_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.2$$

Where;

ROI = Return on Investments

DAR = Debt-Assets-Ratio

ICR = Interest coverage ratio

DER = Debt-equity-ratio.

μ = Error term

β_0 to β_3 = Parameter estimates of the corresponding estimated equation.

4.0 Data analysis and Discussion of result

The study employed descriptive and inferential analysis. Descriptive analyses used were mean, median, standard deviation, maximum and minimum value, skewness, kurtosis, and jarque bera. Inderential analyses used were Pearson's correlation analysis and panel estimation technique. A Hausman test was conducted to ascertain the best panel estimation technique used for the study.

Table 4.1: Descriptive Statistics for all variables

	ROI	DAR	ICR	DER
Mean	6.2516	4.8215	9.0527	7.3948
Median	5.2572	4.0231	5.6263	4.0273
Maximum	15.1284	11.0517	23.0012	19.A6700
Minimum	1.0116	0.1732	1.0231	1.2231
Std. Dev.	4.2343	3.4237	5.1924	33.0265
Skewness	1.3565	1.0375	1.3497	1.9200
Kurtosis	2.0607	2.8041	5.0452	6.1667
Jarque-Bera	2.1379	2.0073	1. 2926	1.1798
Probability	0.06102	0.0650	0.1502	0.1240
Observations	100	100	100	100

Source: Authors' Computation, 2024.

The descriptive statistics for the study on the impact of financial leverage on the financial performance of selected firms between 2013 and 2022 are shown in Table 4.1. ROI had a mean value of 6.2516 and a median value of 5.2572. ROI is Leptokurtic and skewed to the right, according to the coefficients of skewness and kurtosis, which also shows that the companies' financial performance was continuously positive over the years under review. The DAR's median value was 4.0231, and its mean value was 4.8315. DAR is platykurtic and skewed to the right, according to the coefficients of skewness and kurtosis, suggesting typical working capital management.

ICR had a mean value of 9.0527 and a median value of 5.6263. This suggests that ICR had a favourable impact on financial performance. The information on ICR's skewness and kurtosis

coefficients, which are 1.3497 and 5.0452, respectively, show that the data is skewed to the right and Leptokurtic. The DER had a mean value of 7.3948 and a median value of 4.0273. DER's skewness and kurtosis coefficients, which are 1.9200 and 6.1667, respectively, show that it is skewed to the right and Leptokurtic.

Covariance Analysis: Ordinary
Date: 07/23/24 Time: 20:51
Sample: 2013 2022
Included observations: 100
Balanced sample (listwise missing value deletion)

	ROI	DAR	ICR	DER
ROI	1.000000			
DAR	0.423253	1.000000		
ICR	0.236243	0.132432	1.000000	
DER	0.324364	0.172425	0.635365	1.000000

Table 4.2: Pearson's correlation analysis

Source: Author's Computation, (2024)

The Pearson correlation coefficient (in matrix form) for the study's parameters is shown in table 4.2. It was discovered by looking at the table's result that there was a positive and significant association between the listed firms' DAR and ROI. The basis for this claim was the positive correlation coefficient of 0.4232 found for DAR and ROI. Therefore, a 1% rise in the Debt to Asset ratio might have a 42% impact on the company's financial performance. Additionally, the results showed a strong and substantial link between the listed firms' ROI and ICR. The basis for this claim was the positive correlation coefficient of 0.2362 for both ROI and ICR. Therefore, a 1% increase in the interest coverage ratio could have a 27% impact on the company's financial performance.

Additionally, the data showed a strong and substantial association between DER and ROI for the listed firms. The basis for this claim was the positive correlation coefficient of 0.3243 found for both ROI and DER. Therefore, a 1% rise in the Debt to Asset ratio might have a 32% impact on the company's financial performance.

Hausman Test

Table 4.3: Correlated Random Effects -

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	7.276383	3	0.0105

Source: Author's Computation (2024)

The Hausman test utilised in this study was to assess whether to adopt a fixed effects model or a random effect model. The Hausman test's null hypothesis is that the random effects model is more appropriate to be used. Therefore, the null hypothesis was rejected, and we infer that the fixed effect model is appropriate and more consistent for the study. The result reveals that the p-value of the Chi-square statistics for the cross-section random effect test of 0.0105 was less than the crucial value of 5% ($p<0.05$) with a significant Chi-square statistics of 7.2764.

Table 4.4: Regression analysis of the effect of DER, ICR and DAR on ROI

fixed effects test equation:
Dependent Variable: ROI
Method: Panel Least Squares
Date: 07/23/24 Time: 21:15
Sample: 2013 2022
Periods included: 10
Cross-sections included: 10
Total panel (balanced) observations: 100

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.384759	1.837336	3.384746	0.0000
DER	0.323736	0.032847	1.437451	0.0057
ICR	-0.139746	0.017635	2.847363	0.0730
DAR	0.102745	0.002534	3.128373	0.0000

Effects Specification

Period fixed (dummy variables)

R-squared	0.754372	Mean dependent var	7.744691
Adjusted R-squared	0.712938	S.D. dependent var	4.384747
S.E. of regression	2.383648	Akaike info criterion	3.129484
Sum squared resid	2364.193	Schwarz criterion	3.574648
Log likelihood	-262.3895	Hannan-Quinn criter.	6.905857
F-statistic	36.38347	Durbin-Watson stat	0.327365

Prob(F-statistic)	0.000000			

Source: Author's Computation (2024)

Table 4.4 shows the results of the fixed effect test, which examined the relationship between **DER, ICR and DAR on ROI**. From the result, the regression coefficient of DER in the fixed effect estimation test of 0.3237 and a t-statistical value of 1.4375 at a p value of 0.0057 ($p<0.05$) show that the null hypotheses one was rejected, indicating that Debt to equity ratio has significant effect on financial performance of firms in Nigeria. This finding indicates that the DER of the selected firms has a substantial influence on their ROI.

The regression coefficient of ICR in the fixed effect estimation test of -0.1397 and a t-statistical value of 2.8473 at a p value of 0.0730 ($p>0.05$) indicated that the relationship between ICR and ROI was negative and insignificant. This finding indicates that the ICR of the selected firms has a negative influence on their ROI. The null hypotheses two was accepted, indicating that interest coverage ratio has no significant effect on financial performance of firms in Nigeria.

The regression coefficient of DAR in the fixed effect estimation test of 0.1027 and a t-statistical value of 3.1283 at a p value of 0.0000 ($p<0.05$) indicated that the relationship between DAR and ROI was positive and significant. This finding indicates that the DAR of the selected firms has a substantial influence on their ROI. The null hypotheses three was rejected, indicating that Debt to asset ratio has significant effect on financial performance of firms in Nigeria.

Discussion of result

This study evaluated the effect of financial leverage on financial performance of manufacturing firms in Nigeria. The study focused on agriculture sector and Oil and gas sector. Panel data regression analysis was used to evaluate the data gathered from 10 sampled firms. The study made use of descriptive analysis and inferential analysis. The Descriptive analysis showed that all the independent variables (DER, ICR, DAR) has a positive influence on the dependent variable (ROI). The pearson correlation analysis also affirmed a positive and significant relationship between the variable used to measure financial leverage (DER, ICR and DAR) and ROI which was used as a proxy for financial performance.

The Hausman test was conducted and it suggested that fixed effect regression be used for regression analysis and infer decision of the hypothesis. The findings of the regression analysis showed that; the DER of the selected firms has a substantial influence on their ROI, The ICR of the selected firms has a negative and insignificant influence on their ROI, and the DAR of the selected firms has a substantial influence on their ROI.

Conclusion

This research work was carried out to show the effect of financial leverage on performance of firms in Nigeria. The study posited that Debt to equity ratio has significant effect on financial performance of firms in Nigeria according to the result of the regression analysis in this study. The Debt to equity ratio measures how much debt a company has taken on relative to the value of its

assets net of liabilities and could impair or destroy the value of equity in the event of a default. As a result, a high Debt to equity ratio is often associated with high investment risk.
The regression analysis in this study also indicated that the relationship between ICR and ROI was negative and insignificant, this indicates that the ICR of the selected firms has a negative influence on their ROI. This study also posited that there exist a positive and significant relationship between DAR and ROI. Thus indicated that the DAR of the selected firms has a substantial influence on their ROI.

Recommendations

Since this study found that the debt-to equity ratio has a significant effect on the financial performance of listed firms in Nigeria, in a case of a high debt-to-equity ratio, any losses incurred will be compounded, and the company will find it difficult to pay back its debt. It is recommended that manufacturing firms should take on the strategy of reducing their debt and increasing their equity. Reducing debt can include repaying existing loans, refinancing debt at lower interest rates, or restructuring debt to extend its maturity or reduce its principal.

The study also recommends that firms in Nigeria should always improve their interest coverage ratio by increasing the earnings before interest and tax (EBIT) and reducing the finance costs and even interest expenses so as to maintain a higher interest coverage ratio, which indicates that there is a very low chance of a financial default.

Finally, this study recommends that manufacturing firms should endeavour to always maintain a good debt-to-assets ratio by bringing their debt-to-assets ratio into range. They can achieve this by increasing their assets and decreasing their debts.

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