

LEVERAGES (L)

When a firm employs ASSETS or SOURCE of FINANCE which entails a FIXED COST is called a leverage.

Types of L

Operating L (OL)

- when an ASSET is involved which entails FC

$$OL = \frac{\text{Contribution}}{\text{PBIT}} \quad \text{(Times)}$$

OL ↑ PBIT ↓ FC ↑
∴ high risk

OL ↓ PBIT ↑ FC ↓
∴ low risk

$$OL = \frac{\% \Delta \text{PBIT}}{\% \Delta \text{Sales}} \quad \text{(3)}$$

business risk

Finance L (FL)

- when source of fund entails FC

$$FL = \frac{\text{PBIT}}{\text{PBT}} \quad \text{(2)}$$

FL ↑ PBT ↓ int ↑
high risk

FL ↓ PBT ↑ int ↓
low risk

$$FL = \frac{\% \Delta \text{EPS}}{\% \Delta \text{PBIT}} \quad \text{(4)}$$

financial risk

COMBINED LEVERAGE (CL)

When both risks or leverages are combined it gives rise to CL. It measures total risk of co.

$$CL = 1 \times 2 = \frac{\text{Contribution}}{\text{PBT}} \quad \text{(Times)}$$

$$CL = 3 \times 4 = \frac{\% \Delta \text{EPS}}{\% \Delta \text{Sales}} \quad \text{(1) \cdot (2)}$$

OL → capacity to pay

FC → how much paid of interest cost.

General conclusions.

OL	FL	Remarks.
low	low	conservative, defensive company.
low	high	ideal combination
high	low	natural combination
high	high	Risky combination. (Jai Hai Hai)

networth = equity.

$$EPS = \frac{\text{PAT} - \text{pref div}}{\text{no. of shares}}$$

structure = capital structure (debt, equity, borrowings)

asset leverage = asset turnover

$$= \frac{\text{Sales}}{\text{asset}}$$

P.V

Sales

⊖ VC

P.V

Contribution

⊖ FC

PBIT

⊖ int

PBT

⊖ Tax

PAT

P.V × no. of units

- ① Always comment on highest L and lowest L then average.
- ② sales wipe out = 100%. (N/A)

Favorable Financial leverage.

- return generated > cost of capital on capital

ROI/ROR > debt cost → favorable FL

ROI/ROR < debt cost → unfavorable FL

$$\begin{aligned} \text{ROI/ROR} &= \frac{\text{PBIT}}{\text{equity} + \text{debt} + \text{pref}} \quad - \text{all} \\ &= \frac{\text{PAT} - \text{pref div}}{\text{equity}} \quad - \text{equity} \end{aligned}$$

PBT for financial leverage.

$$\text{Adjusted PBT} = \frac{\text{PBIT} - \text{int} - \text{pref div (before tax)}}{\text{OR}}$$

$$= \text{PBT} - \text{pref div (b4 tax)}$$

$$\text{Pref div (b4 tax)} = \frac{\text{pref div}}{100 - \text{TR}} \times 100.$$

$$\text{FL} = \frac{\text{Adj PBIT}}{\text{Adj PBT}}$$