Leverage Analysis (Financial Management)

Dr. Nagesh Parashar
School of Studies in Commerce
Vikram University, Ujjain

Leverage Analysis

- The term ‘Leverage’ originates from the word ‘lever’ which is used to lift heavy objects. Leverage permits us to achieve certain things which are otherwise not possible. In Financial Management the term Leverage is used to explain the firm’s ability to use fixed cost assets or funds to increase the return to its investors/owners.

Leverage Analysis

- **Leverage** is an investment approach of using borrowed money to elevate the probable return of an investment. **Leverage** also indicates the amount of debt a firm uses to finance assets.

Characteristics of leverage

(a)Leverage is applied to the use of an asset or funds.

(b)Profits have a tendency to change at a faster rate than sales.

(c)There is risk return association which is found in the same direction.

(d) Higher the leverage, higher the risk and higher the expected returns.

Leverage Analysis

These fixed costs can be classified as:

1) Different types of operating expenses which are fixed in nature and

2) Different non-operating expenses like interest payments which are also fixed in nature.

From fixed operating expenses operating leverage can be determined and from fixed financial expenses financial leverage can be determined. The two leverages provide a measure of total leverages.

Main Types of Leverages

1) Operating Leverage

2) Financial Leverage.

3) Combined Leverage

Operating Leverage

- **Operating Leverage** belongs to fixed cost. Operating Leverage influences a firm's operating profit (EBIT), It shows the impact of changes in sales on operating income. It is calculated as follows :

  Contribution/EBIT

- It takes place when a change in sales produces a greater change in EBIT. A firm with comparatively high fixed costs uses much of its marginal contribution to cover fixed costs
- Definition: "If a high percentage of a firm's total costs are fixed costs, then the firm is said to have a high degree of operating leverage."

  -E F Brigham

Operating Leverage…

- It is a function of three factors :
- Fixed costs
- Contribution
- Volume of Sales

Specific Characteristics of Operating Leverage

- It influences assets side of Balance sheet
- It is related to composition of fixed assets
- It is related in ups and downs in business risk
- It influences capital structure and return on total assets.

Behaviour of Operating Leverage

- The behaviour of operating leverage is measured by the degree of operating leverage. It is the percentage change in the profits resulting from a percentage change in the sales. It may be put in the form of the following formula :

Degree of Operating Leverage=

Percentage change in EBIT/Percentage change in Sales

Applications of Operating Leverage

- (1) Operating leverage plays an important role in capital budgeting decisions. Actually this concept was originally developed for use in capital budgeting.

  (2) Long term profit planning can be done by observing at quantum of fixed cost investment and its possible effects.

  (3) A high degree of operating leverage enhances the risk of a firm. For deciding capital structure in favour of debt, the impact of further increase in risk will affect the capital structure decision.

Financial Leverage

It is based on the ratio of debt and preference shares together to equity shares. Financial Leverage affects earning after tax. It is calculated with the help of EBIT and EBT as :

EBIT/ EBT

- Financial Leverage refers to use of debt in capital structure. It is the use of fixed cost capital (debt) in the total capitalisation of the firm. Fixed cost capital includes loans, debentures and preference share capital.

Characteristics of Financial Leverage

- The following are the essentials of financial leverage :

(1) Financial Leverage is related to liabilities side of balance sheet

(2) Financial Leverage is related to capital structure

(3) Financial Leverage is related to financial risk

(4) Financial Leverage impacts earning after tax and earnings per share

(5) Financial Leverage may be favourable or unfavourable. Unfavourable leverage arises when the firm does not earn as much as the funds cost.

Behaviour of Financial Leverage

- The behaviour of financial leverage is calculated by the degree of financial leverage. :

Degree of Financial leverage=

Percentage change in EBT/Percentage change in EBIT

Alternatively, this can be calculated in terms of EPS.

Degree of Financial leverage=

Percentage change in EPS/Percentage change in EBT

Applications of Financial Leverage

- Financial leverage is helpful in

  (i) Capital Structure Planning

  (ii) Profit Planning

- Financial leverage helps the finance managers while framing the capital structure of the company. High financial leverage implies high fixed financial costs and high financial risk. Increase in fixed financial costs may push the company into liquidation.

Composite/Combined Leverage

- It is the multiplication of operating leverage and financial leverage. The joint effect of two leverages can be significant for the earnings available to shareholders.

  Collectively operating and financial leverage magnify the returns. There is joint effect of these leverages on income. Both the leverages are closely connected with the firm's capacity to meet its fixed costs . In case both the leverages are joined , the result obtained will show the effect of change in sales over change taxable profit.

Composite/Combined Leverage….

- Composite Leverage = Operating Leverage * Financial Leverage
- It may be expressed as Contribution/EBT

The degree of combined leverage is computed in the following manner :

Degree of Combined leverage=

Percentage change in EPS/Percentage change in Sales Volume

Thank You