

Topic 3: The 15 “Ratios” We Work With

Liquidity Ratios Current Ratio = $\frac{\text{Current} \cdot \text{Assets}}{\text{Current} \cdot \text{Liabilities}}$

Quick Ratio = $\frac{\text{Current} \cdot \text{Assets} \cdot \text{Other} \cdot \text{than} \cdot \text{Inventory}}{\text{Current} \cdot \text{Liabilities}}$

Asset Receivable Turnover = $\frac{\text{Sales}}{\text{Accounts} \cdot \text{Receivable}}$

Management Ratios

Inventory Turnover = $\frac{\text{Sales}}{\text{Inventory}}$

Fixed Asset Turnover = $\frac{\text{Sales}}{\text{Net} \cdot \text{Fixed} \cdot \text{Assets}}$

Total Asset Turnover = $\frac{\text{Sales}}{\text{Total} \cdot \text{Assets}}$

Debt Management Times Interest Earned Ratio = $\frac{\text{EBIT}}{\text{Interest}}$

(long term solvency)

Ratios Debt Ratio = $\frac{\text{Total} \cdot \text{Liabilities}}{\text{Total} \cdot \text{Assets}}$

Debt to Equity Ratio = $\frac{\text{Total} \cdot \text{Liabilities}}{\text{Equity}}$

Equity Multiplier = $\frac{\text{Total} \cdot \text{Assets}}{\text{Equity}}$

Profitability Ratios Profit Margin = $\frac{\text{Net} \cdot \text{Income}}{\text{Sales}}$

Return on Assets (ROA) = $\frac{\text{Net} \cdot \text{Income}}{\text{Total} \cdot \text{Assets}}$

Return on Equity (ROE) = $\frac{\text{Net} \cdot \text{Income}}{\text{Equity}}$

Return on Invested Capital (ROIC) = $\frac{\text{EBIT} \cdot (1 - \text{tax} \cdot \text{rate})}{\text{Total} \cdot \text{Assets}}$

Economic Value Added (EVA) [a dollar difference, not a ratio]
= [(EBIT)(1 - t)] - [(Total Assets)(WACC%)]

DuPont Breakdown

$$\text{ROA} = \frac{\text{NI}}{\text{TA}} = \frac{\text{NI}}{\text{S}} \times \frac{\text{S}}{\text{TA}}$$

$$\begin{aligned}\text{ROE} &= \frac{\text{NI}}{\text{EQ}} = \frac{\text{NI}}{\text{S}} \times \frac{\text{S}}{\text{TA}} \times \frac{\text{TA}}{\text{EQ}} \\ &= \text{ROA} \times \frac{\text{TA}}{\text{EQ}}\end{aligned}$$