Types of Leverage

Leverage is of three types:

- (i) Operating leverage
- (ii) Financial leverage and
- (iii) Combined leverage

1. Operating Leverage

Operating leverage refers to the use of fixed operating costs such as depreciation, insurance of assets, repairs and maintenance, property taxes etc. in the operations of a firm. But it does not include interest on debt capital. Higher the proportion of fixed operating cost as compared to variable cost, higher is the operating leverage, and vice versa.

Operating leverage may be defined as the "firm's ability to use fixed operating cost to magnify effects of changes in sales on its earnings before interest and taxes."

In practice, a firm will have three types of cost viz:

- (i) Variable cost that tends to vary in direct proportion to the change in the volume of activity,
- (ii) Fixed costs which tend to remain fixed irrespective of variations in the volume of activity within a relevant range and during a defined period of time,
- (iii) Semi-variable or Semi-fixed costs which are partly fixed and partly variable. They can be segregated into variable and fixed elements and included in the respective group of costs.

Operating leverage is associated with operating risk or business risk. The higher the fixed operating costs, the higher the firm's operating leverage and its operating risk. Operating risk is the degree of uncertainty that the firm has faced in meeting its fixed operating cost where there is variability of EBIT.

It arises when there is volatility in earnings of a firm due to changes in demand, supply, economic environment, business conditions etc. The larger the magnitude of operating leverage, the larger is the volume of sales required to cover all fixed costs.

Importance of Operating Leverage

- 1. It gives an idea about the impact of changes in sales on the operating income of the firm.
- **2.** High degree of operating leverage magnifies the effect on EBIT for a small change in the sales volume.
- 3. High degree of operating leverage indicates increase in operating profit or EBIT.
- **4.** High operating leverage results from the existence of a higher amount of fixed costs in the total cost structure of a firm which makes the margin of safety low.
- **5.** High operating leverage indicates higher amount of sales required to reach break-even point.
- **6.** Higher fixed operating cost in the total cost structure of a firm promotes higher operating leverage and its operating risk.
- **7.** A lower operating leverage gives enough cushion to the firm by providing a high margin of safety against variation in sales.
- **8.** Proper analysis of operating leverage of a firm is useful to the finance manager.

2. Financial Leverage

Financial leverage is primarily concerned with the financial activities which involve raising of funds from the sources for which a firm has to bear fixed charges such as interest expenses, loan fees etc. These sources include long-term debt (i.e., debentures, bonds etc.) and preference share capital.

Long term debt capital carries a contractual fixed rate of interest and its payment is obligatory irrespective of the fact whether the firm earns a profit or not.

As debt providers have prior claim on income and assets of a firm over equity shareholders, their rate of interest is generally lower than the expected return in equity shareholders. Further, interest on debt capital is a tax deductible expense.

Favorable or positive financial leverage occurs when a firm earns more on the assets/ investment purchased with the funds, than the fixed cost of their use. Unfavorable or negative leverage occurs when the firm does not earn as much as the funds cost.

Financial leverage is associated with financial risk. Financial risk refers to risk of the firm not being able to cover its fixed financial costs due to variation in EBIT. With the increase in financial charges, the firm is also required to raise the level of EBIT necessary to meet financial charges. If the firm cannot cover these financial payments it can be technically forced into liquidation.

Importance of Financial Leverage:

The financial leverage shows the effect of changes in EBIT on the earnings per share. So it plays a vital role in financing decision of a firm with the objective of maximising the owner's wealth.

- 1. It helps the financial manager to design an optimum capital structure. The optimum capital structure implies that combination of debt and equity at which overall cost of capital is minimum and value of the firm is maximum.
- 2. It increases earning per share (EPS) as well as financial risk.
- **3.** A high financial leverage indicates existence of high financial fixed costs and high financial risk.
- **4.** It helps to bring balance between financial risk and return in the capital structure.
- 5. It shows the excess on return on investment over the fixed cost on the use of the funds.
- **6.** It is an important tool in the hands of the finance manager while determining the amount of debt in the capital structure of the firm.

3. Combined Leverage

Operating leverage shows the operating risk and is measured by the percentage change in EBIT due to percentage change in sales. The financial leverage shows the financial risk and is measured by the percentage change in EPS due to percentage change in EBIT.

Both operating and financial leverages are closely concerned with ascertaining the firm's ability to cover fixed costs or fixed rate of interest obligation, if we combine them, the result is total leverage and the risk associated with combined leverage is known as total risk. It measures the effect of a percentage change in sales on percentage change in EPS

Importance of combined leverage are-

- 1. It indicates the effect that changes in sales will have on EPS.
- 2. It shows the combined effect of operating leverage and financial leverage.
- **3.** A combination of high operating leverage and a high financial leverage is very risky situation because the combined effect of the two leverages is a multiple of these two leverages.
- **4.** A combination of high operating leverage and a low financial leverage indicates that the management should be careful as the high risk involved in the former is balanced by the later.
- **5.** A combination of low operating leverage and a high financial leverage gives a better situation for maximizing return and minimizing risk factor, because keeping the operating leverage at low rate full advantage of debt financing can be taken to maximize return. In this situation the firm reaches its BEP at a low level of sales with minimum business risk.
- **6.** A combination of low operating leverage and low financial leverage indicates that the firm losses profitable opportunities.