Assessing Financial Performance

Topics

- Importance of Assessing Financial Performance
- Financial ratio analysis

Goals of The Corporation

- Shareholders desire wealth maximization.
- Do managers (i.e. agents) maximize shareholder value?
- The managers will generally act in the shareholders' best interests.
  - The shareholders can devise contracts that align the incentives of the managers with the goals of the shareholders.
  - The shareholders can monitor the managers behavior.
- However, this contracting and monitoring is costly.

➔ Agency Costs = Costs of Implementing Control Devices + Monitoring Costs

Role of Financial Manager

- To create value, the financial manager should:
  1. Make sound investment decisions.
  2. Make sound financing decisions.

➔ Importance of Assessing Financial Performance

Assessing Financial Performance

- Key issue in assessing the long-term financial health of a company is whether the corporate system of goals, product market strategies, investment requirements, and financing capabilities are in balance.
- Analysts try to understand
  - future industry structure and competitive behavior,
  - the competitive and operating characteristics of the business,
  - the long-term goals and plans of management, and
  - the soundness of management
- Most likely, initial assessment involves investigating published financial statements.

→ Financial statement analysis is only a part of a complete analysis of a company.

Financial Ratios

Five areas

- Profitability
- Activity/Efficiency
- Leverage
- Liquidity
- Market Value

Profitability Ratios

$$\text{Net profit margin} = \frac{\text{net income}}{\text{sales}}$$

$$\text{Return on assets} = \frac{\text{EBIT} - \text{tax}}{\text{total assets}}$$

$$\text{Return on equity} = \frac{\text{net income}}{\text{equity}}$$

$$\text{Payout ratio} = \frac{\text{cash dividends}}{\text{net income}}$$

Activity/Efficiency Ratios

$$\text{Asset turnover ratio} = \frac{\text{sales}}{\text{total assets}}$$

$$\text{Fixed asset turnover} = \frac{\text{sales}}{\text{net fixed assets}}$$

$$\text{Inventory turnover ratio} = \frac{\text{cost of goods sold}}{\text{inventory}}$$

$$\text{Average collection period} = \frac{\text{account receivables}}{\text{average daily sales}}$$

Leverage Ratios

$$\text{Total debt ratio} = \frac{\text{total debt}}{\text{total assets}}$$

$$\text{Total debt ratio at the market} = \frac{\text{total liabilities}}{\text{total liabilities} + \text{market value of equity}}$$

$$\text{Debt equity ratio} = \frac{\text{total liabilities}}{\text{total equity}}$$

$$\text{Times interest earned} = \frac{\text{EBIT}}{\text{interest payments}}$$

Liquidity Ratios

$$\text{Current ratio} = \frac{\text{current assets}}{\text{current liabilities}}$$

$$\text{Quick ratio} = \frac{\text{cash} + \text{marketable securities} + \text{receivables}}{\text{current liabilities}}$$

$$\text{Cash ratio} = \frac{\text{cash} + \text{marketable securities}}{\text{current liabilities}}$$

$$\text{Interval measure} = \frac{\text{cash} + \text{marketable securities} + \text{receivables}}{(\text{COGS} + \text{operating expenses})/365}$$

Market Value Ratios

$$\text{PE Ratio} = \frac{\text{stock price}}{\text{earnings per share}}$$

$$\text{Dividend yield} = \frac{\text{dividend per share}}{\text{stock price}}$$

$$\text{Market to book ratio} = \frac{\text{stock price}}{\text{book value per share}}$$

Others

- Sustainable Growth Rate: Steady rate at which a firm can grow.

$$g = \text{Sustainable growth rate} = \text{ROE x (1 - payout ratio)}$$

- Du Pont Analysis

$$\text{ROE} = \frac{\text{assets}}{\text{equity}} \text{ x } \frac{\text{sales}}{\text{assets}} \text{ x } \frac{\text{net income}}{\text{sales}}$$

Assessing Financial Performance

- Financial ratio analysis
  - Trend analysis
    - Analyze whether the firm's ratios are improving or deteriorating over time.
  - Common size analysis
    - Express a firm's I/S (and B/S) items in percentage of sales (and assets)
  - Percentage change analysis
    - Focus on the growth rate of I/S and B/S items
  - Comparative analysis
    - vs. Industry or vs. Competitor(s)