

CAPITAL STRUCTURE THEORIES

INTRODUCTION

The plan that a company incorporates for its financing is referred to as the capital structure of the company. In other words, it's the finances that the company uses in a long term. As the goal of any company or firm is towards increasing its value in market, the capital structure of the firm should be planned or decided in such a way that it adds to the market value of the firm. A company's capital structure can be termed as advantageous if the funds are used in such a manner that it not only increases the firm's market value, but also reduces the company's cost of capital.

Capital Structure

The capital structure is how a firm finances its overall operations and growth by using different sources of funds. Debt comes in the form of bond issues or long-term notes payable, while equity is classified as common stock, preferred stock or retained earnings. Short-term debt such as working capital requirements is also considered to be part of the capital structure.

A company's proportion of short and long-term debt is considered when analyzing capital structure. When people refer to capital structure they are most likely referring to a firm's debt-to-equity ratio, which provides insight into how risky a company is. Usually a company more heavily financed by debt poses greater risk, as this firm is relatively highly levered.

Factors Affecting Capital Structure

A company uses fixed fund sources viz debentures, term loans etc. along with equity capital. This is known as financial leverage. The firms generally make use of equity to raise debts. The number of debt units a company holds per equity unit is called the company's debt equity ratio. It is calculated by a formula

$$\text{Debt Equity Ratio} = \text{Debt} / \text{Equity}$$

Ideally, the small scale industries must have debt equity ratio of 3:1 while medium and large scale industries must have debt equity ratio of 2:1. A ratio of 3:1 indicates that for every 1 equity unit, the company can raise 3 units of debt. Higher the leverage, higher is the company's commitments in terms of interests and loan repayments. This in turn affects the returns of the equity shareholders. Some of the other factors that must be considered while deciding the firm's capital structure are the firm's size, its cost of capital, the way the cash flows of the company are projected and other costs incurred.

Features of an Optimal Capital Structure

An efficient capital structure should encompass the following features:

- The capital structure should be such that the dilution of control should be minimal.

- The use of leverage should be high and at minimum cost leading to company's prosperity.
- The capital structure of the company should enable it to raise need based funds as well as stop the debts from a particular source if they are too expensive i.e. the capital structure should be flexible enough to sustain in varying conditions.

The use of debts should be minimal as it hampers the company's solvency since the interest rates are very high.

Capital Structure Theories

The two essential components of capital structure of a company are debt and equity. Hence, the proportion of debt and equity is very important in capital structure. In other words, it is very essential to decide the level of financial leverage to be employed in any company. To decide this, it becomes necessary to understand the relationship that exists between firms' cost of capital and its financial leverage. Some of the assumptions that are made to understand this relationship are

- ✓ It is not expected for the net operating income to increase or decrease over the period of time.
- ✓ There is no income tax applicable, neither corporate, nor personal.
- ✓ A firm can alter its capital structure at any point of time without even bearing the transaction costs.
- ✓ The company can pay its earnings in terms of dividends i.e. the company can pay 100% dividends.

There are two extreme views on whether there exist any such things as optimal capital structure.

The Net Income Approach (NI) assumes that the cost of debt and that of equity are independent to capital structure. With high use of leverage, the weighted average cost of capital reduces, increasing the value of the firm in totality.

In Net Operating Income (NOI) approach, it is assumed that the cost of equity increases linearly with leverage. As the leverage changes, the value of the company and the weighted average cost of capital remains constant.

In Traditional approach, the cost of capital decreases, there by increasing the value of the firm. This happens till a particular threshold is reached, after which the reverse happens i.e. the cost of capital increases there by causing decline in the value of the firm.

NET INCOME (NI) APPROACH

Net income approach suggested by the Durand. According to this approach, the capital structure decision is relevant to the valuation of the firm. In other words, a change in the capital structure leads to a corresponding change in the overall cost of capital as well as the total value of the firm. According to this approach, use more debt finance to reduce the overall cost of capital and increase the value of firm.

Net income approach is based on the following three important assumptions:

- There are no corporate taxes.
- The cost debt is less than the cost of equity.
- The use of debt does not change the risk perception of the investor.

Where $V = S+B$

V = Value of firm

S = Market value of equity

B = Market value of debt
Market value of the equity can be ascertained by the following formula:

$$S = \frac{NI}{K_e}$$

NI = Earnings available to equity shareholder
capitalization rate

K_e = Cost of equity/equity

TRADITIONAL APPROACH

It is the mix of Net Income approach and Net Operating Income approach. Hence, it is also called as intermediate approach. According to the traditional approach, mix of debt and equity capital can increase the value of the firm by reducing overall cost of capital up to certain level of debt. Traditional approach states that the K_o decreases only within the responsible limit of financial leverage and when reaching the minimum level, it starts increasing with financial leverage.

Assumptions Capital structure theories are based on certain assumption to analysis in a single and convenient manner:

- There are only two sources of funds used by a firm; debt and shares.
- The firm pays 100% of its earning as dividend.
- The total assets are given and do not change.
- The total finance remains constant.
- The operating profits (EBIT) are not expected to grow.

- The business risk remains constant.
- The firm has a perpetual life.
- The investors behave rationally.

MODIGLIANI AND MILLER APPROACH

Modigliani and Miller approach states that the financing decision of a firm does not affect the market value of a firm in a perfect capital market. In other words MM approach maintains that the average cost of capital does not change with change in the debt weighted equity mix or capital structures of the firm.

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- There is a perfect capital market.
- There are no retained earnings.
- There are no corporate taxes.
- The investors act rationally.
- The dividend payout ratio is 100%.
- The business consists of the same level of business risk.

Value of the firm can be calculated with the help of the following formula: $V = \frac{EBIT}{K} (1-t)$

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