International Journal on Economics, Finance and Sustainable Development (IJEFSD)

e-ISSN: 2620 – 6269
p-ISSN: 2615 - 4021

Volume: 7 Issue: 1 | March 2025

https://journals.researchparks.org/index.php/IJEFSD

Article

Capital Structure and Financial Performance of Listed Manufacturing Goods Firms in Nigeria

WORLU, CHRISTIAN NWENEDA (Ph.D)[1]

ZORKPA, CHARLES BARINEM (Ph.D)[2]

1. Department of Accounting, Faculty of Management Science Ignatius Ajuru University of Education Port Harcourt

* Correspondence: christianweneworlu@gmail.com, Charlesz2007@yahoo.com

Abstract: This study investigated capital structure and financial performance of listed industrial goods firms in Nigeria. The dwindling rate of business operations which has affected the revenue base of the listed industrial goods firms in the Country necessitated this study. The sample size for the study consisted of thirteen (13) listed industrial goods firms in Nigeria. The study made use secondary data. The secondary data was obtained from the listed industrial goods firm's annual reports and accounts. Data was analyzed using descriptive and Pearson correlation coefficient statistical tools with the aid of statistical package for social sciences. The findings reveal that equity capital has a positive strong relationship with return on asset in the listed industrial goods firms in Nigeria and also debt capital was found to have very strong relationship with return on asset. Based on the findings, it was concluded that capital structure significantly affects financial performance. Therefore, the study recommends that listed industrial goods firms in Nigeria should employ more equity finance in establishing optimal capital structure. Finally, when capital is raised through debt instrument, more attention should be channeled towards other areas for performance enhancement instead of relying on returns from equity capital alone.

Keywords: Capital Structure, Equity Capital, Debt Capital, Financial Performance, Return on Asset

Citation: Nwenda W. Ch, Barinem Z. Ch. Capital Structure and Financial Performance of Nigerian Manufacturing Firms. International Journal on Economics, Finance and Sustainable Development (IJEFSD) 2025, 7(1), 13-18

Received: 26th Dec 2024
Revised: 15th Jan 2025
Accepted: 23th Jan 2025
Published: 31th Jan 2025

Copyright: © 2025 by the authors. Submitted for open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/)

1. Introduction

This study investigated capital structure and financial performance of listed industrial goods firms in Nigeria. The dwindling rate of business operations which has affected the revenue base of the listed industrial goods firms in the Country necessitated this study. The sample size for the study consisted of thirteen (13) listed industrial goods firms in Nigeria. The study made use secondary data. The secondary data was obtained from the listed industrial goods firm's annual reports and accounts. Data was analyzed using descriptive and Pearson correlation coefficient statistical tools with the aid of statistical package for social sciences. The findings reveal that equity capital has a positive strong relationship with return on asset in the listed industrial goods firms in Nigeria and also debt capital was found to have very strong relationship with return on asset. Based on the findings, it was concluded that capital structure significantly affects financial performance. Therefore, the study recommends that listed industrial goods firms in Nigeria should employ more equity finance in establishing optimal capital structure. Finally, when capital is raised through debt instrument, more attention should be channeled towards other areas for performance enhancement instead of relying on returns from equity capital alone.

Key words: Capital Structure, Equity Capital, Debt Capital, Financial Performance, Return on Asset. A new business requires capital and still more capital is needed if the firm is to expand- The required funds can come from many different sources and by different forms (Sebastian, 2010). Two major sources are available for firms willing to raise funds for their activities. These sources are internal and external sources, the internal source refers to the funds generated from within an enterprise which is mostly retained earnings, and it results from earnings from their activities. Firms may in the same vein look outside to source for their needed funds to enhance their activities. Any fund sourced not from within the earnings of their activities are termed external financing (Ishaya, 2014).

Capital structure is the mixture of debt and equity capital maintained and used by a firm to finance itself. The study of capital structure has been researched upon by many scholars, yet it remains the most debatable topic of finance during the past half century (Bradley 2004). Basically, capital structure decision is the search for the optimal capital structure which is the level of capital that maximizes profitability and shareholders' value. Following the financial finance theory, the capital structure has an impact on a firm's cost of capital; it plays a crucial part in determining the cost of capital which therefore consequently affects the business' profitability (Abor & Biekpe, 2010). Of all the aspects of capital investment decision, capital structure decision is the most vital since the profitability of an enterprise is directly affected by such decision. Hence, proper care and attention need to be given while making the capital structure decision.

Therefore, a balance needs to be maintained. The cost of capital (interest plus dividends) serves as the benchmark for a company's capital budgeting decisions; therefore, the optimal mix of debt and equity is vital. Furthermore, the shareholders wealth maximization theory also indicates that firms should maintain the ideal combination of debt and equity capital, the optimal capital structure which maximizes returns as well as the firm's value and which reduces significantly the cost of capital. In other words, the one which best helps the business to achieve its main goal (profitability in most cases). Therefore, this study evaluated the relationship between capital structure financial performance of listed Nigerian industrial goods firms.

The following research hypotheses were formulated for the study.

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

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

Review of Related Literature

Capital structure Capital structure is the mixture of debt and equity capital maintained and used by a firm to finance itself. Debt is the amount owed for borrowed funds from sources such as individuals, banks, or other financial institutions while equity is the ownership interest in a firm including equity share capital, share premium, preference share capital, free reserves and surplus profits. According to Saad, (2010), capital structure is a wide and complicated concept in finance which basically entails how a company should finance the capital needs of its business. Al Taani, (2013), is of the opinion that capital structure is the way in which a firm finances its investment through some combination of equity and debt. Yue (2011) also described capital structure as the mixture of different financing sources, designed to meet the capital needs of the firm. He enumerated some of these financing sources to include: debt capital, lease financing, warrants, convertible bonds or trade bond swap. He also argued that deciding financing mix ranks among the major duties of financial managers of the firm. He concluded that though the firm is at liberty to choose any combination of financing sources, the overall objective must always be to minimize the cost of capital and maximize the market value of the firm. In this study, equity capital and debt capital are used as the proxies of capital structure.

Financial Performance

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. It has also been the primary concern of business practitioners in all types of organizations since financial performance has implications to organization's health and ultimately its survival (Kenton, 2021). it is important to take into consideration that the corporate performance is an important indicator for investors and stakeholders. It means that the firm's performance indicates whether the company is worth investing in or not. According to Sharma (2012), corporate performance is a product of the quality and skills of human resource available. A quality and skilled human resource also known as human capital will provide the organization with the much-needed competitive edge over its rivals in the industry. In this study, corporate performance is measured by return on asset (ROA).

Empirical Review

Chukwu et al. (2022) examined the relationship between capital structure (CS) and corporate financial performance (CFP) of deposit money banks (DMBs) listed on the Nigerian Stock Exchange. The study also examined the moderating effect of board diligence on the relationship between CS and CFP. The study used the ex post facto research design and data from thirteen (13) DMBs over the period 2010 to 2018, and multiple regression was used to analyzed the data. The results revealed a negative and insignificant relationship between debt ratio and return on assets (ROA), a negative and insignificant relationship between debt ratio and net profit margin (NPM), and a positive and significant relationship between equity ratio and ROA. It further revealed a positive and significant relationship between equity ratio and NPM. Firm size had a significant, positive relationship with firm performance, while firm age was negatively related to both ROA and NPM. The results further showed that board diligence positively moderates the relationship between capital structure (CS) and financial performance (CFP) in the banking industry. Ohaka et al. (2020) examined the effect of debt financing on firm's financial performance in Nigeria. The study adopted the random sampling techniques to arrive at the sample size of the study. Secondary data was used in the study. Panel econometric tools were used to analyze the panel data of various companies across sectors in the capital market. The results of the analysis revealed that, size of the firm; short term debt and long-term debt have positive and significance impact on the financial performance of listed firms in Nigeria capital market. The study concluded that debt financing is very important in firm's financial performance since there is a positive and a significant relationship between the variables.

Olarewaju (2019) examined the dynamic relationship between capital structure and quoted manufacturing firms' performance in Nigeria from 1990-2016. Secondary data were obtained from the Nigerian Exchange Group Fact book, 2016. A sample size of thirty (30) quoted manufacturing companies in Nigeria were chosen. Panel unit root test, Padroni cointegration tests and Panel Vector Error Correction Method (PVECM) were used to analyze data. The study revealed that there is evidence of long run relationship between capital structure and firms' performance in Nigeria. The study, therefore, recommended that manufacturing firms should be pragmatic when choosing capital structure outlays to enhance performance in their activities.

Ezuma (2022) examined the relationship between capital structure and financial performance of listed pharmaceutical companies in Nigeria from 2013–2017. The ex post facto research design was adopted for the study with a population of ten (10) listed pharmaceutical companies in Nigeria as listed by the Nigerian Exchange Group in 2021. Data were retrieved from the annual reports of the selected listed pharmaceutical companies for the period 2013–2017. Multiple regression analysis was used to analyze the data gathered with the aid of Stata12 statistical software. The study revealed a positive and significant relationship between equity capital and profit before tax of listed

pharmaceutical companies in Nigeria. It also revealed the existence of a positive and significant relationship between equity capital and return on assets of listed pharmaceutical companies in Nigeria.

2. Materials and Methods

The research design adopted for this study is the correlation research design. The population of the study comprises of fourteen (14) quoted industrial goods firms listed on the floor of the Nigerian Stock Exchange (NSE) while only thirteen (13) of the fourteen (14) firms were considered as the sample for this study. Data were retrieved from published financial report of the selected listed industrial goods firms. Pearson correlation and multiple regression were used for data analysis within aid of SPSS 22.0 software.

3. Results

Data Presentation & Analysis/discussion of Results

Table 1: Correlation Analysis showing the Relationship between Equity capital and Return on Asset

Correlations

		Equity capital	Return on Asset
Equity capital	Pearson Correlation	1	.615*
	Sig. (2-tailed)		.000
	N	10	10
Return on Asset	Pearson Correlation	.615*	1
	Sig. (2-tailed)	.000	
	N	10	10

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

Table 1 showed a correlation coefficient of 0.615* significant at 0.000< 0.05 level of significance. The correlation coefficient is strong from the categorization in table 4.5, thus indicating a strong relationship between equity capital and return on asset. The observed positive correlation coefficient indicates that an increase in return on asset is associated with an improvement in equity capital. Accordingly, the researchers concluded that there is a significant relationship between equity capital and return on asset of listed industrial goods firms in Nigeria.

Table 2: Correlation Analysis showing the Relationship between Debt capital and Return on Asset

Correlations

		Debt capital	Return on Asset
Debt capital	Pearson Correlation	1	.894*
	Sig. (2-tailed)		.000
	N	10	10
Return on Asset	Pearson Correlation	.894*	1
	Sig. (2-tailed)	.000	
	N	10	10

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

Table 2 showed a correlation coefficient of 0.894* significant at 0.000 < 0.05 level of significance. The correlation coefficient is very strong from the categorization in table 4.5, thus indicating a very strong relationship between debt capital and return on assets. The observed positive correlation coefficient indicates that an increase in return on asset is associated with an improvement in debt capital. Accordingly, the researcher concludes that there is a significant relationship between debt capital and return on asset of listed industrial goods firms in Nigeria.

4. Discussion

Test of Hypothesis 1

The analysis showed that equity capital had the observed significant t value of0.028<0.05 level of significance, therefore the researcher rejects the null hypothesis and conclude that equity capital had significant and positive impact on return on asset of listed industrial goods firms in Nigeria.

Test of Hypothesis 2

The analysis revealed that debt capital had the observed significant t value of0.000<0.05 level of significance, therefore the researcher rejects the null hypothesis and conclude that debt capital had significant and positive impact on return on asset of listed industrial goods firms in Nigeria.

Discussion of Findings

From the analysis and discussion of results, the following findings were reached;

The relationship between Equity capital and Return on Assets

The result of the regression analysis indicates that equity capital has significant positive impact on financial performance (ROA) of listed industrial goods firms in Nigeria, implying that with every increase in the composition of equity capital that were available to management for use in financing the business of industrial goods firms in Nigeria, there is a proportional increase in the financial performance (return on assets) of the firm. The positive relationship between equity capital and return on assets is consistent with the studies of Nwidobie, et al. (2015), Kalsoom and Mujahid (2014), Kavita (2014), Olayiwola (2014). The study results however, contradict the studies of Opoku, et al. (2013) who established negative relationship between equity capital and financial performance.

The Effect of Debt capital on Return on Assets

Regression output indicates that debt capital has significant positive impact on financial performance (ROA) of listed industrial goods firms in Nigeria, which implies that increase in debt capital of industrial goods firms in Nigeria, brings about a proportional increase in the financial performance (return on assets) of the firm. This result was consistent with the findings of Nwidobie, et al. (2015). Kalsoom and Mubeen (2014), Kavita (2015), Javed and Akhtar (2012), the results of the study are however not consistent with the findings of Khalifa (2014), Khanam et al. (2014), Al-Tani (2013), Iropev and Kwanum (2012) and Osuji and Odita (2012).

5. Conclusion

Conclusion

The conclusions of this study were drawn based on the results of the study. The study concluded that equity capital enhances return on assets of listed industrial goods firms in Nigeria. Also, it concluded that equity capital enhances return on investment in assets of listed industrial goods firms in Nigeria.

Recommendations

The following recommendations were made in respect to the findings;

i. The listed industrial goods firms in Nigeria should employ more equity finance in establishing optimal capital structure.

ii. When capital is raised through debt instruments, more attention should be focused towards other areas for performance enhancement instead of relying on returns from owners' capital employed alone.

REFERENCES

1. Abor, J., & Biekpe, N. (2010). What determines the capital structure of listed firms in Ghana? African Finance Journal, 1(1), 37-48.
2. Al-Taani, K. (2013). The relationship between capital structure and firm performance:
3. Evidence from Jordan. Journal of Finance and Accounting, 1(3) 41-45.
4. Bradley, C. M. (2004). The impact of foreign acquisition on labour. In Auerbach, A (Ed): Financial take-overs: Causes and consequences. University Of Chicago Press, Chicago.
5. Chukwu, G. J., Egbuhuzor, C. A., Namapele, A., Willy, N. O., Chukwu, A. N., Okoba, D., & Ebilaowei, P. (2022). Capital structure and financial performance of listed commercial banks in Nigeria: the moderating effect of board diligence. Current Journal of Applied Science and Technology, 41(32), 21-32.
6. Ezuma, S. C. (2022). Capital structure and financial performance of listed pharmaceutical
7. companies in Nigeria. African Journal of Accounting and Financial Research, 5(2), 1-12.
8. Kenton, W. (2021). Financial performance. https://www.investopedia.com/terms/f/financialperformance.asp
9. Sharma, C. (2012). R&D and productivity in the Indian pharmaceutical firms. Journal of the Asia Pacific Economy, 17(2), 332-342.
10. lshaya. L.C., & Abduijeleel, B.O. (2014). Capital structure and profitability of Nigerian quoted firms: The agency cost theory perspective. American International Journal of Social Science, 3 (1), 1-20.
11. Kalsoom, A., & Mubeen, M. (2014). Impact of capital structure on firms' financial performance and shareholder's wealth: textile sector of Pakistan, international. Journal of Learning & Development, 4, 2.
12. Kavita R. (2015). The impact of capital structure on financial performance of different sectors in India. International Journal in Management and Social Science, 03(06).
13. Khalifa, M. (2014). The effect of capital structure on profitability of energy American firms. International Journal of Business and Management Invention, 3(12), 54-61.
14. Ohaka, J., Edori, D. S., & Ekweozor, U. C. (2020). Debt financing and firms' financial performance in Nigeria. Account and Financial Management Journal, 5(2), 2106-2113.
15. Olarewaju, O. R. (2019). Dynamic relationship between capital structure and quoted manufacturing firms' performance in Nigeria. International Journal of Economics, Finance and Management Sciences, 7(3), 82-87.
16. Osuji, C., & Odita, A. (2012). Impact of capital structure on the financial performance of Nigerian firms, Arabian Journal of Business and Management Review (OMAN Chapter) I, 12.
17. Saad,N. M. (2010). Financial governance, compliance and the effects to capital structure. International Journal of Financial Economics, 2(1), 105-1 14.
18. Sebastian, G. (2010). A theory of financial decisions with liquidity and solvency concerns. Journal of Financial Economics, 99(2), 365-384
19. Yue, H.Y. (2011). Determinants of financial capital structure under different debt maturities. International Research Journal of Finance and Economics - 66.
20. Zorkpa, C.B. (2023). Financial management Dynamics, Celwil publishers port Harcourt.