A Critical Literature Review of Capital Structure Theories

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Abstract
Capital structure is a vital component of any business entity. The success and or failure of many business enterprises arise from their capital structures. Many financial institutions adopt different approaches regarding their capital structure arrangement. Some depend entirely on debt financing, others depend more on equity financing and others still mix the two approaches. The question has been which capital structure is the best for financial institutions? For those firms which prefer mixing the two approaches, what would be the best portion for the two approaches? This paper critically reviews the capital structure theories, which include Franco Modigliani and Merton Miller theorem, Trade-off theory of capital structure and taxes, Pecking order theory, The market timing theory and Agency cost theory. This paper suggests that any financial institution should carefully analyze its operations before making its capital structure decision
Key Words: *Capital structure theories, Debt financing, Equity financing.*

1.0 INTRODUCTION

Capital structure has been a subject of discussion for quite some sometime as far as many financial institutions are concerned. Many firms are often found in difficult situations when it comes to making appropriate financial decisions and more especially in deciding on the capital structure a firm wants to adopt. The capital structure takes two broad dimensions, which are equity financing and debt financing. The nature and extent of association between capital structure and financial performance of firms have involved attention in the writings of finance. The capital structure encompasses the pronouncement about the amalgamation of the various foundations of funds a firm uses to finance its tasks and capital investments. These sources include the use of long-term debt finance called debt financing, as well as preferred stock and common stock, also called equity financing. One of the most important goals of financial managers is to maximize shareholders' wealth through the determination of the best combination of financial resources for a company and maximization of the company's value by determining where to invest their resources (Dahiru, 2016).

The cost of capital considerably varies from one firm to another. For instance, some firms are largely financed by debt through borrowing, while others make greater use of shareholder's funds. An important aspect in this respect is whether there exist some capital structures which are better than others. A good capital structure would be considered to be one that results in a low cost of capital overall for the firm. This, therefore, means that a low rate of return needs to be paid on provided funds and thus the discounted future cash flow values generated by the firm are high, resulting in a higher value of the firm on overall. It is in this respect that i critically review the capital structure theories as outlined below.

- Franco Modigliani and Merton Miller theorem
- Trade-off theory of capital structure and taxes
- Pecking order theory
- The market timing theory
- Agency cost theory

2.0 FRANCO MODIGLIANI AND MERTON MILLER THEOREM

In 1958, the two financial researchers developed Modigliani and Miller capital structure irrelevance theory, which contributed immensely towards capital structure by the Proposition I Theorem. According to MM, the relationship between capital structure and the value of the firm is explained by the net operating income

approach. In other words, according to MM, the capital structure does not affect the value of the firm. MM offered a behavioral justification to these claims. The theory is based on a number of assumptions outlined below.

- ✓ Firstly, it is assumed that firms operate in perfect markets where there is no taxation.
- ✓ Secondly, during the the raising of finances, transaction costs are not associated with the process.
- ✓ Thirdly, it is assumed that there is complete rationality in the economic behavior, implying that profit maximization as a motive of a firm is very fundamental.
- ✓ Fourthly, it is assumed that an investor can substitute personal leverage for corporate leverage, which means that commercial financial institutions are assumed to be able to borrow at similar rates of interest just as individuals.
- ✓ Fifthly, it is assumed that financial institutions that are in similar risk categories can be identified.

MM later on developed Proposition II that relaxed the assumptions under Proposition I and additionally reflected corporate taxes. In 1977 Miller progressed the two propositions and established a model that documented personal taxes.

The net operating income in Proposition I argued that the capital structure is irrelevant in defining the firm value. The decisions about Capital structure do not influence firm value because the value of the firm is independent of its leverage. MM further argued that using debt has no advantage because there are no corporate taxes and furthermore, the WACC of a levered firm and unlevered firm is autonomous and therefore has no relationship with the capital structure. MM argued that an increase in the cheaper debt in the firm's capital structure increases the firm's risk profile. This makes the equity owners demand an increased rate of return as compensation for the increased risk. Therefore, any benefits resulting from an increase in the cheaper debt are exactly offset by an increase in the required rate of return on equity. Modigliani and Miller further proposed that in the event that the assumptions do not hold, the arbitrage process then is carried out which forces the value of the two firms to be the same. Arbitrage is where investors take benefit of the market deficiencies decide to sell stocks in the overrated firms and thereafter buy the stocks in the underestimated which leads to arbitrage gain recognized. MM maintained their thought that the value of the firm has no relationship with the capital structure by carrying out the arbitrage process to two companies, which are similar in every aspect except for their capital structure. The two firms are expected to have the same value. Studies carried out later accomplishes that the assumptions do no hold and have led to researchers to vindicate the MM proposition I and its underlying assumptions to show that capital structure affects the value of firm. For instance the theory had serious flows based on their restrictive assumptions (Watson and Head (2007). The assumption that commercial financial institutions can be able to borrow at similar rates of interest just as individuals can be challenged because borrowing by personalities is more risky and more costly. Secondly, transaction costs cannot be wished away because borrowing costs exist. Thirdly, investors have a lot of variations in their expectations and thus an assumption that a perfect market does exist is exaggerated. Later on MM developed a second thought; Proposition II, otherwise called the net income approach that relaxed the impractical assumptions put forward by proposition I (Net operating income) and acknowledged that tax shield benefit associated with debt capital exists as well as corporate tax exist too. MM established that as firms borrow more loans, they guard more of their profit from corporation tax. MM additionally claimed that the levered firm would at all times have a higher value as compared to the unlevered firm by an interest on tax shield (Watson and Head, 2007; Pandey, 2010 and Welch, 2009).

2.1 TRADE-OFF THEORY OF CAPITAL STRUCTURE AND TAXES

Trade-off theory justifies moderate debt ratios (Myers, 2001). The drive of the trade-off theory of capital structure is to expound on the approach a firm customs to finance investments, which sometimes can be through debt or sometimes even through equity. A weak firm will rely exclusively on a bank for debt capital; this is predicted by the Tradeoff theory. This, therefore, means that for weak firms, debt controls any combination of equity and debt notwithstanding the precedence structure. This outcome, therefore, opposes the proposition that lesser firms shun debt finance due to lack of access to debt financing and also the high transaction costs

involved in the whole process (Hackbarth, Hennessy, & Leland, 2007). Myers illustrated that the firm would borrow funds to the level where the fringe value of tax shields on further debt is compensated by rising in the present value of potential costs of economic distress. The appeal of debt drops with individual tax on the interest revenue (Modigliani & Miller, 1958). Financial distress is experienced by many firms especially when they are not able to handle debt holders' requirements. The theory can be expounded by expenditures of financial distress and agency costs (Pandey, 2005). Tax policy has an important effect on capital structure decisions of a firm (Murinde et al., 2002). This, therefore, proposes that tax benefits resulting from debt would make firms be exclusively funded by means of debt due to interest payments associated with debt being tax-deductible while expenditures related to equity such as bonuses are not tax-deductible. It was resolved that trade-off theory could not justify the relationship between profitability and debt.

2.2 PECKING ORDER THEORY

Myers (1984) came up with the pecking order theory, which stated that firms prefer inner sources of finance as opposed to external sources of finance. As witnessed from the previous section by MM, the capital structure theory does not clearly advise management about the optimum capital structure. The typical theories of capital structure put forward by MM and by extension the advocates of the traditional view propose that the capital structure decision is a tradeoff between the benefits and limitations of financing a firm through debt. Different firms, however, have different types of capital structures in reality. The pecking order theory asserts that there is no target capital structure but rather, finance is raised based on favorite pecking order. The order generally suggests that retained earnings are the most preferred source of funds. Information asymmetry is also an important consideration because internal managers are more likely to be in possession of better information about the firm as compared to external investors. Management is often hesitant to issue stocks that they know very well that they are underpriced, but they prefer raising new equity finance when they consider their stocks to be highly-priced, signaling that they are overvalued. This consideration is a very important input in making capital structure decisions.

The cost of borrowing is also an important aspect of the capital structure decision making process. This is based on the risk premium and the risk free rate of return. The higher the perceived risk of default on the loan payment, the bigger the risk premium and vice versa. Management can, therefore, solve these challenges by relying as much as possible on retained earnings as the most stable source of finance for the firm. Additionally, in the event that external finance is essential, firms are most probably first to issue the harmless security, starting with debt finance then followed by the issue of new equity (Pandey, 2005).

2.3 THE MARKET TIMING THEORY

This theory of capital structure maintains that firms time their equity issues in that new shares are issued when the share price is seemingly overestimated and buy back their own stocks when they are underestimated. Subsequently, variations in share prices upset the capital structure of the firm. Similar capital structure dynamics can be explained by two forms of equity market timing. One assumes economic mediators to be balanced. Firms are presumed to issue equity immediately when positive information is release thus this eliminates the information asymmetry problem between shareholders and management as well as external investors. This leads to decrease in share prices. Consequently, companies generate timing opportunities that are suitable which they are compatible. Secondly, the concept proposes the irrationality of economic agents. Because of this there exists time-varying mispricing of the firm’s shares. The second proposition of market timing doesn’t require inefficiency of the market because management is not asked to predict stock returns effectively. It is assumed that management trusts that the market can be timed. “Managers admitted trying to time the equity market, and most of those that have considered issuing common stock report that the amount by which our stock is undervalued or overvalued" (Graham and Harvey, 2001). The research maintains that managers have confidence that they can be able to time the market, but they do not instantly differentiate mispricing and asymmetric information form of market timing. “Equity market timing has an obstinate consequence capital structure of a company (Baker and Wurgler, 2002).

2.4 THE AGENCY COST THEORY.

Many large business enterprises are in most case, managed and run by employees may either not have shares in the firm or own a very small fraction of the company's shares. The shareholders delegate the powers to the management of such organizations on their behalf to make financial decisions together with all other decisions about the firm and as a result, this creates a conflict of interest, which is referred to as agency theory. The agency relationship usually arises when principals empower other individuals and or organizations otherwise called the agent to perform duties of running the business enterprise on their behalf. Agency cost is a very important factor to consider while making decisions about capital structure especially during this era of insufficient capital availability. This is very important for management, employees, creditors and shareholders. During decisions about capital structure, agency cost comes up through a number of ways; through free cash flows, through property replacements and also through borrowing as well as debt management. Managers may choose to invest in very risky investments, which could create a conflict between management and shareholders. It is true that during the running of a business enterprise, when profits are realized, they are all channeled to the shareholders mainly through dividends but in the unlikely event that the enterprise gets a loss, then definitely, the loss has to be shared amongst the shareholders which create a conflict between shareholders and management.

3.0 CONCLUSIONS

Modigliani and miller developed Modigliani and Miller's capital structure irrelevance theory in 1958, which contributed immensely towards capital structure by the Proposition I Theorem. According to MM, the relationship between capital structure and value of the firm is explained by the net operating income approach. In other words, according to MM, capital structure does not affect the value of the firm. Trade-off theory justifies moderate debt ratios (Myers, 2001). The drive of the trade-off theory of capital structure is to expound on the approach a firm customs to finance investments, which sometimes can be through debt or sometimes even through equity. A weak firm will rely exclusively on a bank for debt capital; this is predicted by the Tradeoff theory. This, therefore, means that for weak firms, debt controls any combination of equity and debt notwithstanding the precedence structure. Myers (1984) came up with the pecking order theory which stated that firms prefer inner sources of finance as opposed to external sources of finance. As witnessed from the previous section by MM, the capital structure theory does not clearly advise management about the optimum capital structure. The typical theories of capital structure put forward by MM and by extension the advocates of the traditional view propose that the capital structure decision is a tradeoff between the benefits and limitations of financing a firm through debt. Different firms, however, have different types of capital structures in reality. The pecking order theory asserts that there is no target capital structure but rather, finance is raised based on favorite pecking order. This theory of capital structure maintains that firms time their equity issues in that new shares are issued when the share price is seemingly overestimated and buyback own stocks when they are underestimated. Subsequently, variations in share prices upset the capital structure of the firm. Similar capital structure dynamics can be explained by two forms of equity market timing. One assumes economic mediators to be balanced. Firms are presumed to issue equity immediately when positive information is release thus this eliminates the information asymmetry problem between shareholders and management as well as external investors. Agency cost is a very important factor to consider while making decisions about capital structure especially during this era of insufficient capital availability. This is very important for management, employees, creditors and shareholders. During decisions about capital structure, agency cost comes up through a number of ways; through free cash flows, through property replacements and also through borrowing as well as debt management.

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