

3. Share Valuation

- ① Working Capital = Current assets - Current liability
- ② Capital employed = Equity share Capital + Preference share Capital + long term debt

(or)

Fixed assets + Working Capital

- ③ Return on Capital employed (pre-tax) = $\frac{\text{EBIT}}{\text{Capital employed}} \times 100$
- ④ Return on Capital employed (post-tax) = $\frac{\text{EBIT} \times (1-T)}{\text{Capital employed}} \times 100$
- ⑤ Earning per Share = $\frac{\text{Profit after tax \& preference dividend}}{\text{No of Equity Share}}$
- ⑥ Dividend per Share = $\frac{\text{Total dividend}}{\text{No of Equity Share}}$
- ⑦ Dividend pay out ratio = $\frac{\text{Dividend per Share}}{\text{Earning per Share}} \times 100$
- ⑧ Dividend pay out ratio + Retention ratio = 100%.
- ⑨ Earning per Share (EPS)
- ↓
- Dividend per Share (DPS) Retained Earning per Share

$$(10) \text{ Book value per share} = \frac{\text{Equity}}{\text{No of Equity Shares}}$$

$$\text{Equity} = \text{Equity Share Capital} + \text{Reserve \& Surplus} - \text{Accumulated losses.}$$

$$(11) \text{ Return on Equity} = \frac{\text{Profit after tax \& Preference Dividend}}{\text{Equity}} \times 100$$

(12)

$$\frac{\text{Earning per share}}{\text{Book Value per share}} \times 100$$

$$(12) \text{ Growth rate} = \text{Retention ratio} \times \text{Return on Equity}$$

$$(13) \text{ Cost of debenture (Kd)}$$

Redeemable debenture

$$\frac{\text{Annual Interest} \times (1-T) + \left(\frac{RV - NP}{\text{Life}} \right)}{\left(\frac{RV + NP}{2} \right)} \times 100$$

Irredeemable debenture

$$\frac{\text{Annual Interest} \times (1-T)}{\text{Net proceeds}} \times 100$$

⑭ Cost of preference share (k_p)

↓ Redeemable preference share ↓ $\frac{\text{Preference Dividend} + \left(\frac{RV - NP}{\text{Life}} \right)}{\left(\frac{RV + NP}{2} \right)} \times 100$	↓ Irredeemable preference share ↓ $\frac{\text{Preference Dividend}}{\text{Net proceeds}} \times 100$
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⑮ Cost of borrowing (k_b) = Borrowing rate $\times (1 - T)$

⑯ $k_e = \frac{D_1}{\text{Net proceeds}} + \text{Growth rate}$

⑰ Price of share = $\frac{D_1}{\text{Cost of Capital} - \text{Growth rate}}$

(when life of share is infinite)

① $D_1 = D_0 + \text{Growth rate}$

$D_0 \rightarrow$ Latest dividend (or) Last dividend (or) Currently paid dividend

$D_1 \rightarrow$ Next year dividend (or) Expected dividend

$$(18) \text{ PE Ratio} = \frac{\text{market price per share}}{\text{Earning per share}}$$

$$(19) \text{ Gordon Model}$$

$$\text{Price of Share} = \frac{\text{EPS}_1 \times \text{Dividend pay out ratio}}{k_e - g}$$

here $g =$ Growth rate.

$$(20) \text{ Walter model}$$

$$\text{Price of Share} = \frac{\text{DPS} + \left[(\text{EPS} - \text{DPS}) \times \frac{r}{k_e} \right]}{k_e}$$

$$(21) \text{ operating margin} = \text{operating profit} = \text{EBIT}$$

$$(22) \text{ Turnover Ratios}$$

$$(a) \text{ Asset turnover Ratio} = \frac{\text{Revenue from operation}}{\text{Average assets}}$$

$$(b) \text{ Inventory turnover Ratio} = \frac{\text{Cost of goods sold}}{\text{Average Inventory}}$$

$$(c) \text{ Debtor turnover ratio} = \frac{\text{Net Credit Sales}}{\text{Average Debtors}}$$

$$(d) \text{ Creditor turnover ratio} = \frac{\text{Net Credit Purchase}}{\text{Average Creditors}}$$

$$(e) \text{ Fixed asset turnover ratio} = \frac{\text{Revenue from operation}}{\text{Average fixed assets}}$$

② Other Important ratio

$$(a) \text{ Interest Coverage ratio} = \frac{\text{EBIT}}{\text{Annual Interest}}$$

$$(b) \text{ Preference Coverage ratio} = \frac{\text{Profit after tax}}{\text{Preference dividend}}$$

$$(c) \text{ Cash ratio} = \frac{\text{Cash} + \text{Bank} + \text{Current Investment}}{\text{Current liability}}$$

$$(d) \text{ Capital Gearing ratio} = \left[\frac{\text{Debt} + \text{Preference}}{\text{Equity}} \right]$$

(24) Price of share when life of share is given say 3 yrs.

$$P_0 = \frac{D_1}{(1+r)^1} + \frac{D_2}{(1+r)^2} + \frac{D_3}{(1+r)^3}$$

(25) leverage

(a) operating leverage = $\frac{\% \text{ Change in EBIT}}{\% \text{ Change in Sales}}$

(or)

$$\frac{\text{Contribution}}{\text{EBIT}}$$

(b) Financial leverage = $\frac{\% \text{ Change in EPS}}{\% \text{ Change in EBIT}}$

(or)

$$\frac{\text{EBIT} \times (1-T)}{\text{Profit after tax \& Preference Dividend}}$$

(c) Combined leverage = $\text{operating leverage} \times \text{Financial leverage}$