

Relationship between Capital Structure and Firm's Performance: Theoretical Review

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Abstract

Advocates of optimal capital structure argue that judicious combination of debt and equity maximizes the value of a firm. There are dissenting views among scholars on what constitutes optimal capital mix and its effects on a firm's financial performance. This paper attempts a theoretical review of the relationship between capital structure and firm's performance. As the title suggests, we try to locate, identify and analyse comments, suggestions, conclusions and recommendations by other researchers and scholars alike on the contentious issue of capital structure and maximization of a firm's performance in the face of systematic risk.

Keywords: Determinants, firm's performance, Capital structure, pecking order

1. Introduction

The importance of capital to a business firm cannot be over emphasized. It is the foundation upon which the business operates. Capital absorbs costs and losses; multiplies fixed assets; and in all, enhances growth through mergers, takeovers and acquisitions (Atseye, 2013). In some countries according to Atseye (2013), governments often give financial assistance to business firms to enable them to kick-start and sustain their operations and overcome some teething problems such as assistance takes pre-eminence during economic downturn.

Increasingly, business, people are seeking to manage their businesses in a strategic manner. The strategic model of the firm according to Prasad *et al* (1997) argues that improved firm performance occurs when the firms' managers select goals and all of the activities of the firm are directed towards meeting those goals. Therefore, the financial strategy of the firm should be consistent with the firm's strategic objectives. Kochar (1997), asserted that the nature of the firm's assets predicts efficient ways of organizing transactions. Varying characteristics of assets imply different levels of optimal capital mix of debt and equity. If transactions with suppliers of finance are not organized as per these predictions, the ability of firms to obtain a competitive advantage over their rivals maybe impaired (Hennart, 1994). The implication is that capacities in managing financial policies are important if a firm is to realize gains for its specialized resources. Poor capital structure decisions lead to a possible reduction in the value derived from strategic assets (Kochar, 1997).

This paper attempts a theoretical review of the relationship between capital structure and firms' financial performance. The relationship between capital structure and financial performance is one that has received considerable attention in the theory of finance. The issue in contention according to Baral (2004) revolves around optimal capital mix. There are two schools of thought regarding optimal mix of debt and equity. One of the schools of thought popularly known as the traditional theory advocates for optimal capital structure, but the other opposes it. The former school believes that judicious combination of debt and equity financing can maximize the value of a firm. According to this school, capital structure decision is relevant. The later school of thought attributed to the path breaking article of Modigliani and Miller (1958) maintains that financing decision of debt and equity does not affect a firm's market value i.e. any combination of debt and equity capital does not have influence on the value of a firm, other exogenous factors held constant. They argue further that since the value of a firm depends on the underlined profitability and investment risk. That is, under the perfect capital market, assumption of no taxes, bankruptcy costs, cost of enforcing debt contracts or issuing securities and hitch-free capital markets, a firm's value is independent of the capital structure. This theory is often referred to as irrelevant theory, hence Modigliani-Miller proposition 1(MM1). Gupta, Srivastava and Sharma (2010) pointed out that the impact of capital structure on firms' financial performance has continued to keep researchers pondering. Thus, capital structure is directly related with the financing decision of the company. Primarily, it consists of the debt and equity used to finance the firm.

Based on the foregoing, the paper will be discussed on the following sub-headings:

- i. Conceptual definition of capital structure
- ii. The determinants of capital structure
- iii. Theories of capital structure
- iv. The relationship between capital structure and financial performance.
- v. Conclusion

Conceptual Definition of Capital Structure

Capture structure may be defined as the combination of debt and equity to finance a firm's operations. Capital structure includes mixture of debt and equity financing (Chou and Lee, 2010, Hall et al, 2004, Barral and Booth et al, 2001). According to Pandey (2000) capital structure refers to the mix of long-term sources of funds, such as debenture long-term debt, preference share capital and equity share capital including reserve and surpluses. In the words of Abor(2008) capital structure is defined as the specific mix of debt and equity a firm uses to finance its operations. A company's combination of debt and equity issues to relieve potential pressures on its long-term financing (Tekker, et al, 2009). Yet, the mixture of a variety of long-term sources of funds and equity shares including reserves and surpluses of an enterprise is called capital structure (Pratheepkanth, 2011).

From the above, discussion, two financing options are open to financial managers-debt and equity. Thus, the financial manager can increase shareholder claim or increase creditor's claim on the assets of the firm. Shareholders' claim increases when shares are issued for public subscription while creditors' claim increases when the company borrows on a short-term or long-term basis. Therefore, the various means of financing company operations represent what is known as financial structure. The financial structure of a firm is shown on the balance sheet as combination of liabilities and equity.

Similarly, the financial manager can finance the assets of the business by debt or equity. The use of both debt and equity as sources of funds to a business is termed capital structure. It is also known as debt-equity mix.

2. The Determinants of Capital Structure

To understand how companies finance their operations, it is necessary to examine the determinants of their financing or capital structure decisions. A company's financing decisions according to Pratheepkanth (2011) involve a wide range of policy issues. At the private, they have implications for capital market development, interest rates and security price determination, and regulation. At the public, such decisions affect capital structure, corporate governance and company development (Green, Murinde and Suppatitjarat, 2002).

In the same vein, Adeshola (2009) explained that the determining factors affecting the choice of the capital structure of firms can be broken down into four categories, according to their purpose towards;

- a. Improving the conflicts between the various stakeholders with claim upon the firm resources, machines, managers (the agency approach).
- b. Conveying private information to the capital markets or mitigating effects of adverse selection (the asymmetric information approach).
- c. Influencing the nature of products or competition in the product/input markets and
- d. Influencing the results of disputes over corporate control (Harris and Raviv, 1991).

However, the capital structure of a firm is determined by internal and external factors. The external factors are the macroeconomic variables which include tax policy of government, inflation rate and capital market conditions. The characteristics of an individual firm, growth rate, profitability, debt servicing capacity and operating leverage according to Baral (2004), are determinants of capital structure. Teker, *et al*, (2009) identified the determinants of capital structure of firms to include tangibility, size, growth opportunities, profitability and non-debt tax shields. The determination of capital structure in practice according to Pandey (2000) involves additional considerations in addition to the concerns about EPS-earnings per share; value and cash flow attitude of managers with regards to financing decisions are quite often influenced by their desire, not to lose control, to maintain operating flexibility and to have convenient and cheap means of raising funds. He argued that the most important considerations are: concern for dilution of control; desire to maintain operating flexibility; ease of marketing capital inexpensively, capacity for economies of scale; and agency costs. Owolabi and Inyang (2012) identified the determinants of capital structure of Nigerian firms as corruption, political instability and nature of financial market.

Abor (2008) in his study of the determinants of the capital structure of Ghanaian firms identified the following factors to be responsible for leverage decisions among Ghanaian firms (both quoted and unquoted firms): age of the firm, size of the firm, asset structure, profitability, growth opportunities, dividends anticipated, risk, tax benefit and managerial ownership. These factors influence both long-term and short-term leverage ratios. In a pooled regression analysis Wolfgang and Roger (2003) identified tangibility, size, growth, profitability, volatility, non-debt tax shield and uniqueness as the major determinants of capital structure.

3. Theories of Capital Structure

This paper looks at these theories associated with capital structure:

- i. The Modigliani-Miller Theory
- ii. Static Tradeoff Theory
- iii. Pecking Order Theory

The Modigliani Miller Hypotheses

The underlying rationale for the Modigliani-Miller theory is that the value of the firm is determined solely by the left hand side of the balance sheet which reflects the company's investments policy (Drobez and Fix, 2003). The theory suggests that the value of the firm tends to be independent of the debt balance of the company and instead, it is mainly affected by the presence of a number of project investments with positive net present value.

Modigliani-Miller assumes that investors have the same financial information about a firm with that of the managers, which can be referred to as systematic information but in practice, it is more convenient to assume that managers are likely to have insider information which is simply called asymmetric information (Tekker, et al, 2009). Myers and Majluf (1984) confirmed that managers of firms have superior information about the actual value of the firms.

In their path-breaking paper in 1958, Nobel Laureates Merton Miller and Franco Modigliani provided the formal proof of their now famous M & M irrelevance propositions. Thus, the MM theory states that, based on the assumption of no brokerage, tax and bankruptcy costs, investors can borrow at the same rates as corporations and they would tend to have the same information as management about the firm's future investment opportunities. There are two propositions.

MMI or Proposition I: According to Modigliani and Miller, quoting Pandey (2000), the firm's market value is not affected by capital structure: that is, any combination of debt and equity is as good as any other. In M-M's world of perfect capital market, because of borrowing and lending rates for all investors and no taxes, investors can borrow their own.

MMII or Proposition II: Here Modigliani and Miller accept that borrowing increases shareholders' return. They show that increased risk exactly offsets the increased return, thus leaving the position of shareholders unchanged.

The Static Trade-Off Theory

This theory holds that a firm's capital composition of debt and equity is determined by taxes and costs of financial distress. Based on this Theory, it is deductible interest payment has benefits since the tax deductible is therefore preferred to equity financing.

The static theory trade-off theory of capital structure predicts that firms will choose their mix of debt and equity financing to balance the costs and benefits of debt. A point or range is reached beyond which debt becomes more expensive because of the increased risk (financial distress) of excessive debt to creditors as well as to shareholders. When the degree of leverage increases, the risk of creditors increases and they demand a higher interest rate and do not grant loan to the company at all, once its debt has reached a particular level. Further the excessive amount of debt makes the shareholders' position very risky. This has the effect of increasing the cost of equity. Thus, up to a point, the overall cost of capital decreases with debt, but beyond that point the cost of capital would start increasing and therefore it would not be advantageous to employ debt further, so there is a combination of debt and equity which minimizes the firm's average cost of capital and maximizes the market value per share. The trade-off between cost of capital and earnings per share (EPS) sets the maximum limit to the use of debt.

Pecking Order Theory

The major prediction of the model is that firms will not have a target optimal capital structure, but will instead follow a pecking order of incremental financing choices that places internally generated funds at the top of the order, followed by debt issues, and finally only when the firm reached its "debt capacity" new equity financing. Myers and Majluf (1984) noted that this theory is based upon costs derived from asymmetric information between managers and the market and the idea that trade-off theory costs and benefits to debt financing are of issuing new securities. The cost of equity includes the cost of new issue of shares and the cost of retained earnings. The cost of debt is cheaper than the cost of both these sources of equity funds. Considering the cost of new issue and retained earnings, the latter is cheaper because personal taxes have to be paid by shareholders on distributed earnings while no taxes are paid on retained earnings as also no flotation costs are incurred when the earnings are retained. As a result, between the two sources of equity funds, retained earnings are preferred. It has been found in practice that firms prefer internal financing. If the internal funds are not sufficient to meet the investment outlays, firms go for external finance, issuing the safest security first.

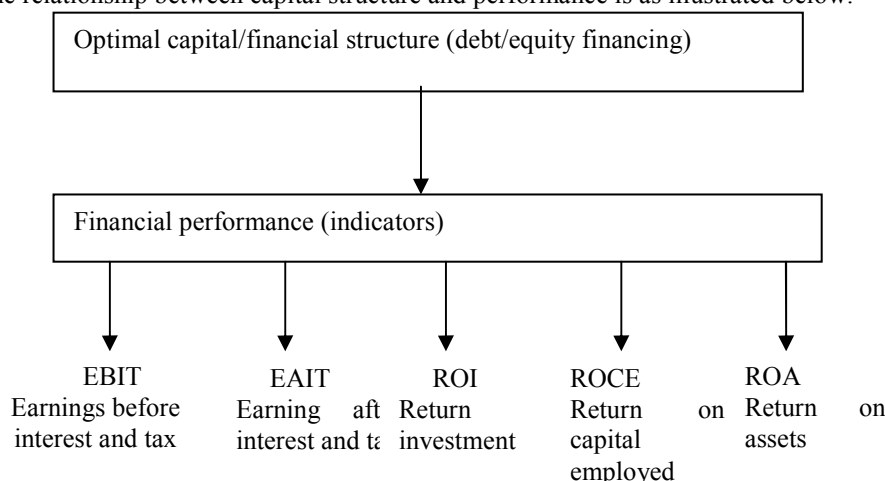
The Relationship between Capital Structure and Financial Performance

Modigliani and Miller (1958) claim that under perfect market conditions, a firm's value depends on its operating profitability rather than its capital structure. In 1963, Modigliani and Miller (1963) fix the previous paper; argue that, when there are corporate taxes then interest payments are tax deductible, 100% debt financing is optimal. This means that the firm's value increases as debt increases.

Studies showed contradictory results about the relationship between increased use of debt in capital structure and firm's performance. Some studies (Champion, 1999; Ghosh *et al*, 2000; Hadlock and James, 2002) showed positive relationship and some (Simerly and Li, 2000, Booth *et al*, 2001, Ibrahim, 2009) showed negative or weak/no relationship between firm's performance and leverage level. In a study of listed firms in Ghana, Abor (2005) found that short-term and total debt are positively related with firm's ROE, whereas long-

term debt is negatively related with firms. While examining the relationship between capital structure and performance of Jordan firms, Seitun and Tian (2007) found that debt level is negatively related with performance (i.e. ROA and ROE) and Abor (2007) on small and medium –sized enterprises in Ghana and South Africa showed that long –term and total debt level is negatively related with performance. As study by Ibrahim El-Sayed Ebaid,(2009) based on a sample of non-financial Egyptian listed firms from 1997 to 2005 reveals that capital structure choice decision, in general terms, has a weak-to no impact on firm’s performance.

Results of some studies (Myers, 2001; Eldomiaty, 2007) show that capital structure is not the only way to explain financial decisions. Probably this explains the contradictory results of the studies that empirically tested the predictions of relationship between leverage and firm’s performance. As explained by Jermias (2008), only the direct effect of financial leverage. Performance is examined by prior studies however leverage-performance relationship may be affected by some other factors like competitive intensity and business strategy. The relationship between capital structure and performance is as illustrated below:



Conclusion

Financing decisions are taken by financial managers based on the level of development of domestic financial markets. In developed countries financial markets are complete and almost perfect in their operations. They are characterized by strict regulations by the governments, advanced debt instruments such as debenture and mortgage bonds, long-term debts and other fixed-income securities. On the other hand, financial markets in developing countries lack the capacity to meet the financial obligations of their business firms. Here, firm rely heavily on commercial bank loans and lease financing as sources of debt financing. Judicious use of debt and equity enhances the value of the firm. The view expressed in this paper is in agreement with the traditional theory of capital structure. Firms can borrow when profit are high, taking advantage of tax shield. Long term debts should be utilized in the financing of long term projects. And short term debts should be employed in financing fast maturing financial obligation. Again, financial managers should choose policies relating to the increasing stock holders’ wealth. Therefore, judicious use of debt and equity will enhance, the financial performance hence the value of the firm.

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