FINANCIAL RATIOS

Objective

This section deals with the different financial ratios used to analyze stocks. These ratios are an indication of how good or bad the particular company is performing.

Financial Ratios: Objectives

- Standardize financial information for comparisons
- Evaluate current operations
- Compare performance with past performance
- Compare performance against other firms or industry standards
- Study the efficiency of operations
- Study the risk of operations

Ratio Analysis: Rationale

- A firm has resources
- It converts resources into profits through
  - production of goods and services
  - sales of goods and services
- Ratios
  - Measure relationships between resources and financial flows
  - Show ways in which firm's situation deviates from
    - Its own past
    - Other firms
    - The industry
    - All firms

Types of Financial Ratios

- Another way of classifying Financial Ratios is based upon what aspect of performance analysis is taken care of:
  - Liquidity Ratio
  - Profitability Ratio
  - Leverage or Solvency Ratio
  - Efficiency Ratio

Performance Analysis: Four Window Approach

Liquidity Ratios

- These ratios indicate the ability of the firm to meet its short-term obligations (e.g., payment of salary, taxes, loans etc.)
- The timeframe for the expression “short-term” is generally twelve months

Liquidity Ratios

- Current Ratio

  Current Assets + Advance Tax + other short-term advances +
  short term marketable investments
  Current liabilities + Short term loans + Provisions

- Quick Ratio

  Current Assets – illiquid Assets – prepaid expenses
  Current liabilities + Short term loans – cash credit + Provisions

- Financial Slack

  Cash and Bank balance x 100
  Total Assets

Efficiency Ratios

- Total asset turnover ratio
- Fixed assets turnover ratio
- Working capital turnover ratio
- Working capital cycle:
  - Inventory holding period
  - Collection period
  - Suppliers credit period

Efficiency Ratios

Overall Efficiency	**Sales/Capital Employed**
Fixed Assets Efficiency (or Turnover) Ratio	**Sales/(Net Block + Capital WIP)**
Working Capital Efficiency(Turnover)	**Sales/ Working Capital**
Inventory Turnover	**Cost of Goods Sold / Average Inventory**
Debtors Turnover	**Credit Sales / (Average Debtors + Average Bills Receivable)**
Creditors Turnover	**Credit Purchase / (Average Creditors + Average Bills Payable)**
Average Inventory Inventory Holding Period	**(Average Inventory/Cost of Goods Sold) x No. of Days/Months in a Year**
Debtors Collection Period	**((Average Debtors + Average Bills Receivables)/ Credit Sales) x No. of Days/Months in a Year**
Suppliers Credit Period	**((Average Creditors + Average Bills Payable)/ Credit Purchases) x No. of Days/months in a year**

Profitability Ratios

- Sales-based
  - Operating margin - [Operating Profit/Sales] x 100
  - Net profit margin - [Profit After Tax (PAT)/Sales] x 100

- Asset-based
  - Return on Total Assets (ROTA) - (Profit Before Interest and After Tax/Total Assets) x100
  - ROCE/ROI - (Operating Profit/Capital Employed) x 100

- Profitability indicators for shareholders
  - RONW - (PAT/Net Worth) x 100
  - EPS - (PAT – Dividend on Preference Shares)/Weighted Average Number of Equity Shares
  - DPS - Proposed Dividend/Number of Shares
  - Pay out ratio - (Proposed Dividend/PAT) x 100

Solvency Ratios (Leverage)

Capital Structure (or Long-term solvency)

- Debt-equity ratio – Long-term Debt/Equity
- Interest coverage ratio – (PAT + Interest) / Interest
- Debt service coverage ratio – Cash Flow from operating activities after tax/(Interest + Installments paid during the year on long term loans)

Market Based Ratios

- Price-earning (P/E) multiple - Market Price/Earning per share
- Price-to-book ratio - Market price/Book value per share
- Dividend yield - (Proposed Equity Dividend/Market Capitalization) x 100
- Total shareholder return (TSR) - [Dividend Per Share + (Closing Market Price – Opening Market Price)]/Opening Market Price

Industry – Key Multiples

Industry/ Capitalization based	Key Multiples for Stock analysis
Banks, Financial Institutions	Price to Book Value
IT	Price/Sales
Large Cap	Price/Earnings
Small size manufacturing Firms	Price/Net Cash-inFlow
Pharma	Price Earnings
FMCG	Price/Sales
Telecom	Enterprise Value/EBIDTA

*Price to Sales ratio works well if capital structure of the companies in a particular industry is nearly same