

FINANCIAL RATIO



FINANCIAL RATIO

- A **financial ratio** (or **accounting ratio**) is a relative magnitude of two selected numerical values taken from an enterprise's financial statement.

SOURCES OF DATA FOR FINANCIAL RATIOS

- Balance Sheet
- Income Statement
- Statement of Cash Flow
- Statement of Retained Earnings

PURPOSE AND TYPES OF RATIOS

- **Liquidity ratios**
- **Asset turnover ratios**
- **Financial leverage ratios**
- **Profitability ratios**
- **Dividend policy ratios**

PURPOSE AND TYPES OF RATIOS

Financial ratios allow for comparisons

- between companies
- between industries
- between different time periods for one company
- between a single company and its industry average

LIQUIDITY RATIOS

Provides information about a firm's ability to meet its short-term financial obligations.

$$\text{CURRENT RATIO} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$\text{QUICK RATIO} = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$$

$$\text{CASH RATIO} = \frac{\text{Cash} + \text{Marketable Securities}}{\text{Current Liabilities}}$$

ASSET TURNOVER RATIO

Indicates of how efficiently the firm utilizes its asset.

$$\text{RECEIVABLE TURNOVER} = \frac{\text{Annual Credit Sales}}{\text{Accounts Receivable}}$$

$$\text{AVERAGE COLLECTION PERIOD} = \frac{\text{Accounts Receivable}}{\text{Annual Credit Sales} / 365}$$

$$\text{AVERAGE COLLECTION PERIOD} = \frac{365}{\text{Receivable Turnover}}$$

ASSET TURNOVER RATIO

$$\text{INVENTORY TURNOVER} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

$$\text{INVENTORY PERIOD} = \frac{\text{Average Inventory}}{\text{Annual Cost of Goods Sold} / 365}$$

$$\text{INVENTORY PERIOD} = \frac{365}{\text{Inventory Turnover}}$$

FINANCIAL LEVERAGE RATIOS

Provide an indication of the long-term solvency of the firm.

$$\text{DEBT RATIO} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

$$\text{DEBT RATIO} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

$$\text{INTEREST COVERAGE} = \frac{\text{EBIT}}{\text{Interest Charges}}$$

PROFITABILITY RATIO

Offer several different measures of the success of the firm at generating profits.

Gross Profit Margin is a measure of the gross profit earned on sales.

$$\text{GROSS PROFIT MARGIN} = \frac{\text{Sales} - \text{Cost of Goods Sold}}{\text{Sales}}$$

PROFITABILITY RATIO

Return on Assets is a measure of how effectively the firm's assets are being used to generate profits.

$$\text{RETURN ON ASSETS} = \frac{\text{Net Income}}{\text{Total Assets}}$$

PROFITABILITY RATIO

Return on Equity is the bottom line in measure for the shareholder profits earned for each dollar invested in the firm's stock.

$$\text{RETURN ON EQUITY} = \frac{\text{Net Income}}{\text{Shareholder Equity}}$$

DIVIDEND POLICY RATIO

Provide insight into the dividend policy of the firm and the prospects for future growth.

$$\text{DIVIDEND YIELD} = \frac{\text{Dividends Per Share}}{\text{Share Price}}$$

$$\text{PAYOUT RATIO} = \frac{\text{Dividends Per Share}}{\text{Earnings Per Share}}$$

USE AND LIMITATIONS OF FINANCIAL RATIO

1. A reference point is needed
2. Most ratios by themselves are not highly meaningful
3. Year-end values may not be representative
4. Ratios are subjects to the limitations of accounting methods

CAPITAL BUDGETING RATIO

- Net present value
- Profitability index
- Internal rate of return
- Modified internal rate of return
- Equivalent annuity