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Capital Structure and Firm Performance in Nigeria

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Abstract: This study analysed how the capital structure of Nigerian Exchange Group-listed industrial companies affected their financial results. Capital structure was estimated using data on long-term debt to short-term debt ratios, and company performance was estimated using return on assets. Thirty-one (31) manufacturing companies were surveyed between 2012 and 2021, and the analytical approach consisted of descriptive and inferential statistics. The study's findings indicated that the ratio of short-term to long-term debt had a substantial, beneficial effect on the performance of manufacturing companies. Findings suggest that manufacturing company management should improve short- and long-term debt ratios by making the best use of available resources to increase the company's value for its shareholders. In addition, industrial companies should finance their capital structure using short-term obligations rather than long-term debts.

Key words: Capital structure; Firm performance; Long-term debts; Short-term debts; Return on assets; Nigeria.

INTRODUCTION

In the literature, there is the maxim that the two (2) vital decision-making areas for most organisations have been financing and investment, given that both are tilted towards assessing the optimal capital structure of the organisation. As defined by Quan (2020) and Yinusa, Ismail, Yulia, and Olawale (2019), capital structure is the mix of equity and debts used to finance the activities of the business. Theoretically, Modigliani and Miller (1958); Fama and Miller (1972) postulated that due to the homogeneity potential of the market, the capital structure of an organisation is somewhat irrelevant; however, other postulations are indicating that capital structure is relevant(Heinkel, 1982; Damodaran, 2001; Salawu, 2007; and Avci, 2016).

The literature has grown increasingly in-depth in analysing how capital structure affects a company's success over the years. There are two (2) consequences documented in the literature: first, similarly risky organizations may incur greater costs of capital if they use a high level of leverage, and second, shareholders may be unwilling to put money into companies that use a high level of leverage (Nenu,

Vintila & Gherghina, 2018; Frank & Goyal, 2021). It follows from the preceding that capital structure is a critical component of corporate finance since a less-than-optimal mix of capital structures can thwart the firm's wealth maximisation goal.

Furthermore, capital structure is fundamentally influenced by several dynamics, like the organisation policies, size, market forces, tax laws, and industry type, among others (Frank & Goyal, 2021; Oino & Ukaegbu, 2015; Akinyomi, 2013; Ahmad, Abdullah & Roslan, 2012). Notably, the capital structure of any given organisation can take the form of long-term and short-term debts; however, the optimal mix of the forms of debts is the basis for assessing the organisation's capital structure. In this paper, the two forms of capital structure (long- and short-term debts) of selected manufacturing companies were used together with a measure of firms' performance – return on assets share from 2012-2021.

LITERATURE REVIEW

Capital Structure

There are two main types of capital structures: equity (short-term) and debt (long-term) capitals, which correspond to the two main types of liability classes: debt-holders (long-term) and equity-holders (short-term) (Chen, 2014; Nassar, 2016). Equity investors carry the majority of the risk and are the residual claimants, whereas debt holders receive a fixed rate of return and are tightly cosseted by contractual bonds with regards to their investments.

Capital structure is shown to have no effect on a company's value by Miller and Modigliani's (1958) theorem, which is impractical due to the M&M's postulate that there are marketplaces with no tax and transaction costs. Capital structure is defined by Nassar (2016), Yinusa et al. (2019), and Quan (2020) defines a company's capital structure as the ratio of its debt to its equity.

Much evidence links a company's financial structure to its performance (Ahmad et al., 2012; Nassar, 2016; Nenu et al., 2018; Yinusa et al., 2019). Capital structure and business performance may be explained empirically based on information asymmetries, signalling (Ross, 1977), and agency costs (Jensen and Meckling, 1976). (cited in (Iavorskyi, 2013; Chakraborty, 2010).

In the Nigerian business environment, organisations' challenge is to finance their operations, whether to issue debts or equity. Thus, the inability of the organisation to identify the optimal blend of equity and debts has been widely acknowledged as one of the fundamental reasons for the demise of most organisations (Oino & Ukaegbu, 2015; Nenu, Vintila & Gherghina, 2018; Frank & Goyal, 2021). In this paper, the two measures of capital structure (equity and debts) were employed.

Firm Performance

In the accounting and finance literature, the "performance" of a company is defined in various ways, and a wide range of metrics are used to assess how well a company is. Firm performance is the capability to achieve the wealth maximisation goals of the organisation (Yinusa *et al.*, 2019; Nenu *et al.*, 2018). Various metrics may be used to evaluate a company's success, including net income, dividends paid per share, book value per share, return on assets, return on equity, EBITDA, EBIT, and EBIT yield.

In earlier studies on the connection between capital structure and business performance or value, financial ratios have been the main emphasis. Financial ratios may be used to compare the health of different companies over time and across industries, as stated by Al-Matari, Al-Swidi, and Fadzil (2014). In this paper, the firm performance measure employed is the return on assets. Return on asset is the profitability scaled by total assets.

MATERIALS AND METHODS

To ascertain how capital structure affects business performance, this article uses an ex-post facto research approach. All manufacturing enterprises trading on the Nigerian Exchange Group (NEG) floor were included in the research population. At the end of 2021, 49 manufacturing firms will publicly trade on the NEG.

A sample of thirty-one(31) manufacturing companies was employed using purposive sampling, given data availability and consistency in dataset choices. Annual reports and financial statements from a sample of industrial companies were mined for secondary data between 2012 and 2021. The data encompassed capital structure (short-term and long-term debts) and firm performance (return on assets) measures.

The study builds and adapts the existing capital structure and firm performance models of Avci (2016); Fosu (2013); Nenu, Vintila and Gherghina (2018). In light of the above, the following empirical models were estimated:

$$RoA = f(ShtDeb) \quad \text{eq. 1}$$

$$RoA = f(LtDeb) \quad \text{eq. 2}$$

Where FrPerf = firm performance (returns on assets) and ShtDeb = Short term debts; LtDeb = Long term debts. However, the definitive versions of equations 3 and 4 were re-estimated as follows:

$$RoA_{it} = \alpha_0 + \alpha_1 ShtDeb + \varepsilon_{it} \quad \text{eq. 3}$$

$$RoA_{it} = \alpha_0 + \alpha_1 LtDeb + \varepsilon_{it} \quad \text{eq. 4}$$

Measures of central tendency and dispersion, as well as the r-squared and Karl Pearson correlation coefficients, were used to summarise and interpret the data (R-squared adjusted, t-statistic, and f-statistic). STATA 13.0 statistical software was used for the statistical analysis.

RESULTS

Table 1: Summary of descriptive analysis

Variables	Minimum	Maximum	Mean	Std. Deviation
Ron	0.3838	5.1039	4.3990	0.2939
ShtDeb	0.5059	6.3060	8.3991	0.4849
LtDeb	0.4202	8.3030	10.4940	0.8273

Source: Researchers Computation via STATA 13.0;

The averages for RoA, ShtDeb, and LtDeb can be seen in Table 1. RoA is 4.39, ShtDeb is 8.39, and LtDeb is 10.49. It means that RoA, ShtDeb, and LtDeb can be 4.3%, 8.3%, and 10.4% off from the mean on both sides. Given the high standard deviation values, it is clear that the data are inconsistent and of insufficient quality for any further statistical analysis.

Table 2: Correlation matrix

Variables	Ron	ShtDeb	Ltd
Ron	1.0000		
ShtDeb	0.2117	1.0000	
LtDeb	0.1639	0.1548	1.0000

Source: Researcher's Computation via STATA 13.0

With a value of 0.2117, short-term debt (equity-holders) is shown to have the strongest association with firm performance (return on assets) in Table 2. In addition, the positive signs of the Karl Pearson correlation coefficients indicate a favourable association between the mix of debt and equity financing and indicators of company performance (return on assets).

Table 3: Ordinary Least Square Results

Estimator	ShtDeb	Ltd
R-Squared	0.8393	0.7832
R-Squared Adj.	0.7403	0.6210
F-Value	29.380	17.204
Prob. F	0.0000	0.0000

Source: Researcher's Computation via STATA 13.0

The R^2 values in Table 3 showed that The regressed variable has between 62% and 74% of its systematic variance explained by the independent factors. Thus, the model is a good fit for the data used to evaluate the relationship between capital mix and company success.

Besides, the f-values are 29.380 and 17.204 for short-term debts (ShtDeb) and long-term debt (LtDeb) with p-values of 0.0000 and 0.0000, respectively, which are less than 0.05% level of significance. It suggests that manufacturing firms listed on the Nigerian Exchange Group's floor benefit from a more balanced capital structure (long and short debts) in terms of their performance (return on assets).

CONCLUDING AND RECOMMENDATIONS

Capital structure has long been argued to have either excellent or adverse effects on a company's performance in the accounting and finance literature. Management's skill in resolving agency disputes and achieving wealth maximisation objectives may hinge on how well they employ a combination of equity and debt funding to operate the business.

In this study, the effect of capital structure on the operating results of industrial companies listed on the Nigerian Exchange Group's floor between 2012 and 2021 is examined. The simple regression results indicated that both forms of capital structure (debt and equity) significantly and positively affect manufacturing firms' performance; thus, capital structure is relevant and matters for manufacturing firms. The findings corroborate with the existing works of Nenu *et al.* (2021); Quan (2020); Yinusa *et al.* (2019); Avci (2016); Akinyomi (2013); Ahmad *et al.* (2012). This research adds to our understanding by demonstrating that the composition of a company's capital structure has a substantial and beneficial effect on its success.

The results suggest that manufacturing company management should work on improving the ratio between short- and long-term debt. This they can realise by utilising the organisation's resources in the most effective and efficient ways to maximise shareholders' wealth. It is recommended that manufacturing companies utilize short-term borrowing rather than long-term obligations in their capital structure financing.

LIMITATIONS OF THE RESEARCH

This study only employed one measurement of firm performance (return on assets) for publicly quoted manufacturing companies in Nigeria. Profits per share, dividends per share, book value per share, return on equity, earnings before interest, taxes, amortisation, earnings yield, and similar metrics have all been proposed in the literature as measures of a company's success. This study did not evaluate whether these performance measures are affected by capital structure. As a result, it will be necessary for future studies to evaluate the connection between capital mix and the aforementioned business performance indicators.

REFERENCES

1. Ahmad, Z., Abdullah, M.A. & Roslan, S (2012).Capital structure effect on firm performance: Focusing on consumers and industrials sectors on Malaysian firms. *International Review of Business Research Papers, 8*(5), 137 – 155
2. Akinyomi, O. J. (2013). Effect of capital structure on firm performance: Evidence from the Nigerian manufacturing industry. *International Journal of Innovative Research and Studies, 2*(9), 469-480
3. Al-Matari, E. N, Al-Swidi, A.K. & Fadzil, F.H. (2014). The measurements of firm performance's dimensions. *Asian Journal of Finance and Accounting, 6*(1), 24-49
4. Avci, E. (2016). Capital structure and firm performance: An application on manufacturing industry. *Marmara Universitesi Iktisadive Idari Bilmler, 38*, 15-30
5. Chakraborty, I. (2010). Capital structure in an emerging stock market: Case of India. *Research in International Business and Finance, 24*, 295-314
6. Chen, J. J. (2014). Determinants of capital structure of Chinese-listed companies. *Journal of Business Research 57*, 1341-1351.
7. Damodaran, D. (2001). *Corporate finance: Theory and practice* (2nd edition). New York: Wiley Publishers
8. Fama E. F. & Miller M.H. (1972). *The theory of finance*. Hinsdale, Illinois: Dryden Press
9. Fosu, S. (2013). Capital structure, product market competition and firm performance: Evidence from South Africa. *The Quarterly Review of Economics and Finance, 53, 140-151*
10. Frank, M. Z. & Goyal, V.K. (2021). The effect of market conditions on capital structure adjustment. *Finance Research Letters, 1*(1), 318-350.
11. Heinkel, R. (1982). A theory of capital structure relevance under imperfect information. *Journal of Finance, 37*(5), 1141-1150.
12. Iavorskyi, M. (2013). *The impact of capital structure on firm performance: Evidence from Ukraine.* A thesis submitted in partial fulfilment of the requirements for the degree of MA in Financial Economics, Kyiv School of Economics, Ukraine, pp.1-43
13. Modigliani, F. & Miller, M. (1958). The cost of capital, corporation finance and the theory of investment. *American Economic Review 48, 261-297*.
14. Modigliani, F. & Miller, M. H. (1958).The cost of capital, corporate finance and the theory of investment. *American Economic Review,48,* 261-97
15. Nassar, S. (2016).The impact of capital structure on the financial performance of the firms: Evidence from Borsa Istanbul. *Journal of Business and Financial Affairs, 5*(2), 1-4
16. Nenu, E. A., Vintila, G. & Gherghina, S.C. (2018). The impact of capital structure on risk and firm performance: Empirical evidence for the Bucharest stock exchange listed companies. *International Journal of Financial Studies, 6*(41), 1-29
17. Oino, I & Ukaegbu (2015). The impact of profitability on capital structure and speed of adjustment: An empirical examination of selected firms in Nigeria Stock Exchange. *Research in International Business and Finance 35*, 111-121.
18. Quan, V. D. H. (2020). A national justification of the pecking-order hypothesis to the choice of sources of financing. *Management Research News, 12*(12), 74-90.

19. Salawu, R. O. (2007). An empirical analysis of the capital structure of selected quoted companies in Nigeria. *The International Journal of Applied Economics and Finance, 1*(1), *16-28.*

20. Yinusa, O. G., Ismail, A., Yulia, R. & Olawale, L.S. (2019). Capital structure and firm performance in Nigeria. *African Journal of Economic Review, VII(I), 31-56*