Financial Leverage and Corporate Performance of Listed Industrial Good Firms in Nigeria

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Abstract
This study evaluated the effect of financial leverage on the corporate performance of industrial goods firms listed on the Nigerian Stock Exchange. The study reviewed the extant literature on capital structure and corporate performance to ascertain research gaps from past studies. In line with the purpose of the study, two (2) specific objectives, research questions, and hypotheses were formulated to guide the study. The population of the study was all the industrial goods firms in Nigeria. Hence, two (2) industrial goods firms operating in Nigeria were selected such as Nestle Nigeria PLC and BUA Foods. Secondary data on financial leverage (represented by Equity financing and Debt financing) and corporate performance (represented by Return on Equity (ROE)) were collected from the financial statements of the listed companies. Data were analyzed using descriptive statistics, correlation coefficient statistical techniques, and bivariate regression analysis with the aid of the Statistical Package for Social Sciences (SPSS) 22. Findings at <0.05 level of significance reveal that equity finance has a significant positive relationship with ROE while debt finance has a significant positive relationship with ROE. The study concluded that financial leverage (equity financing) has a positive relationship with ROE while financial leverage when represented by debt financing has a positive relationship with ROE of sampled industrial goods firms. The study recommends that companies in the industrial goods sector should take into account the mix of equity and debt, because they are the main determinants of the company's performance, The study also recommends that when capital is obtained through debt instruments, more emphasis should be placed on other areas of efficiency improvement rather than relying on

returns from the owners' equity involved and management should strive to improve the ratio of assets to its liabilities.

Keywords: *Financial Leverage, Corporate Performance, Equity Financing, Debt Financing*

Introduction

An important objective of a firm is to maximize shareholder wealth. Managers strive to achieve this objective by making rational financing decisions regarding optimal capital structure which would minimize the cost of capital. However, less optimal capital structure decisions can lead to an increased cost of capital and result in the reduction of shareholders' wealth. According to Gitman (2019), the value of a firm is maximized when its cost of capital is minimized. The capital structure puzzle involves a firm's decision that managers choose an ideal proportion of debt and equity that will minimize the firm's cost of capital which is the optimal capital structure and in return maximize shareholders' wealth. The capital structure of a firm consists of a mix of internal and external sources of funds used to finance the firm's assets. Financial leverage is the use of debt in a company's financial structure for the magnification of earnings (Pandey, 2018).

A firm applies leverage to maximize the potential return of shareholder's wealth. If a firm uses debts, it has to pay some interest in exchange for the use of such resources. The more debt ratios increase, the higher the financial risk, and there will be an increase in the debt costs accordingly. The increase in cost in turn reduces the profitability resulting from debt financing. A financial performance measure provides a valuable tool for stakeholders to evaluate the past financial performance and the current position of a firm. Shareholders' return is reflected by a measure of how well a firm can use its assets from its primary business to generate revenues (Abor, 2015). Managers should emphasize the optimum level of capital structure and efficient utilization and allocation of resources to increase the company's financial performance based on capital structure. When corporations decide on the use of debt finance, they are reallocating some expected future cash flows away from equity claimants in exchange for cash upfront. Nigerian Securities Exchange (NSE) is the stock exchange of Nigeria.

According to Aburub, (2012), this explains why a financial manager depends on debt as a financing source more than owner equity. Exceeding the effective debt ratio would lead a firm into financial difficulties and the positive effect of financial leverage might turn negative (Khan, 2012). Since the capital structure decision is very critical as a determinant of shareholders return, it was necessary to determine the precise relationship between capital structure based on leverage level, and financial performance in attempting to maximize shareholder's wealth. The study therefore sought to address the relationship between leverage level and the performance of firms listed at the Nigerian Securities Exchange.

Objectives of the study

Objectives of the study

The objectives of the study are to:

i. Determine the relationship between equity financing and return on equity of listed industrial goods firms in Nigeria.

ii. Ascertain the relationship between debt financing and return on equity of listed industrial goods firms in Nigeria.

Research Questions

From the objectives of the studies, the following research questions were raised to guide the studies:

i. Is there any relationship between equity financing and the return on equity of listed industrial goods firms in Nigeria?

ii. What is the relationship between debt financing and the return on equity of listed industrial goods firms in Nigeria?

Research Hypotheses

To achieve the objectives of this study, the following null hypotheses were formulated as a guide to the study.

Ho1: There is no significant relationship between equity financing and the return on assets of listed industrial goods firms in Nigeria.

Ho2: There is no significant relationship between debt financing and the return on assets of listed industrial goods firms in Nigeria.

Conceptual Review

Financial leverage is a very important external financing mode. Financial leverage shows that a business needs finance to purchase a new asset, or enhance its production or operational activities, financial leverage is one of the best ways for an organization to achieve its goal, with the help of financial leverage a company can not only achieve its goals but also maximize the value of its shareholders (Oluwole, 2012). Finance is very important to any business. A company that employs financial leverage does so because it intends to maximize the shareholders' return under favorable economic conditions. The role of financial leverage in increasing the return of the shareholders is anchored on the assumptions that fixed-charge funds such as loans from banks or debentures can be obtained at a cost lower than the firm's rate of return on net assets. Generally, the cost of borrowed money (leverage) is less than the amount of equity. Using the financial leverage like debts to equity ratio, debts to total assets ratio we can easily identify the financial position of the

firm or the amount of leverage that is used in a firm. Financial leverage is important to every business in terms of increasing production levels, increasing the shareholders' value, or acquiring a new asset.

Corporate Performance:

Corporate performance is identified as one of the most important indicators of the effect of capital structure in the review of the literature. Kajirwa (2015) posited that a firm's financial performance is determined by it uses its assets from its main role of doing business and how it subsequent generate profits for its sustenance. Performance is reflected by firm profitability which is affected by leverage. Higher profitability usually provides more internal financing and therefore a lower level of debt by the firm (Abor, 2005). According to Swain and Patnaik (2013), financial performance means explaining how efficiently and effectively a company utilises its limited economic resources to produce resources that yield maximum revenue. Less debt is then required to finance already planned investments. Debt introduces an agency cost argument. High profitability results in higher leverage according to the free cash flow hypothesis, but high leverage would result in high profitability based on the pecking order hypothesis.

Financial performance, according to Suleiman, et al. (2022), refers to the extent to which a a company's financial objectives have been met, or would be met. It is also the degree to which the financial objectives of an organisation can be or have been accomplished. A sound financial performance is one of the ultimate goals for all profit-oriented companies. Financial performance measures include, but not limited to profitability, leverage, liquidity, and growth (Yahaya & Lamidi, 2015). Return on Equity as a measure of financial performance is a financial ratio that reveals the percentage of return an entity has during a period, often a fiscal year, on the company's shareholders' equity. This financial ratio shows to what extent a company has converted the shareholders' equity into profit. As a measure of financial performance, Return on Equity focuses on the remaining return that belongs to the shareholders when the interest expenses associated with debt are paid (Brealey, et al. 2017).

Equity Financing: Equity financing involves selling a portion of company equity in return for capital. It is a tactic corporate organizations often use to raise funds, especially in the case of start-ups that need cash or businesses that are looking to expand but don't have the capital to do so. For example, the owner of a company might need to raise capital to fund business expansion. The owner decides to give up 10% of ownership in the company and sell it to an investor in return for capital. That investor now owns 10% of the company and has a voice in all business decisions going forward. Equity financing does not put an extra financial load on the company since there are no required monthly payments associated with equity financing, the company has more capital available to invest or divest to enhance the growth of its business.

Debt Financing: this entails the borrowing of money and paying it back with interest. The most common form of debt financing is a loan. The use of debt will have this effect only if the rate of return on the investment is greater than the rate of return on the debt Watkins (2002). Debt financing sometimes comes with restrictions on the company's activities that may prevent it from taking advantage of opportunities outside the realm of its core business. The advantages of debt financing are numerous. First, the lender has no control over your business. Once you pay the loan

back, your relationship with the financier ends. Next, the interest you pay is tax deductible. Finally, it is easy to forecast expenses because loan payments do not fluctuate.

Theoretical Review

Agency costs theory: Agency costs rose from separation of ownership and control and conflicts of interest between categories of agents. One of the problems that cause conflict between managers and shareholders is free cash flows. Jensen (1986) and others define debt as a disciplinary tool to ensure that managers give preference to wealth creation for the equity holders. Thus, in firms that have high cash flows and profitability, increasing debts can be used as a tool for reducing the scope for managers until the resources of a company may not be wasted as a result of their benefits, and is seen when managers' share in the ownership of a company is low. But when the manager's share in the ownership increases, here, something would be done to let the stock be as high as possible; this may lead to inefficiency decreases. Therefore, it is appropriate that increasing debts instead of stock issuance prevents from decrease in the manager's share of ownership interest. (Huang & Song 2002).

Empirical Review

Many researchers have investigated the relationship between leverage and firms' performance in various industry sectors. The various researchers concluded both positive and negative associations between the debt level and the firm's performance.

Abor (2005) observed that the relationship between financial leverage and financial performance differs depending on which type of debt that is included in the financial leverage ratio. Abor (2005) found a significant positive relationship between both short-term debt ratio and total debt ratio to Return on Equity. On the other hand, the long-term debt ratio had a negative relation to Return on Equity.

Bassey, et al. (2016) appraised the significance of retained profits as an alternative source of finance, on the corporate performance of Niger Mills Company Limited, Calabar, Nigeria. The study found that the future earning ability of the company under study was influenced by its retained profit. The study concluded that an entity should always strive to retain profits and reinvest them in their business instead of distributing all to shareholders.

Zuraidah et al. (2012) explored the effect of the capital structure on a firm's profitability by using ROA and ROE as proxies for the performance, and short-term debt, long-term debt, and total debt as proxies for the capital structure. The study concluded that short-term debt and total debt have a significant association with ROA.

Adera et al. (2015) evaluated the relationship between capital structure and the corporate financial performance of manufacturing companies in the Nairobi Securities Exchange. Nine listed manufacturing companies were sampled. The findings of the study revealed that preference share capital ordinary share capital, long-term debts, and capital reserves have a positive and significant relationship with corporate financial performance of listed manufacturing companies in Nairobi

Ebaid (2009), focusing on nonfinancial companies found no significant relationship between financial leverage ratios and Return on Equity or Gross Profit Margin, whereas it revealed a negative relationship between return on assets, and he held that that capital structure has a little to no impact on the financial performance.

Nguyen and Rugman (2015) evaluated the importance of internal financing in subsidiary performance using six emerging economies in Southeast Asia. They found out that internal financing yielded an increase in the subsidiary's performance.

Aburub (2012) investigated the impact of capital structure on the firm performance of companies listed in the Palestine Stock Exchange from 2006 to 2010 in which 28 companies were selected in the sample. Five financial performance measures: return on equity, return on assets, earnings per share, market value to book value of equity ratio, and Tobin Q ratio were employed as dependent variables. The measures of the independent variable were short-term debt to total assets ratio, long-term debt to total assets ratio, total debt to total assets ratio and total debt to total equity ratio findings revealed that the capital structure has a positive effect on firm performance evaluation measures.

Methodology

For this study, the correlation research design was adopted. A correlation research design is used to describe the statistical relationship between two or more variables. It is most appropriate for this study because it allows for testing of expected relationships between and among variables and the making of predictions regarding such relationships. The population of this research study consists of quoted industrial goods firms listed on the floor of the Nigerian Stock Exchange (NSE) as of 31 December 2022. There are fourteen industrial goods firms listed on the stock exchange but due to accessibility and availability of financial statements, only two of the fourteen firms were considered for this study, such as Nestle Nigeria PLC and Unilever Nigeria Plc.

The secondary method of data collection was employed to gather the secondary data used for this study. The method to be adopted in this study requires the use of empirical analysis of simple linear regression estimation analysis/technique, correlation analysis, and descriptive statistics because it recognizes that different factors can affect or establish the relationship between financial leverage and performance.

Results and Discussion

Table 1: Descriptive Statistics

	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Skewness Statistic
Equity Finance	10	5896416	29834227	14915931.48	10081321.241	.520
Debt Finance	10	2357758	27880864	7109347.34	8213447.091	1.261

Return on Equity	10	.0079287	.2613026	.107765767	.0785961379	.406
Valid N (listwise)	10					

Source: *SPSS Output, 2023*

The mean of the variable (equity finance) is observed to be ₦14,915,931 and a standard deviation of ₦10,081,321. The maximum and minimum values were ₦29,834,227 and ₦5,896,416 respectively. The mean of the variable (debt finance) is observed to be ₦7,109,347 and a standard deviation of ₦8,213,447. The maximum and minimum values were ₦27,880,864 and ₦2,357,758 respectively, while the skewness is at .520 and -1.392. The ROE is observed to have a mean of .108 and a standard deviation of .079. The maximum and minimum values for the ROE were .261 and .008 respectively, while the skewness is at .520 and 406.

Correlation

Table 2: Inter-Item Correlation Matrix

	Equity Finance	Debt Finance	Return on Assets	Return on Equity
Equity Finance	1.000	.645	.615	.652
Debt Finance	.645	1.000	.894	-.600
Return on Equity	.652	-.600	.517	1.000

The inter-item correlation between the variables also to some extent explains their reliability. Return on assets and debt financing correlates the highest at 0.894, while return on assets and return on equity correlates the least but is still a positive correlation at point 0.517.

Hypotheses Testing

Hypothesis 1 -Regression analysis for the relationship between Equity Financing and Return on Equity of listed industrial goods firms in Nigeria.

Table 3: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.615[a]	.378	.300	.0422897125	1.839

a. Predictors: (Constant), Equity Financing

Source: *SPSS Output, 2023*

The above model summary table produced a correlation coefficient, 'R' of 0.615 that shows a moderate uphill (positive) relationship between equity financing and return on equity. The R2

stood at 0.378 which implies that about 38% of variations in the dependent variable (return on assets) are attributed to changes in the independent variable (equity financing). The Durbin-Watson statistics of .839 imply that the auto-correlation problem is absent in the residuals of regression analysis.

Table 4: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.009	1	.009	4.866	.028[b]
	Residual	.014	8	.002		
	Total	.023	9			

a. Dependent Variable: Return on Assets

***Source**: SPSS Output, 2023*

The result with a P-value of <0.05 is significant at .028 and shows that our model is significant. Therefore, the predictor variable (equity finance) is a good predictor of the outcome variable (return on equity).

Table 5: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.130	.025		5.246	.001
	Equity Finance	3.084	.000	.615	1.206	.028

***Source:** SPSS Output, 2023*

The above coefficients table shows a Beta (β) value (same as correlation coefficient, R) of 0.615, produced a t-value of 1.206 which is significant at P (0.028) less than the chosen alpha of (0.05). The Beta (β) of 3.084 implies that for every additional input of a unit of equity finance, there will be an increase in return on equity of 3.084.

Hypothesis 2- Regression analysis for the relationship between Debt Financing and Return on Equity of listed industrial goods firms in Nigeria.

Table 6: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.894[a]	.800	.775	.0239920451	1.903

a. Predictors: (Constant), Debt Financing

Source: SPSS Output, 2023

The above model summary table produced a correlation coefficient, 'R' of 0.894 that shows a positive relationship between debt financing and return on equity. The R2 stood at 0.80 which implies that about 80% of the variations in the dependent variable (return on equity) are attributed to changes in the independent variable (debt financing). The Durbin-Watson statistics of 1.903 imply that the auto-correlation problem is absent in the residuals of regression analysis.

Table 7: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.018	1	.018	3.974	.000[b]
	Residual	.005	8	.001		
	Total	.023	9			

a. Dependent Variable: Return on Assets

b. Predictors: (Constant), Debt Financing

Source: *SPSS Output, 2023*

The result with a P-value of <0.05 is significant at .000 and shows that our model is a significant model. Therefore, the predictor variable (debt finance) is a good predictor of the outcome variable (return on equity).

Table 8: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics
		B	Std. Error	Beta	T	Sig.	Tolerance
1	(Constant)	.123	.010		11.988	.000	
	Debt Finance	5.506	.000	.894	5.655	.000	1.000

Source: SPSS Output, 2023

This coefficients table shows a Beta (β) value of 0.894, produced a t-value of 5.655 which is significant at P (0.000) less than the chosen alpha of (0.05). The Beta (β) of 5.506 means that there will be an increase in return on equity of 5.655 for every additional input of a unit of debt finance,

Test of Hypothesis One

H_{01}: *There is no significant relationship between equity financing and the return on equity of listed industrial goods firms in Nigeria.*

Decision Rule: The strength of the relationship between equity financing and firm performance (ROE) is measured by the calculated p-value of 0.041 at a significance level of 0.05. Since the computed p-value is less than the significance level of 0.05, the outcome is significant and the null hypothesis is rejected. There is a significant relationship between equity financing and the return on equity of listed industrial goods firms in Nigeria.

Test of Hypothesis Two

$H0_2$: *There is no significant relationship between debt financing and the return on equity of listed industrial goods firms in Nigeria.*

Decision Rule: The relationship between debt financing and firm performance (ROE) is evaluated by the calculated p-value of 0.016 at a significance level of 0.05. Here, we observed that the computed p-value is less than the significance level of 0.05, It is evident that relationship between debt financing and the return on equity of listed industrial goods firms in Nigeria is significant and therefore the null hypothesis is rejected.

Findings

The first hypothesis was to evaluate the relationship between equity financing and return on equity. Therefore, it was hypothesized that there is no significant relationship between equity financing and return on equity. Based on findings, there is a significant relationship between equity financing and return on equity. This is in line with the study of Olayiwola (2014), which found a positive relationship between both sources of financing (debt and equity) and the company's profitability.

The second hypothesis examined the relationship between debt financing and return on equity. Result showed a significant relationship between debt financing and return on equity. This is in

line with the study of Nwidob, et al. (2015), which found a positive relationship between the debt-to-equity ratio, total leverage and total liabilities, and ROA, ROE, and Tobin's Q.

Conclusion

The study draws the following conclusions;

Equity financing has a significant positive relationship with the return on equity of listed industrial goods firms in Nigeria. Based on the above, it was found that equity financing increases the return on equity of listed industrial companies in Nigeria.

There is a significant positive relationship between debts financing the return on equity of listed industrial goods firms in Nigeria. Equity financing can lead to an increase in the return on equity of listed companies in Nigeria.

Recommendations

The study recommends the following:

i. Business entities should strive to take into account the mix of equity and debt, because they are the main determinants of the company's performance.
ii. When capital is obtained through debt instruments, more emphasis should be placed on other areas of efficiency improvement rather than relying on returns from the owners' equity involved and management should strive to improve the ratio of assets to its liabilities.

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