
RELEVANCE OF CAPITAL STRUCTURE IN A GLOBAL VILLAGE

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ABSTRACT

This work looked at the relevance of the concept of Capital Structure and its contribution in developing good financial policy for a business organisation. The paper briefly look at early and recent theories of capital structure and see how those theories and their assumptions can be of help to management of companies in taking good decision which will lead to their expansion. Some of the theories examined are Modigliani & Miller, Pecking order theory, Traditional approach, Net income approach, Net operating income approach as well as Market Timing theory. It was recommended that good understanding of the concept of capital structure and relevant theories will aid management in taking good capital structure decision.

Keywords: Capital structure, theories, companies, total value, overall cost of capital.

INTRODUCTION

Shah and Hijazi (2004) explained that capital structure could be described as different options available to a business organization in combining various sources of long-term capital, that is, debt and common stock. It is believed that debt capital is usually cheaper but with higher level of risk when compared to equity capital (Windayu, 2016). Thus, it is expected that financial managers will advise management on the proportion its carries with equity capital which will be of benefit to the firm and will not expose shareholders to undue risk. Management also need to be notified that, the more equity acquired, the higher the ownership dilution, which affect proportion of returns to current owners of the firm (Jamal et al., 2013; Jamal et al., 2014)

In view of the fact that finance play a vital role in all endeavours of life; the importance of capital cannot be overemphasized in any business organisation, be it borrowed funds or capital provided by shareholders. Adequate capital enables a company to take advantage of investment opportunities for the purpose of wealth maximization and attainment of primary objective of profit maximization. With these sources of capital carrying relevant costs attached to them ability of managers of business to combine these sources of capital appropriately to attain above mentioned objectives is paramount, particularly long term sources of capital which the concept of capital structure is all about. Therefore, this paper is to examine the relevance of this concept of capital in taking good financial decision by reviewing earlier and more recent theories on it.

LITERATURE REVIEW

Concept of Capital Structure

According to Hornby (2013) the term structure can be defined as arrangement of various parts of something. Therefore, capital structure referred to the arrangement of capital from different sources needed by a business on the long term (Sangram,nd). The long term sources of funds include equity capital, preference share capital, debenture and long term debt (Olowe, 2009).

Capital structure is the mix between owners' funds and borrowed funds employed by a firm (Oloyede, 2000).

Lawal (2014) explained that capital structure is the combination of long term sources of funds such as debentures, long term debt, preference share capital and ordinary shares. Pandey (2014) distinguished between financial structure and capital structure. He defined financial structure as the entire sources of financing the assets of a firm be it long-term, medium term and short term sources, whereas capital structure is sources used in capital expenditure i.e. all sources of financing a firm projects excluding short-term sources. Capital structure refers to a company's outstanding debt and equity and it is commonly known as debt-to-equity ratio (Banerjee, 2012).

According to Omolumo (2017), financial structure is the entire right hand side of a firm balance sheet whereas capital structure is made up of permanent financing of a business organization which include long-term debt, debentures, ordinary shares or common stock, preferred stock and retained earnings. So, it may be concluded that the capital structure a firm is a part of its financial structure. It is important for a business organization to know the state of its capital structure because it provide an overview of the company's risk; it is generally belief that the more the proportion of debt capital in a company's capital structure, the higher it exposure to risk. In that case the firm is said to be highly levered and vice versa (Omolumo, 2017).

Factors determining capital structure of a firm include the following: risk of cash insolvency, risk in variation of earnings, cost of capital, consideration of retaining control of the firm, Government policies, trading on equity, size of the company, needs of investors, flexibility, period of finance, nature of business, legal requirements, purpose of financing, corporate taxation, cash inflows, provision for the future. In addition to the above factors determining the capital structure of a firm include stock market condition, dividend payout ratio, debt servicing capacity, floatation cost and return on investment, financial leverage, EBIT-EPS analysis, among others (Windayu, 2016; Oppong-Boakye et al., 2013; Harris & Raviv, 1991).

The concept of capital structure is important in taking good decision in other areas of finance (Barbuta- Misu & Bodea, 2014; Saif et al., 2013; Bierman, 2003; Ezike, 2003). Capital structure decision of a firm affects its financing and investment decision (Bierman, 2003). Barbuta- Misu and Bodea (2014) concluded that capital structure decision affect the funding arrangements of a firm and its capacity to make profit. Saif, Rehman, Rehman, Khan, Rehamn and Khan (2013) opined that capital structure decision affects some other decisions in corporate finance such as dividend policies, project financing, mergers and acquisition, insurance of long term securities among others. Ezike (2002) expressed that the concept of capital structure is relevant in the following areas: Increase in value of the firm, Utilization of available funds, Maximization of return, Minimization of cost of capital, Solvency or liquidity position, Flexibility, dilution of ownership, Minimization of financial risk theories.

Baseline Theories

Howe (1009) argues that the reason theories are propounded is to provide explanation to, enable the predicting of, or enhance the understanding of phenomena. In some cases, theories are relied upon to extend existing knowledge within the limits of bounding assumptions (Howe, 2009). Baseline theories thus, provide support for an investigation, by describing why and how constructs in an examen could interact (Ateke & Amangala, 2021). Consequently, this study is based on the following theories:

Modigliani and Miller (MM) theory: This theory is named after its proponents, Franco Modigliani and Merton Miller and was propounded in 1958. The theory holds that the total value of a firm is independent of its capital structure (Abosedo, 2012). According to Oloyede (2000), MM theory expresses that capital structure is irrelevant to the value of a firm as the value of two identical firms will not be affected by the mix of finance adopted in financing its assets; as the value of the firms remain the same. According to Hashemi and Shivaraj (2014), the above was under an ideal market conditions with the following assumptions:

- a) Capital markets are ideal with no transaction and bankruptcy costs.
- b) There are not different risk classes for firms.
- c) Only one kind of tax matters is the corporate tax payable to the government.
- d) All cash flows are perpetuities and no growth factor in cash is assumed.
- e) Insiders and outsiders have no information asymmetry.
- f) There is no moral hazard on manager's part and they work for shareholder's wealth maximization.
- g) Firms issue solely two varieties of claims equity with risk and debt without risk.

If market values of identical firms are different, arbitrage process will take place. This will make investors to switch their securities from levered firms to unlevered firms and receive same returns from both firms (Poornima & Reddy, 2016).

Net income approach: According to Ganesamoorthy (2016) the net income approach to capital structure was developed by David Durand in 1952. The theory postulated that because cost of debt is cheaper than cost of equity, the more a firm engage debt capital the lower the overall cost of capital of such a company and the higher the value of such a company. The theory stated that the optimal capital structure is that point where the overall cost of capital is at minimal point and total value of the firm is maximized with the use of 100% debt capital structure under the following additional assumptions:

- a) The cost of debt (K_b) and the cost of equity (K_e) remain constant with an increase in the use of debt capital.
- b) The cost of debt is less than the cost of equity.

Therefore, since K_e and K_d are constant, increase in use of debt by increasing expected returns of the shareholders will increase the value of equity, this in firms increase the value of firm (Olowe, 2011). Omolumo (2016) presented the following to justify the proposition of the theory:

$$V = B + S, \text{ where } B = IC / K_b, \text{ and } S = EBIT - IC / K_s$$

$$V = IC / K_b + EBIT - IC / K_s \text{ where:}$$

V= the total value of the firms,

B= total market value of debt capital,

S= total market value equity capital,

EBIT= earnings before interest and taxes,

IC= interest payment or charge on debt.

Banerjee (2012) presented the postulation by the theory is presented in the diagram below

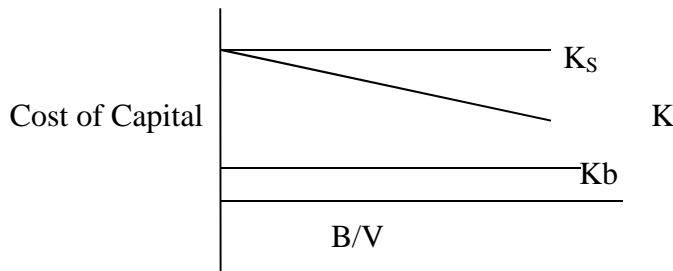


Fig. 1: Capital structure decision under net income approach

Net operating income approach: According to Banerjee (2012), the net operating income approach to capital structure was also propounded by David Durand. Net operating income approach is the opposite of net income approach if there are no taxes. It states that the value of a firm and cost of capital of a firm is not dependent upon its capital structure. It is in support of MM approach use by Modigliani and Miller to justify their proposition in MM theory (Abeywerdham, 2017). The theory was based on the following different set of assumptions from the one made under net income approach

- a) The overall capitalization rate of the firm k is constant for all degree of leverage;
- b) NOI is capitalised at an overall capitalisation rate in order to have the total market value of the firm, therefore the value of the firm V is determined by dividing earnings before interest and taxes by overall cost of capital (K) which is presented below:

$$V = \text{EBIT} / k$$

- c) The market value of the debt is then subtracted from the total market value in order to get the market value of equity.

$$S = V - D$$

- d) As the cost of debt is constant, the cost of equity will be

$$K_e = \frac{\text{EBIT} - \text{Int}}{S}$$

Banerjee (2012) stated that based on the above assumptions, the theory asserted that there is no single optimum capital structure and since cost of capital of the firm will remain the same with change with the level proportion of leverage used. He concluded from the proposition that capital structure will be indifferent to investors as increase in the use of leverage at a lower cost increase risk face by equity finance provider which also increase return demanded by them and make the overall cost of capital of such a company to be unchanged. Fig. 2 below illustrates the theory.

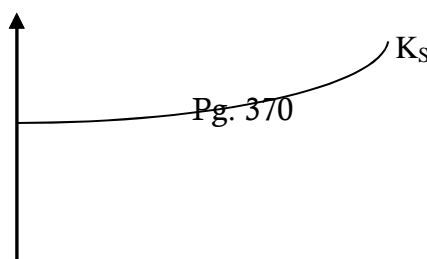




Fig.2: Capital structure decision under NOI Approach

Traditional Approach: This theory was propounded by Ezra Solomon in 1963 (Pandey, 2007). The theory proposed that a firm can reduce the overall cost of capital or increase its value by increasing the debt proportion in its capital structure to a certain limit, because debt is a cheap source of raising funds as compared to equity capital. The theory is referred to as the mid-view, that it serves as a compromise between the net income approach and the net operating income approach to capital structure (Ezike, 2003). The theory believe that there is an optimum capital structure where the firm maximize its total value and minimizes its overall cost of capital or weighted average cost of capital. This is because as more of debt capital is employed, the cost of equity do not rise fast enough as to offset fully the lower after tax cost of additional debt (Broyles, 2007). Initially, cost of capital reduces while overall value of the firm increases as more and more low-cost debt are used until it got to a point, after which additional use of debt capital make weight average cost of debt to increase the value of the firm diminishes because there is greater risk associated with increasing use of debt capital which makes provider of equity capital to demand for higher rate of return which offset the benefit of using increased debt capital also at a significant point cost of debt capital (K_d) to rises (Gbede 2007; Van Horne, 2007).

However, this view has been criticized based on its assumption, that investors' perception of leverage at different levels is not the same as there is no strong justification and the fact that that it stated that risk for shareholder does not increase with additional debt for financial sound firms (Pandey, 2014). The traditional theory of capital structure is based on the following assumptions:

- Cost of debt (K_d) remains stable with an increase in the debt ratio to a certain limit after which it begins to grow rapidly.
- Cost of equity (K_e) remains stable or grows slightly with an increase in the debt ratio to a certain limit after which it begins to grow rapidly.
- Weighted average cost of capital decrease to some degree with an increase in debt ratio, and then begins to grow.
- Cost of equity is larger than cost of debt at any capital structure i.e., $K_e > K_d$ at any value of debt ratio.
- The traditional approach to capital structure believes in the existence of optimal capital structure. It is the combination of debt and equity in such a way to make the at WACC reaches the minimal value and the value of a firm is maximized.

Pecking order theory: This theory states that the order a company finances its activities from internally general funds, low risk debt finances and finally sales of share. From the theory it can be concluded that when a business finances its activities through internal generated funds it is seen to be strong but if through sales of shares it is seen to be weak as the management tries to make money from its overvalued stock before share price start to fall (information asymmetries).

Market Timing Theory (MTT): This theory was developed by Baker and Wurgler in 2002 (Setyawan & Frenzidy, 2012). MTT postulates that Capital evolves as the cumulative outcome of past attempt, to time the equity market movement (Virk et al., 2014). Companies will usually want to take advantage of stocks or asset mispricing by issuing equity financing when it seems their shares price is overvalue and go for debt financing when the Managers felt their stock is undervalue using marke- to- book ratio to measure their timing for taking such moves making use of initial Public offer (IPO) (Baker & Wurgler, 2002) They further emphasized that the theory does not believe that there is optimum Capital structure. This theory is regarded as one of the theories of behavioural finance which is highly explanatory (Saba & Sayed, 2014) Notwithstanding the theory has been criticized by scholars based on the fact that most of its assumption are applicable on the short-run which cannot be of any significance on the capital structure of a firm after two years (Alti, 2006). Setyawan and Frensidy, (2011) expressed that the theory does not consider market where stock buyback or repurchase of stocks is not allowed.

CONCLUSION

All the theories of capital structure propounded by various scholars have the objective of helping management of companies to take good capital structure decision. Modigliani and Miller posits that capital structure does not matter or irrelevant in increasing the value of firm nor reduce the weighted average cost of capital. This was based on some assumptions which had been criticized. Some of the assumptions which draw criticism include perfect situation, agency conflicts as well as the fact that the theory does not provide realistic proposition on how firm finance their operations (Luigi & Sorin, 2014).

The criticism led to development of some other theories and review of its initial proposition in 1963 where the assumption on taxation was relaxed. Notwithstanding the fact that the theory was criticized on some of its assumptions which cannot be put to use in practical terms; it is important to note that they play a pivotal role in the development of capital structure theories as well as stimulating most of modern theories on capital structure.

Modigliani and Miller used the theory of net operating income approach, to justify that the capital of capital structure is irrelevant to the value of a firm nor has effect on its WACC. NOI approach to capital structure analyzed the fact that with increase in use of debt capital ‘lemon premium ‘ required by equity capital provider will increase because of additional exposure to financial risk and this will make the value of the firm and its overall cost of capital to remain unchanged. The conclusion of NOI tends towards MM thesis on capital structure.

Although, Market Timing Theory also support the conclusion that there is no optimal capital structure but it is a behavioral theory which is an emotional theory that relate to how an investor think and its opinion about the stock market (Saba & Syed, 2014). Market timing theory believes that there is no optimum capital structure as the capital structure of a firm is determined by past efforts of taking advantage of stock mis-pricing with firms that have high Market –to –book ratio to be growing rapidly and may be issuing as much debt capital as equity capital (Setyawan & Frensidy, 2012) . Pecking order theory can be categorized as one of the theory that argued that there is no optimal capital structure (Jarallab et al., 2018) In line with the Postulation of pecking order theory, Hashemi and Shivaraj (2014) concluded that in as much as Company follow a particular order in Sourcing for finance in carrying out their projects. There would be increase in

stock price upon information that a company is issuing debt instrument while on the other hand stock price falls on the announcement of the firm issuing equity capital. This conclusion also tend towards market timing theory which stated that firms will only issue equity capital if the management are of the opinion that shares are overvalued, issue debt capital if they believe that the firm's stock are undervalued.

In contrast to the above theories, Traditional theory and Net Income approach agreed that there is optimal capital structure, which means the combination of debt capital, and equity capital significantly affect the overall cost of capital and total value of a company. From the above it can be concluded that traditional theory submitted that there is optimum capital structure which makes cost of capital a firm (WACC) to reduce as more and more debt capital is used, which leads to increase in the value of such a firm until it gets to the maximum point after which the use of additional debt capital increases the firm's cost of capital and reduces total value of the firm. The traditional theory is a mid-point between Net income approach to capital structure which believed that as more debt capital is engaged by a corporate organization, the WACC of the company reduces while the total value of the firm continue to increase;

The Managerial Implication of this paper is that with deep understanding of various factors determining the capital structure by management of companies as supported by divergent postulations of various theories of capital structure, the financial policy of Companies will be enhanced and also, aids them in taking a very good capital structure decision. Lawal (2014) supported the above based on the conclusion from empirical work on capital structure and the value of the firm with evidence from Nigeria Banking System where it was concluded that understanding the relevance of the concept and its theories will enhance financial policy of companies and aid them in taking sound capital structure decision.

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