



A study on the macro economic environment on the capital structure of Business firms

Dr. Pushpa B.

Assistant Professor of Economics,

Government First Grade College, Nelamangala. Bengaluru Rural.

Abstract:

For any business firm 'financing decision' is the most crucial decision, which helps the firm to achieve the objective of maximization of the shareholder's wealth. The assets of a company can be financed either by increasing the owner's claims or the creditors claim. The owner's claims increases when the firm raises funds either by issuing equity shares or by retaining the earnings. The creditors claim increases when the firms resort to borrowings. Given the objective of the firm to maximize the value of the equity shares, the firm should select a financing mix or capital structure or financial leverage, which will help in achieving the objective of maximizing the value of equity shares. As a consequence, the capital structure should be examined from the viewpoint of its impact on the value of the firm. It can be legitimately expected that if the capital structure decision affects the total value of the firm, a firm should select such a financing mix that will maximize the shareholders' wealth. Such a capital structure is referred to as 'the optimum capital structure'. The optimum capital structure may be defined as the capital structure or combination of debt and equity that leads to the maximum value of the firm. The term capital structure is used to represent the proportionate relationship between debt and equity. Equity consists of the followings: Equity share capital + Share premium + Free reserve + Surplus profit + Discretionary provision for contingency + Development rebate reserve. Debt consists of all borrowings from the government, statutory financial corporations and other agencies + Term loans from banks, financial institutions etc + debentures + All deferred liability payments. Capital structure is an aspect of corporate financial management, which does have practical relevance to firms and their managers. This significant managerial decision influences the shareholder's return and risk. Consequently the market value of the share may be affected by the capital structure decision. This paper analyses the impact of macro economic environment on the capital structure of business firms in the Indian context.

Key words: Capital, Equity shares, Debt, Creditors, Managerial decision, Financial institution.

Introduction:

A business firm has to plan its capital structure initially at the time of its promotion. Subsequently, whenever funds have to be raised to finance investments a capital structure decision is involved. A demand for raising funds generates a new capital structure since a decision has to be made as to the quantity and forms of financing. This decision will involve an analysis of the existing capital structure and factors, which will govern the decision at present. The company's policy to retain or distribute earnings affects the owners' claims. Shareholder's equity position is strengthened by retention of earnings. Thus, the dividend decision has bearing on the capital structure of the company.

The new financing decision of the company may affect its debt equity mix. The debt equity mix has implications for shareholder's earnings and risks, which in turn will affect the cost of capital and the market value of the firm. As the objective of the firm should be directed towards the maximization of the value of the firm, the capital structure or leverage decision should be examined from the point of its impact on the value of the firm. As capital structure or financing decision, can affect the value of the firm so it would like to have a capital structure, which maximizes the market value of the firm. There exist conflicting theories on the relationship between capital structure and the value of the firm. The value of the firm depends upon its expected earnings stream and the rate used to discount this stream. The rate used to discount earnings stream is the firm's required rate of return or the cost of capital. Thus, the capital structure decision can affect the value of the firm either by changing the expected earnings or cost of capital or both. Leverage cannot change the total expected earnings of the firm but it can affect the residue earnings of the shareholders.

The effect of leverage on the cost of capital is not very clear. Conflicting opinions have been expressed on this issue. In fact this issue is one of the most contentious areas in the theory of finance, perhaps more theoretical and empirical work has been done on this subject than on any other. If leverage affects the cost of capital and the value of the firm, an optimum capital structure would be obtained at that combination of debt and equity that maximizes the total value of the firm or minimizes the weighted average cost of capital. All does not accept the existence of an optimum capital structure. There exist two extreme views and a middle position.

David Durand identified the two extreme views, namely (a) The net income approach and (b) Net operating approach.

NET INCOME (NI) APPROACH: Under this approach, the cost of debt and the cost of equity are assumed to be independent to the capital structure. The weighted average cost of capital declines and the total value of the firm rises with increased use of leverage.

NET OPERATING INCOME (NOI) APPROACH: Under this approach, the cost of equity is assumed to increase linearly with leverage. As a result, the weighted average cost of capital remains constant and the total value of the firms also remains constant as leverage is changed.

Beside the above mentioned approaches, there is another approach i.e. the traditional approach.

According to this approach, the cost of capital declines and the value of the firm increases with leverage up to a prudent debt level and after reaching the optimum point, leverage causes the cost of capital to increase and the value to decline. Thus, if net income approach is valid, leverage is a significant variable and financing decisions have an important effect on the value of the firm.

On the other hand if the net operating income approach is correct, then the financing decision should not be of great concern to the financing manager, as it does not matter in the valuation of the firm. Modigliani and Miller, support the net operating income approach by providing logically consistent behavioral justifications in its favor. They deny the existence of an optimum capital structure. The Modigliani and Miller position changes when corporate taxes are assumed. The interest tax shield resulting from the use of the debt adds to the value of the firm.

DETERMINANTS OF CAPITAL STRUCTURE

Indian business sector has been experiencing a series of significant economic changes since 1991 when the Government of India opted for liberalization of the economy. With liberalization leading to globalization, the companies are expanding their international dimensions, increasing export sales and diversifying operation at a rapid pace. Those changes and developments insisted the competitive companies to change their capital structure or to deviate from the traditional theoretical models. While framing the capital structure many factors which were not at all considered by any company previously are now being taken into account. To plan their capital structure, Indian companies are not only looking at the practice of companies operating in developed countries, but they are also trying to find out their own shortcomings and taking different measures to overcome those hurdles. In India previously only micro economic factors were considered while determining the capital structure, but in present days the macro economic factors appear to have started to get due importance in capital structure determination. The objective of the study is to determine 'the impact of the macro economic environment factors upon the capital structure of the Indian companies'. In order to examine the influence of macro economic factors on capital structure, the following factors of macro economy has been considered and each of these factors influence on capital structure has been analyzed. Some of the influencing factors are:

- (a) Existing rate of Inflation
- (b) Present status of stock market.
- (c) Current market rate of interest
- (d) Economic growth status.

Review of Literature:

Some studies have been conducted to ascertain the determinants of financial leverage under the Indian context.

Bhat's (2006) paper concerned the impact of size, growth, business risk, dividend policy, profitability, debt service capacity and the degree of operating leverage on the leverage of the firm. The study used the multiple regression models to find out the contribution of each characteristic. Business risk, profitability, dividend payout and debt service capacity were found to be significant determinants of the leverage ratio.

Pandey's (2010) study about the corporate manager's attitude towards use of borrowings in India revealed that the practicing managers generally preferred to borrow instead of using other sources of funds because of low cost of debt due to the interest tax deductibility and the complicated procedures for raising the equity capital. In the light of this finding, Pandey (2011) conducted another empirical study examining the industrial patterns, trend and volatilities of leverage and the impact of size, profitability and growth on leverage. It was found that about 72 to 80 percent of the assets of sample companies were financed by external debt, including current liabilities. Companies employed trade credit as much as bank borrowings. The level of leverage for all industries showed a noticeable increase after 1993-94. The study also indicated that classifying leverage percentages by the type of industry does not produce any patterns, which may be regarded as systematic and significant. The trends and volatilities associated with the leverage percentages also did not give any support to the belief that the type of industry had an impact on the degree of leverage. It also revealed that there was some evidence of the tendency of large size companies to concentrate in the high levels of leverage. But it is difficult to say conclusively that size has an impact on the degree of the leverage since a large number of small firms were also found employing high levels of debt. The study also did not show a definite structural relationship between the degree of leverage on the one hand and profitability and growth on the other hand. Although overtime, profitability and growth have improved and so has the degree of leverage. The majority of the profitability and growth groups of companies were concentrated within narrow bands of leverage.

Chakraborty (2017) has also conducted a study to investigate debt equity ratio in the private corporate sector in India. He tested the relation of debt equity ratio with age, total assets, retained earnings, profitability and capital intensity. He found that age, retained earnings and profitability were negatively correlated while total assets and capital intensity was positively related to debt equity ratio. He also provided a glimpse of the regional pattern of debt equity ratios in different industrial centers in India. He also attempted a prediction equation for debt equity ratio for each industry. Chakraborty also used a very simple methodology for calculating the cost of capital. The average cost of capital for all the consumer goods industry firms taken together was the highest while; it was lowest for the intermediate goods firms. One of the reasons for this was attributed to the relatively low amount of debt used in the former industry than the latter. The effect of stock market performance has, however, not been considered. Authors also generally do not explore the effect of the prevailing long term market rate of interest upon the capital structure decision. Finally, the influence of macro economic activity, measured by the growth of GDP and the growth of aggregate investments, appears to be

almost entirely under researched. One question may rise in mind that is there any effect of macro economic environment upon the capital structure at all? In response it might be argued that as the finance manager makes his decision in the monetary and real market framework within which firms operates, so obviously macroeconomic environment is expected to exert a significant influence upon all of the financial and investment decisions of the finance manager. So, the inadequacy of the literature regarding the influence of the macro economic environment upon the corporate capital structure thus demands a structured theoretical and empirical analysis in order to identify the role of macro economy in corporate capital structure determination in Indian context.

Objectives of the study:

- To study the relationship between some important macro economic variables on capital structure of the business firms.
- To understand the influence of inflation rate on the capital structure of the firm.
- To identify the different sources of finance for a business firm.
- To explore the factors considered on capital structure designing of a business firm.

Research methodology:

Type of research: It is an exploratory research in nature.

Data Collection: Both primary data and secondary data has been collected for the purpose of the study. Primary data has been collected through questionnaire directly from the management of the sample companies. Secondary data has been collected through various books dealing with financial management, articles and research papers published in various national and international journals, websites etc.,

Analysis and Inference:

If inflation exceeds that expected rate then firms will gain at the expense of investors whereas if inflation is less than expected rate then investors will gain at the expense of the firms. Intuitively, if inflation exceeds expectations then the firm gains as it is essentially repaying cheaper rupee to investors whilst not compensating them fully through adequate interest rate increases. The price indices of all assets and liabilities except those of money assets and liabilities go up during periods of continuous inflation. Although the subject of giving effects inflation induced changes is engaging worldwide attention, definitive conclusions have yet to emerge for universal application. Yet, in this general climate of uncertainty a certain measure of agreement with respect to depreciation of fixed assets at higher rates than historical figures has been reached. This is where the impact of inflation is felt with its greatest long term implication. For stocks too the need for suitable adjustments to profit has been recognized a given effect to in many cases. However, for monetary assets and liabilities the effects of inflation have only just began to be given an attention.

The financial market conditions, which encompass the performance of equity markets and debt interest rates used to influence the corporate capital structure decision of the firms. The level of debt issuance is related to the performance of bond markets such that finance managers are more likely to issue debt when interest rates are low or are expected to rise. Another important finding is that the debt equity ratio is decreasing for almost all of the company excepting the few during the research period. From the annual reports of the companies, it can be seen that most of the companies are financing a major portion of their capital investment out of equity resources. The internally generated funds are ample and so most of the companies under most of the industries never had to think about debt. It is clear that not only these four factors but other macro factors (such as corporate tax rate, global economic trends etc.) and with it the micro factors are also playing an important role in determining an optimal capital structure. The debt equity ratio is decreasing for most of the company during the ninth plan period. In case of few companies in certain years the ratio is high due to certain company specific factors or because of lack of flexibility. But most of the companies show the decreasing trend in respect of debt equity ratio.

Conclusion:

The study on the impact of macro economic environment upon the capital structure of Indian companies will encourage the management of the company to take into account the macro economic factors while designing their capital structure. The factors, which were not at all considered by them, can be taken into consideration and they will be able to take proper decision regarding the debt equity mix, which will help them to compete in a profitable manner in this competitive business world. When the cost of financing would be low then naturally it will add to equity shareholders value. In turn this will have a favorable effect on the growth of stock market and as well as on GDP. A growth in GDP is always a good indicator of a better economy and is desirable for the betterment of any economy. The overall contribution of the above mentioned macro economic factors on capital structure is not ignorable and in future this study will help the companies to make more strong, acceptable and profitable capital structure decision.

References:

- Barclay, Michael J and Clifford W. Smith, Jr. (2003), "The Capital Structure Puzzle, another Look at the Evidence", Journal of Applied Corporate Finance, Vol12, No1, pp 8-20
- Business India, April 17-20, 2016 Published As "The Reason is Finance"
- Corbett and Jenkinson. (2017), "Financing Pattern in Developed Countries"
- Development of Indian Debt Markets. Source: ICFAI Reader, July 2018
- Engle, R.F. and Granger, C. W. J. (2017), "Co-Integration and Error Correction: Representation, Estimation and Testing", Econometrica, Vol. 55, pp 251-276

Holland, D. and Myers, S. (2018), “Trends in Corporate Profitability and Capital Cost”, Working Paper [MIT, Cambridge, MA].

Kim, M.K. and Wu, C.(2018), “Effects of Inflation on Capital Structure”, The Financial Review, Vol. 23, pp 183-200

Malabika. (2016), “An Innovation in Debt Market”, The Chartered Accountant, pp 1007-1010.

Pattnik, lia and Shah Ajay. (2016), “The Interplay between Capital Flows and the Domestic Indian Financial System”, Indian Express.

Ross S. (2015), “The Determination of Financial Structure: The Incentive Signaling Approach”, Bell Journal of Economics, pp 23-40.

Samuel, Cherian. (2016), “The Stock Market as a Source of Finance: A Comparison of U.S. and Indian Firms”, World Bank Policy Research Working Paper no. 1592.

