

Net Income Approach:

According to this approach, a firm can minimize the weighted average cost of capital and increase the value of the firm as well as market price of equity shares by using debt financing to the maximum possible extent. The theory propounds that a company can increase its value and decrease the overall cost of capital by increasing the proportion of debt in its capital structure.

This approach is based upon the following assumptions:

- The cost of debt is less than the cost of equity.
- There are no taxes.
- The risk perception of investors is not changed by the use of debt.

The total market value of a firm on the basis of Net Income Approach can be ascertained as below:

$$V = S + D$$

Where, V = Total market value of a firm

$$S = \text{Market value of equity shares}$$

$$= \text{Earnings Available to Equity Shareholders (NI)} / \text{Equity Capitalization Rate}$$

D = Market value of debt, and, Overall Cost of Capital or Weighted Average Cost of Capital can be calculated as:

$$K_0 = \text{EBIT} / v$$

Net Operating Income Approach:

This theory as suggested by Durand is another extreme of the effect of leverage on the value of the firm. It is diametrically opposite to the net income approach. According to this approach, change in the capital structure of a company does not affect the market value of the firm and the overall cost of capital remains constant irrespective of the method of financing.

It implies that the overall cost of capital remains the same whether the debt-equity mix is 50: 50 or 20:80 or 0:100. Thus, there is nothing as an optimal capital structure and every capital structure is the optimum capital structure.

This theory presumes that:

- The market capitalizes the value of the firm as a whole;
- The business risk remains constant at every level of debt equity mix;

- There are no corporate taxes.

The value of a firm on the basis of Net Operating Income Approach can be determined as below:

$$V = \text{EBIT} / K_0$$

Where, V = Value of a firm

EBIT = Net operating income or Earnings before interest and tax

k_0 = Overall cost of capital

The market value of equity, according to this approach is the residual value which is determined by deducting the market value of debentures from the total market value of the firm.

$$S = V - D$$

Where, S = Market value of equity shares

V = Total market value of a firm

D = Market value of debt

The cost of equity or equity capitalization rate can be calculated as below:

$$\begin{aligned} \text{Cost of Equity or Equity Capitalisation Rate } (K_e) &= \frac{\text{Earnings after Interest and Before Tax}}{\text{Market Value of Firm} - \text{Market Value Debt}} \\ &= \text{EBIT} - I / V - D \end{aligned}$$

Question: Discuss the Modigliani and Miller Approach with assumptions.

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.

Modigliani and Miller approach is based on the following important assumptions:

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