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The Impact of Capital Structure on Profitability of Manufacturing Firms on the Ghana Stock Exchange: A Conceptual Analysis

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Abstract:

The concept of capital structure has raised considerable attention across many manufacturing sectors since the sector is influenced by many economic factors. There have been many efforts to comprehend the concept of capital structure using different theoretical perspectives.

The study is grounded on a literature review that aims to assess the influence of the choice of capital on profitability by reviewing literature extensively on capital structure theories such as trade-off theory, pecking order theory, agency theory, Modigliani & Miller, and market timing theory.

To ensure a firm's profitability, firstly, the firm must be aware of its life cycle stage to determine the appropriate capital mix or structure required. Also, the company must develop a corporate financial strategy to determine the optimal mix of capital to maximize the market value of firms outstanding shares, which will lead to profitability

The researcher recommends that managers of manufacturing companies should not overuse the amount of leverage in their capital structure, but rather, they must first attempt to finance their projects through retained earnings and only resort to leverage as a last resort. Managers must strive to reach and maintain the appropriate capital structure level to maximize the firm's performance. The result from the study of literature shows that increases in short term debt and long-term debt affect the manufacturing companies' performance. The implication is that managers should make sure that they identify and maintain the optimal capital structure level to maximize the company's profit base.

Keywords: Capital structure, profitability, debt financing and equity financing

1. Introduction

The concept of capital structure has raised considerable attention across many manufacturing sectors since the sector is influenced by many economic factors (Khalaf, 2013; Ahmad & Mohsin, 2016). There have been many efforts to comprehend the concept of capital structure using different theoretical perspectives. The concept of capital structure is imperative in the examination of the factors that influence manufacturing firms into the financing of their operations (Gropp & Heider, 2010). The increased attention paid to the capital structure has therefore brought significant differences about what is capital structure. According to Gitman and Zutter (2012), capital structure is defined as the mix of long-term debt and equity maintained by the firm. Brigham and Ehrhardt (2011) indicated that capital structure comprises the optimal mix of debt and equity.

2.1. Theories Related to Capital Structure

These theories are; trade-off theory, pecking order theory, agency theory, Modigliani & Miller, and market timing theory.

2.1.1 Trade-off Theory

The second proposition by Modigliani and Miller (1958) introduces the trade-off theory. This theory of capital structure assumes that the management of a company will always determine the amount of debt and equity to use in financing the operations of the entity and that this is obtained by balancing off the cost and benefits associated with each source of finance. According to the theory, firms should select an optimum capital structure that balances the advantages and disadvantages of both debt and equity. The Trade-off theory indicates that financially unstable firms will always depend on banks for debt while profitable and financially stable firms rely on internally generated funds for investment. It is established that within the trade-off theory, there is a debt pecking order which prefers bank loans to market debt, and this is due to the lower implied bankruptcy costs. According to Myers (2001), a business should leverage itself to the point where the marginal value of tax benefits associated with any additional debt can be offset by an increase in the present value of potential financial distress costs (Rasiah & Kim, 2011). The value of the firm will therefore decrease because of financial distress. The theory suggests that managers prefer debt to equity and that they will always balance the profits and the costs benefits associated with each source to reach optimum leverage. The effective price of using debt relative to equity will reduce since the interest expense is tax-deductible. In evaluating the trade-off theory based on the empirical

studies conducted, it would seem that, overall, it is plausible to explain firms' financing behaviour. Trade-off theory also explains that companies usually borrow from financial institutions gradually to reach their optimal level of debt-equity ratio. At this level, firms can maximize market value by summing up the present value of expected debt financing costs against the expected benefits of debt financing (Nwude, Itiri, Agbadua&Udeh, 2016). Empirical studies highly support its predictions relating to the relationship between leverage and asset tangibility or leverage and growth. On the contrary, its prediction regarding the relationship between leverage and profitability seems to be anomalous to firms' financing behaviour. This theory is intended to aid in developing whether manufacturing firms in Ghana have a well-known way of choosing optimal capital structures that balances the benefits and disadvantages of both loan and equity, which are used to finance business activities. The theory further guided the study in establishing if sugar firms' financial strength and performances are influenced by their preferred source of financing, either debts or equity.

2.1.2 Pecking Order Theory

The pecking order theory proposes that firms have a particular way of choosing the kind of capital they use to finance their business (Myers & Majluf, 1984). The pecking order theory is about what the firm's management will prefer in terms of which source(s) of finance to use in financing the business operations and the order in which these sources will be used. The pecking order theory was proposed by Myers and Majluf (1984), who reason that in most instances, the prudent choice is to issue safe securities in preference to that of issuing risky ones. Firstly, firms will choose internal finance that uses profits from previous years. Secondly, if there are insufficient funds internally, firms will look to borrow from banks, and finally, if that is, as a last resort, they will issue additional shares to increase their equity capital. In a nutshell, the pecking order theory states that a firm's management favours internal financing over external financing. According to Sorin (2019), firms' leverage reflects both the past profitability and the firms' investment opportunities, implying that if a firm has no available opportunities, it may prefer equity over debt, contrary to the pecking order theory. The pecking order theory suggests a negative relationship between leverage and profitability. Intuitively, profitable firms are more inclined to tap into retained earnings to fund their investment requirements than to seek recourse to debt markets. Additionally, the pecking order theory indicates that firms with more investments, holding profitability fixed, should accumulate more debt over time.

2.1.3 Agency Cost Theory

Ross proposed the agency cost theory in 1972. Meckling expounded it in 1976. It is based on the idea that a conflict of interests exists between the management and shareholders. This is according to Jensen & Meckling, 1976. The researchers argued that since the ownership and control of a firm are separate, agency costs of equity in corporate finance arise since managers are inclined to maximize their own convenience instead of the firm's value. They argued that in explaining the relevance of capital structure, there exist three types of agency cost. Firstly, the asset substitution effects emphasized that as the debt/equity ratio increased, management developed an increased incentive to undertake risky projects because if the project succeeds, shareholders receive all of the benefits, and if it fails, loan holders receive all of the costs. Secondly, there are underinvestment problems where if the debt were risky, the gain from the project would accrue to debt holders rather than the shareholders; as a result, management had incentives not to undertake projects with a positive net present value, even if they had the potential to boost the firm's worth. Thirdly, the agency costs arising from the free cash flow, which argued that unless the free cash flow is paid to investors, management will always have an incentive to destroy the firm's value through empire building and perks with cash that should have been paid back to shareholders. According to this theory, conflict of interest pressure managers to seek funds even when profitable opportunities do not exist. The funds can then be used for projects other than those that enhance the value of the firm. The theory, however, gives a solution by concluding that increasing the leverage level of a firm would impose financial discipline on management in such circumstances (Calabrese, 2011). The agency theory guided this study in a number of ways. Foremost, the posits of ways theory were used to determine if the managers of the sugar milling companies act in the best interest of the shareholders in coming up with the capital structure decisions or are swayed by partisan, selfish, and debt holders' interest in analyzing the trends of capital formation on financial performance. The theory guided the study to establish whether the public and shareholders' interests are considered when taking loan financing from internal sources to develop optimal debt/equity ratio and subsequent acquisition and amortization of assets.

2.1.4. Market Timing Theory

According to this theory, a firm's capital structure is a result of timing its equity issues. This theory states that managers do a critical analysis, and they will issue new shares if they believe those shares will be overvalued. On the other hand, they will repurchase them when they are undervalued. There is a different version of this theory that points towards capital structure dynamics that are alike. The theory expectations are: The theory assumes that the economic agents are rational, and after positive information, firms are generally assumed to issue equity directly because of reduced information asymmetry between the firm's management and stockholders. In reducing asymmetric problems after the release of positive information, the companies do a direct issue to a potential investor. When information is shared regularly, the company may increase its stock prices; therefore, its own timing opportunities are created. Graham and Harvey (2001) noted that the managers admitted that it was essential to issue or buy back the firm's stock and time the equity market. Baker & Wurgler (2002) concluded that past collective efforts to time the equity market determines the firm's capital structure; this resulted from a positive relation between leverage and measure of market timing. This theory states that managers should take advantage of the information gap and critically analyze the funds market. This is

important because information asymmetry can be costly to firms if the investors misinterpret the manager's behavior and charge them unfairly, affecting the firm's performance.

2.1.5. Impact of Debt on Return on Asset

Return on assets is a profitability ratio which indicates the amount of profit a business can earn from its assets. In other words, return on assets (ROA) gauges a company's management's efficiency in generating earnings from its economic resources or balance sheet assets.

Debt financing has become a universal practice in the global corporate world. It provides a mechanism for business firms that lack sufficient internal resources to finance their investment and operating activities to close their financing gaps. Because retained earnings are insufficient or unavailable, debt financing is the primary source of capital for truly fledgling businesses (Githaigo and Kabiru, 2015). Generally, firms without sufficient track records pose a relatively greater risk to capital providers (Schmidt, Mason, Bruwer and Aspelung (2017). As a result, shareholders are less likely to invest in such businesses. Maturity matching between debt and the useful life of assets is critical in determining the duration of debt maturity.

Garcia-Terul and Martinez-Solano (2007) found a positive correlation between short-term debt and a firm's growth prospects. Because short-term debt is perceived to be less expensive, it is the optimal financing tool. Thus, both the entrepreneur and the bank prefer short-term debt to finance their operations and expansion in the short term in order to maximize the company's return on assets. Therefore, the researcher proposes the first proposition:

P1: Debt financing positively impacts profitability in terms of return on assets.

2.1.6. Impact of Equity on Return on Equity

The return on equity (ROE) is a financial performance metric that is calculated by dividing net income by shareholders' equity. Due to the fact that shareholders' equity equals a company's assets minus its debt, ROE is referred to as return on net assets. ROE is viewed as a barometer of a company's profitability and efficiency in generating profits. Return on Equity (ROE) ratios indicate how effectively businesses manage their own capital (net worth), indicating the profitability of the investment made by the capital of owners or shareholders of the company, which is known as equity. According to Yamin and Pratiwi (2020), the higher the Return on Equity (ROE) ratio, the faster the profit growth. Return on Equity can also be referred to as the profitability of owners' capital, which is frequently referred to as 'business profitability' (Potashnik, Garina, Romanovskaya, Garin and Tsymbalov, 2017). The greater the value, the greater the return on equity (ROE) generated by additional working capital that can be used to finance the company's operations, which may ultimately result in profit. Irawan (2011) discovered that the Return on Equity (ROE) affects profit growth in his research. This is because the nature and pattern of the company's investments are extremely precise, ensuring that all assets are utilized efficiently, and profits are maximized. The researcher, therefore, posits the second proposition:

P2: Equity financing positively impacts profitability in terms of Return on Equity.

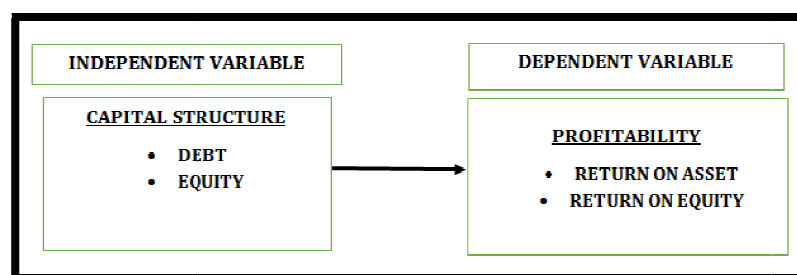


Figure 1: The Influence of Capital Structure on Profitability of Manufacturing Firms on the Ghana Stock Exchange
Source: Authors' Compilation

Figure 1 suggests that the profitability of manufacturing companies listed on the Ghana Stock exchange can be impacted by its capital structure.

3. Conclusion

Companies need capital in managing corporate operational activities. The need for capital in funding is significant to maintain and guarantee the continuity of a company (Wardani and Subowo, 2020). All company activities will determine the amount of capital, so an optimal capital structure is needed to support all operational activities. A balanced capital structure can be determined by collecting internal and external funds. Internal and external funds must be made with an ideal composition to create a balance between debt and capital.

The use of debt financing gives a positive signal that management is confident of the firm's future prospects and will be able to meet debt obligations in the future (Anarfo and Appiahene, 2017). However, the issues relating to debt pricing, including the level of interest, meaning that firms will prefer to look internally for financing options primarily from their retained earnings, which is cheaper than the use of debt.

To ensure a firm's profitability, firstly, the firm must be aware of its life cycle stage to determine the appropriate capital mix or structure required. Also, the company must develop a corporate financial strategy to determine the optimal mix of capital to maximize the market value of firms outstanding shares, which will lead to profitability.

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