'Ratio Analysis' An Accounting Technique of Analysis and Interpretation of Financial Statements

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Abstract:
At the end of the year, every company presents two statements which are known as Financial Statements. These statements are Income Statements and Balance-Sheet. The main objective of any company is profitable growth of enterprise to maximize the wealth of its shareholders. Analysis and interpretation of financial statements help in determining the liquidity position, profitability, efficiency and long term solvency a firm. Ratio is an accounting technique to know the financial position of the business unit. Ratio analysis shows whether the company is improving or deteriorating in past years. Moreover, Comparison of different aspects of all the firms can be done effectively with this. It helps the clients to decide in which firm the risk is less or in which one they should invest so that maximum benefit can be earned. This paper discusses introduction, meaning and objectives of financial statements. It also discusses meaning and classification of ratios. At last, it presents various types of ratios and their uses.

Keywords: *Activity, Balance-Sheet, Financial Statements, Income Statement, Leverage, Liquidity, Profitability, Ratio Analysis etc.*

1. Introduction and Concept of Financial Statement

The term 'Financial Statements' as used in modern business refers to two statements which the accountant prepares at the end of a period of time. They are Balance-Sheet and Income Statement. There are some other statements which are not only important but are essential for the business enterprise to draw useful conclusions regarding the financial position of the concern.

There are four basic financial statements:

- **Balance-Sheet:** It is also referred to as statement of financial position or condition, reports on a company's Assets, Liabilities and Ownership Equity as of a given point in time.
- **Income Statement:** It is also referred to as Profit and Loss statement (P&L), reports on a company's income, expenses, and profits over a period of time. Profit & Loss account provide information on the operation of the enterprise. These include sale and the various expenses incurred during the accounting year.
- **Statement of Retained Earnings:** It explains the changes in a company's retained earnings over the reporting period.
- **Cash Flow Statement:** It reports on a company's cash flow activities; particularly it's operating, investing and financing activities.

Financial statements are prepared primarily for decision making. They play a dominant role in setting the framework of managerial decisions. But the information provided in the financial statements is not an end in itself as no meaningful conclusions can be drawn from these statements alone. However, the information provided in the financial statements is the immense use in making decisions through analysis and interpretation of financial statements. Financial analysis is "the process of identifying the financial strengths and weaknesses of the firm by properly establishing relationship between the items of the Balance-Sheet and the Income Statement." There are various methods or techniques used in analyzing financial statements such as Comparative Statements, Statements of Changes in Working Capital, Common-Size Statements, Funds Flow Statement, and Trend Percentage and Ratio Analysis. The Ratio Analysis is the most powerful tool of financial analysis.

2. Objectives of Financial Statements

The main objective of Financial Statements are to show profits or losses during a particular period and the financial condition on a particular point of time. The following are the objectives of finance statement analysis.

- To estimate the earning capacity of the concern
- To judge the financial (both liquidity and solvency) position and financial performance of the concern.
- To determine the debt capacity of the concern.
- To decide about the future prospects of the concern.

3. Why Accounting Ratio is Necessary?

Financial Statements fail to convey the following aspects of the business in which all stake-holders are interested :

- The relationship of two relevant items: e.g. operating Expenses to Sales, Current Assets to Current Liabilities, Net Profit to Sales or Long-term Debt to Equity Funds.
- As per the provisions of The Companies Act, 1956, the companies are required to give the preceding year's figures for every item of the Profit &Loss Account and Balance-Sheet as shown below.

To evaluate the financial condition and performance of an enterprise, the financial analyst needs certain yardsticks frequently used is a Ratio Analysis. Thus, Ratio Analysis is a tool or techniques for analysis and interpretation of financial statement.

4. What is Accounting Ratio?

Ratio is the mathematically relationship between two or more quantities of financial statements. According to **Batty**, "The term 'accounting ratios' is used describe significant relationship which exist between figures shown on a Balance-Sheet, in as Profit and Loss Account, in a budgetary control system, or in any other part of the accounting." Ratio can be expressed in the form of (a) percentage, (b) fraction, (c) times and (d) days

5. Interpretation through Ratio

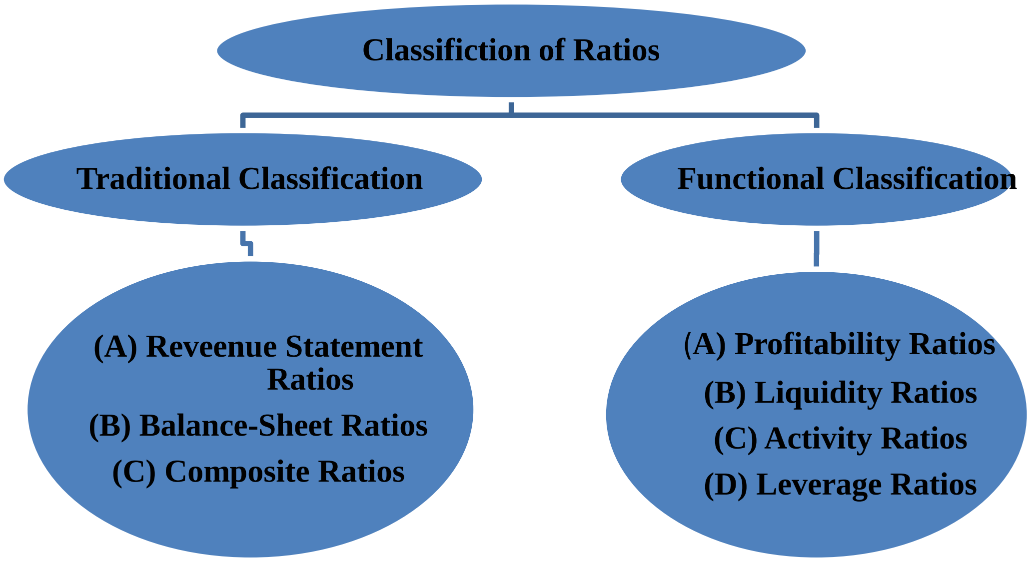
Only calculating of ratio is of no use unless it is interpreted so as to be useful to management in making policy decisions. For this purpose, following methods are used.

- **Comparison with Past Ratios:** If the present ratios of a company are compared with past ratios, they will indicate the trend. It will show whether the financial position and performance of the firm has improved, deteriorated or remained constant. This will help the management in making corrective steps in future.
- **Comparison with Ideal Ratio:** No conclusion can be drawn from any individual ratio. So, current year ratio of firm is compared with an ideal ratio of an industry. E.g. ideal Current Ratio is 2:1 and Current Ratio of firm is 1.33:1. So, it indicates that, the liquid position of the firm is not satisfactory.
- **Comparison with an Industry's Average Ratio:** comparison of firm ratio with an industry average is very useful. It indicates the strengths and weaknesses of the firm. E.g. TCS company's

ratios are compared with the average of IT companies' ratios. Such comparison will provide the real position of the company. This type of comparison is very useful because the firm in the same industry faces similar problems.

6. Classification of Accounting Ratios

There are two ways to classify accounting ratios as follows.



(A) Profitability Ratios: The term profitability may be defined as the ability of given investment to earn a return from its use. Every business unit is established to earn profit and develop on that basis. Hence, profitability ratios are the most important ratios. Profitability provides an incentive to achieve efficiency. Profitability also shows that the firm can perform competitively. Hence profitability is the key indicator of a performance and is a must for its survival and growth. Such ratios are computed as an indicator to the financial performance. Such ratios also help in critically analyzing and interpreting the current and prospective earning capacity of business corporations.

(B) Liquidity Ratios: These ratios indicate the liquid position of the business. They are used to ascertain whether the business is able to pay its short term liabilities from its short terms resources or not.

(C) Activity Ratios: These ratios indicate the efficiency of the resources of business. They also indicate the efficiency of the management. E.g. Stock Turnover Ratio shows the number of times the stock is turned over during the year.

(D) Leverage Ratio: The composition of capital of business and the proportion of owners' funds and funds provided by outsiders are reflected by leverage ratios. E.g. Debt-Equity Ratio shows the proportion of Long-term Liabilities with Owners' Funds.

7. Financial Ratios and their Interpretation

Serial No.	Category	Name of Ratio	Interpretation
(A-I)	**Profitability Ratios** **(Based on Sales)**	(1) Gross Profit Ratio = Gross Profit * 100 Sales (2) Net Profit Ratio =N. P .After Int. & Tax*100 Sales	• It measures the Profits in relation to Sales. • To whether the selling price is properly fixed. • It measures the Net Profitability in relation to Sales.

		(3) Operating Ratio = COGS + Op.Exps*100Sales (4) Expense Ratio = Expense * 100 Sales	• It shows the operational efficiency of the business. • Lower operating ratio shows higher operating profit and vice versa. • It measures the specific expense per sale.
(A-II)	**Profitability Ratios** **(Based on Investments)**	(1)Return on Investments = N.P. (EBIT) * 100 Capital Employed (2)Return on Shareholders' Funds = N.P. After Int. & Tax*100 Shareholders' Funds (3) Return on Equity Shareholders Funds = N.P After Int. & Tax – Pref. Sh. Dividend*100 Shareholders' Funds (4) Return on Equity Share Capital = N.P. After Int. & Tax – Pref. Sh. Dividend*100 Equity Share Capital	• It measures the profitability of the total funds per investment of a firm. • It shows the profitability of the business. • To know the profitability from the view point of shareholders. • To know the profitability from the view point of Equity shareholders. • To know the profitability from the view point of Equity Share Capital.
(B)	**Liquidity Ratios**	(1) Current Ratio = Current Assets Current Liability (2) Liquid Ratio = Liquid Assets Liquid Liabilities (3) Quick Ratio = Quick Assets Liquid Liabilities	• It measures the short term liquidity of a firm. • A firm with a higher ratio has better liquidity. • Ideal ratio is 2:1 • To know the better idea about liquid position of the firm. • Ideal ratio is 1:1. • To know whether the firm is able to pay liquid liabilities immediately.
(C)	**Activity Ratios**	(1)Stock Turnover Ratio= COGS Average Stock (2) Debtors' Ratio = Debtors+Bills Receivable * Working Days Credit Sales (3) Creditors' Ratio = Creditors+ Bills	• It indicates how fast the inventory is sold. • To know how many days taken to collect due amount from debtors. • To know how many days taken to pay due amount to creditors. • To know the efficiency of Fixed Assets utilized in

		Payable * Working Days Credit Purchases (4) Fixed Assets Turnover Ratio = Fixed Assets Sales (5) Total Assets turnover Ratio = Total Assets Sales	business. • To know the efficiency of Total Assets utilized in business.
(D)	**Leverage Ratios**	(1) Proprietary Ratio = Proprietors' Funds*100 Total Real Assets (2) Debt-Equity Ratio= Long Term Liabilities *100 Shareholders' Funds (3) Long Term Funds to Fixed Assets Ratio= Long Term Funds*100 Fixed Assets (4) Gearing Ratio = Pref. Share Capital + Long Term Liabilities*100 Equity Share Capital (5) Interest Coverage Ratio = Profit Before Int. and Tax Interest	• It shows the proportion of Proprietors' Funds with Total Real Assets. • It shows the proportion of Long Term Liabilities with Shareholders' Funds. • It shows whether all Fixed Assets are purchased from Long Term Funds. • To know the proportion of fixed dividend and interest bearing securities with equity share capital. • To know how many times the firms is able to pay interest.

8. Utility of Ratio Analysis

- It is useful to know the trend of profitability of the business.
- It is also useful to know the liquid position of the business.
- It guides the management to know the efficiency of the business.
- It is useful for preparing budgetary control.
- It guides the management in making some important financial and policy making decisions.
- The ratios of the last three of five years will indicate the trend in the respective fields.

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