

## Unit 3 Financial Analysis

**Write short notes on:**

### a. Financial Ratio Analysis

Ratio analysis is a widely used tool of financial analysis. The systematic use of ratio helps to interpret the financial statements so that the strength and weaknesses of a firm can be determined and assessed. The ratios describe the significant relationship that exists between figures shown on a balance sheet and income statement or any part of a financial statement. Ratios make the related information comparable. Ratios can be expressed as a decimal value, such as 0.10, or given as an equivalent percent value, such as 10%.

### b. Use of Financial Ratios

As Ratio Analysis is a means of communicating relevant information to different parties, who are interested, in and around the enterprise, it is very much useful to for improvement of their needs according to their respective interest in the enterprise. Various uses of Ratio Analysis are given as follows:

- It is useful for identification of financial strengths and weaknesses of an enterprise.
- It is useful to measure liquidity, solvency, profitability, managerial efficiency and activity of an enterprise.
- It is useful for inter- and intra-firm comparison of performance.
- It is useful to measure the proper utilization of the various assets of the business.
- It is useful to measure the operating efficiency of the business.

### c. Limitations of Ratios

Following are the drawbacks or limitations of Ratio Analysis:

- It depends on the data supplied from the process of Financial Accounting, and if those data are incorrect, information obtained from the Ratio Analysis cannot be relied upon.
- As the Ratios are calculated on the basis of the past results, a proper prediction for future may not always be dependable.
- A single Ratio calculated for any functional area of a business does not convey its conclusive state. A series of Ratios is needed to get any conclusive idea about that area of the business.
- Ratios are tools of quantitative analysis, which ignore qualitative points of view.
- Ratios are generally distorted by inflation.

### d. Common Size Statements

*Common size* statements of common size ratios that are used to compare financial statements of different-size companies, or of the same company over different periods. By expressing the items in proportion to some size-related measure, standardized financial statements can be created, revealing trends and providing insight into how the different companies compare. The common

size ratio for each line on the financial statement is calculated as follows: Common Size Ratio =  $\frac{\text{Item of Interest}}{\text{Reference Item}}$ ; for e.g. Salary Ratio =  $\frac{\text{Salary expenses}}{\text{Sales}}$ .

The ratios often are expressed as percentages of the reference amount. Common size statements usually are prepared for the income statement and balance sheet, expressing information as follows:

- Income statement items - expressed as a percentage of total revenue
- Balance sheet items - expressed as a percentage of total assets

#### e. Du-Pont System of Analysis

The Du Pont system of analysis is named for the DuPont Corporation, which originally popularized its use. The Du Pont system merges the income statement and balance sheet into two summary measures of profitability; return on total assets (ROA) and return on equity (ROE).  
 $ROE = ROA \times \text{Equity Multiplier}$

The Du Pont system links the net profit margin with its total assets turnover. The DuPont formula then multiplied these two ratios to find the firm's return on total assets (ROA).  
 $ROA = \text{Net Profit Margin} \times \text{Total Assets Turnover}$ .

#### f. Types of Ratio

On the basis of function or test, the ratios are classified as:

**Liquidity ratios** measure the adequacy of current and liquid assets and help evaluate the ability of the business to pay its short-term debts. The ability of a business to pay its short-term debts is frequently referred to as short-term solvency position or liquidity position of the business. E.g. current ratio, quick ratio etc.

**Profitability ratios** measure the efficiency of management in the employment of business resources to earn profits. These ratios indicate the success or failure of a business enterprise for a particular period of time. A strong profitability position ensures common stockholders higher dividend income and appreciation in the value of the common stock in future. E.g. net profit margin, gross profit margin etc.

**Assets management ratios** (also known as turnover ratios) measure the efficiency of a firm or company in generating revenues by converting its production into cash or sales. Generally a fast conversion increases revenues and profits. Turnover ratios show how frequently the assets are converted into cash or sales and, therefore, are frequently used in conjunction with liquidity ratios for a deep analysis of liquidity. E.g. Inventory turnover ratio, Receivables turnover ratio etc.

**Debt management ratios** (also known as long-term solvency ratios) measure the ability of a business to survive for a long period of time. These ratios are very important for stockholders and creditors. Solvency ratios are normally used to analyze the capital structure of the company and to evaluate the ability of the company to pay interest on long term borrowings and other fixed charge coverage. E.g. Debt to equity ratio, Times interest earned (TIE) ratio etc.

**Market Value Ratios** relate an observable market value, the stock price, to book values obtained from the firm's financial statements. E.g. P/E Ratio, Market-to-Book Ratio etc.

