Test 1 Equations

Cash Flow from assets = Operating Cash Flow – Net capital spending – Change in net working capital

Current Ratio = \( \frac{Current \ Assets}{Current \ Liabilities} \)

\[ \text{Cash Ratio} = \frac{\text{Cash}}{\text{Current Liabilities}} \]

\[ \text{Debt – Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}} \]

\[ \text{Times Interest Earned Ratio} = \frac{\text{EBIT}}{\text{Interest Expense}} \]

\[ \text{Inventory Turnover} = \frac{\text{Costs of Goods Sold}}{\text{Inventory}} \]

\[ \text{ Receivables Turnover} = \frac{\text{Sales}}{\text{Accounts Receivables}} \]

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

\[ \text{Return on Assets} = \frac{\text{Net Income}}{\text{Total Assets}} \]

\[ \text{Return on Equity} = \frac{\text{Net Income}}{\text{Total Equity}} \]

\[ \text{PE Ratio} = \frac{\text{Price per Share}}{\text{Earnings per Share}} \]

\[ \text{Market – to – Book Ratio} = \frac{\text{Market Value per Share}}{\text{Book Value per Share}} \]

\[ \text{ROE} = \frac{\text{Net Income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Total Equity}} \]

\[ \frac{\text{D/E}}{1 - \text{D/A}} = \frac{\text{D/A}}{1 + \text{D/E}} \]

\[ \text{ROE} = \text{ROA} \times \text{Equity multiplier} = \text{Profit margin} \times \text{Total asset turnover} \times \text{Equity multiplier} \]
**Dividend Payout Ratio**

\[
\text{Dividend Payout Ratio} = \frac{\text{Cash Dividend}}{\text{Net Income}}
\]

**Retention Ratio**

\[
\text{Retention Ratio} = \frac{\text{Addition to Retained Earnings}}{\text{Net Income}}
\]

**Internal Growth Rate**

\[
\text{Internal Growth Rate} = \frac{\text{ROA} \times b}{1 - \text{ROA} \times b}
\]

**Sustainable Growth Rate**

\[
\text{Sustainable Growth Rate} = \frac{\text{ROE} \times b}{1 - \text{ROE} \times b}
\]