



- [1] Activity Ratios
- [2] Liquidity Ratios
- [3] Profitability Ratios
- [4] Solvency Ratios
- [5] Valuation Ratios

[1] Activity Ratios

[a] Inventory turnover = $\frac{\text{Costs of Goods Sold}}{\text{Average Inventory}}$ = Times → Higher better

[b] Average holding period = $\frac{365}{\text{Inventory turnover}}$ = Days

[c] Receivable turnover = $\frac{\text{Credit Sales}}{\text{Average Accumulated Accounts Receivable}}$ → Lesser better

[d] Average Collection Period = $\frac{365}{\text{Accumulated Receivables Turnover}}$
Days Sales Outstanding

→ The less
better

[e] Payable Turnover = $\frac{\text{Credit Purchase}}{\text{Average Accounts Payable}}$ = The lower is better

[f] Payable deferral period = $\frac{365}{\text{Payable Turnover}}$ = The more better

[g] Working Capital Turnover = $\frac{\text{Net Sales}}{\text{Average working Capital}}$

Net Sales = Sales - COGS
W.C. = Current Asset

[h] Fixed Asset Turnover = $\frac{\text{Sales}}{\text{Average Fixed Asset}}$

How effective efficiently company uses its fixed assets to generate sales revenue. Higher turnover indicates more efficient use of fixed asset.

[i] Total Asset Turnover = $\frac{\text{Sales}}{\text{Total Asset}}$

Same as before

[2] Liquidity Ratio

The higher the ratio, the greater the liquidity of the firm

[a] Current Ratio = $\frac{C.A}{C.L}$

[b] Quick Ratio = $\frac{\text{Cash} + \text{Marketable Securities} + \text{Receivables}}{C.L}$

[c] Cash Ratio = $\frac{\text{Cash} + \text{Marketable Securities}}{C.L}$

[d] Cash Conversion Cycle = Average Collection Period + Average Holding Period - Payable Deferral Period

The lower the better

~~It~~ It indicates total time required to generate cash for the firm

Solvency Ratios

a) Debt to Asset Ratio = $\frac{\text{Total Debt}}{\text{Total Asset}}$ → The percentage of total asset financed with debt

b) Debt to Equity Ratio = $\frac{\text{Total Debt}}{\text{Total Equity}}$ → The amount of debt capital relative to equity capital

c) Debt to Capital Ratio = $\frac{\text{Total Debt}}{\text{Total Debt} + \text{Shareholders equity}}$
The percentage of company's capital represented by debt

d) Financial leverage = $\frac{\text{Total Asset}}{\text{Total Equity}}$ → The amount of total asset supported by equity

e) Interest Coverage Ratio = $\frac{\text{Earning before Interest and Tax (EBIT)}}{\text{Interest payment}}$
The number of time company's EBIT could cover I.P.

f) Fixed Charged Coverage = $\frac{\text{EBIT} + \text{Lease payment (Cash Inflow)}}{\text{Interest payment} + \text{Lease payment (Cash outflow)}}$

Profitability Ratios (Percentage) [%]

a) Gross Profit Margin = $\frac{\text{Gross profit}}{\text{Sales}}$

b) Net Profit Margin = $\frac{\text{Net profit}}{\text{Sales}}$

c) Operating Profit Margin = $\frac{\text{Operating Profit}}{\text{Sales}}$

$$[d] \text{ Return of Asset (ROA)} = \frac{\text{Net income}}{\text{Total asset}}$$

$$[e] \text{ Return on Equity (ROE)} = \frac{\text{Net income}}{\text{Total Equity}}$$

Du-Pont - Analysis

$$\text{ROE} = \frac{\text{Net income}}{\text{Total equity}}$$

$$= \frac{\text{Net income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Total Asset}} \times \frac{\text{Total Asset}}{\text{Total Equity}}$$

$$= \text{Net profit Margin} \times \text{Total Asset Turnover} \times \text{Financial Leverage}$$

[5] Valuation Ratios

$$[a] \text{ P/E Ratio} = \frac{\text{Price per share}}{\text{Earnings per share}}$$

$$[b] \text{ P/CF Ratio} = \frac{\text{Price per share}}{\text{Cash flow per share}}$$

$$[c] \text{ P/S Ratio} = \frac{\text{Price per share}}{\text{Sales per Share}}$$

$$[d] \text{ P/Bv Ratio} = \frac{\text{Price per share}}{\text{Book value per share}}$$

$$[e] \text{ Dividend per share} = \frac{\text{Total Dividend}}{\text{No. of Shares}}$$

$$[H] \text{ Dividend Payout Ratio} = \frac{\text{Total dividend}}{\text{Net income}}$$

$$[9] \text{ Retention Ratio} = \frac{\text{Net income} - \text{Dividend}}{\text{Net income}}$$

$$[h] \text{ Sustainable growth rate} = b \times ROE$$

$$* \text{ Capital Adequacy Ratio} = \frac{\text{Various Components of Capital}}{\text{Risk weighted asset}}$$

[Bank]