

**DEPARTMENT OF COMMERCE AND FINANCIAL  
STUDIES  
BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI –  
620024  
MBA (Financial Management)**

**Course Code and Name: FMFC1/24 – CORPORATE FINANCE**

**Unit – II/ Topic : FINANCIAL STATEMENT ANALYSIS**

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# Scheme of Presentation

- Common size analysis
- Trend Analysis
- DuPont Analysis
- Industry Average
- Outline
- Financial Statements

# common size analysis

Common size or vertical analysis allows an owner to express each financial statement item as a percentage of a base. ... The formula for common size analysis is:  $(\text{analysis amount} / \text{base amount}) \times 100\%$ . On the balance sheet, the base amount is total assets or total liabilities and owner's (or shareholders') equity.

# Trend Analysis

- A trend analysis is a method of analysis that allows traders to predict what will happen with a stock in the future. Trend analysis is based on historical data about the stock's performance given the overall trends of the market and particular indicators within the market.

# DuPont Analysis

DuPont Analysis is an extended examination of Return on Equity (ROE) of a company which analyses Net Profit Margin, Asset Turnover, and Financial Leverage. This analysis was developed by the DuPont Corporation in the year 1920.

# Industry Average

Financial ratios are often used to compare a company against an industry average or other companies in order to benchmark or measure a company's performance. Industry ratios are often useful when creating the financial components of a business plan.

# Outline

- Meaning of Financial Statements and Financial Statement Analysis
- Significance of Financial Statements
- Types of Financial Statements
  - Income Statement
  - Balance Sheet
  - Cash Flow Statement
  - Statement of Retained Earnings
- Ratio Analysis including Du Pont Analysis
- Limitations of Financial Statement Analysis

# Meaning of Financial Statements

- Financial statements are summaries of the operating, financing, and investment activities of a firm.
- According to the *Financial Accounting Standards Board (FASB)*, the financial statements of a firm should provide sufficient information that is useful to investors and creditors in making their investment and credit decisions in an informed way.



- The financial statements are expected to be prepared in accordance with a set of standards known as generally accepted accounting principles (GAAP).
- The financial statements of publicly traded firms must be audited at least annually by independent public accountants. The auditors are expected to attest to the fact that these financial statements of a firm have been prepared in accordance with GAAP.

# Significance of Financial Statements

- Financial statements summarize and provide an overview of events relating to the functioning of a firm.
- Financial statement analysis helps identify a firm's strengths and weaknesses so that management can take advantage of a firm's strengths and make plans to counter weaknesses of the firm.

- For example, are inventories adequate to support the projected level of sales?
- Does the firm have too heavy an investment in account receivable?
- Does large account receivable reflect a lax collection policy?
- To ensure efficient operations of a firm's manufacturing facility, does the firm have too much or too little invested in plant and equipment?
- Financial statement analysis provides answers to all of these questions.

# Types of Financial Statements and Reports

The following are important types of financial statement reports.

1. The Income Statement
2. The Balance Sheet
3. The Statement of Retained Earnings
4. The Statement of Cash Flows

# The Income Statement

- An income statement is a summary of the revenues and expenses of a business over a period of time, usually either one month, three months, or one year.
- Summarizes the results of the firm's operating and financing decisions during that time.
- Operating decisions of the company apply to production and marketing such as sales/revenues, cost of goods sold, administrative and general expenses
- Provides operating income/earnings before interest and taxes (EBIT)

- Results of financing decisions are reflected in the income statement.
- When interest expenses and taxes are subtracted
- Net income does not necessarily equal actual cash flow from operations and financing.

# The Balance Sheet

- A summary of the assets, liabilities, and equity of a business at a particular point in time, usually at the end of the firm's fiscal year.

Assets (Resources of the business enterprise)	=	Liabilities (Obligations of the business)	+	Equity (ownership left over Residual)
<b>Fixed Assets</b> (Plant, Machinery, Equipment Buildings)		<b>Long-term</b> (Notes, bonds, & Capital Lease Obligation)		Common stock outstanding Additional paid-in capital Retained Earnings
<b>Current Assets</b> (Cash, Marketable Securities, Account Receivable, Inventories)		<b>Current Liabilities</b> (Accounts Payable, Wages and salaries, Short-term loans Any portion of long-term Indebtedness due in one-year)		

# THE STATEMENT OF CASH FLOWS

- The statement is designed to show how the firm's operations have affected its cash position cash flows also answer the following questions
  - Is the firm generating the cash needed to purchase additional fixed assets for growth?
  - Is the growth so rapid that external financing is required both to maintain operations and for investment in new fixed assets?
  - Does the firm have excess cash flows that can be used to repay debt or to invest in new products?



# RATIO ANALYSIS

- Financial statements report both on a firm's position at a point in time and on its operations over some past period.
- From management's viewpoint, financial statement analysis is useful to anticipate future conditions and more important, as a starting point for planning actions that will influence the future course of events or to show whether a firm's position has been improving or deteriorating over time.

- Ratio analysis begins with the calculation of a set of financial ratios designed to show the relative strengths and weaknesses of a company as compared to
  - Other firms in the industry
- Ratio analysis helps to show whether the firm's position has been improving or deteriorating
- Ratio analysis can also help plan for the future

# Types of Ratios

- Liquidity Ratios
  - Current Ratio
  - Quick Ratio/Acid Test Ratio
- Asset Management Ratios
  - Inventory Turnover Ratio
  - Days Sales Outstanding
  - Fixed Assets Turnover Ratio
  - Total Assets Turnover Ratio
- Debt Management Ratio
  - Total Debt to Total Assets Ratio
  - Times Interest Covered Ratio
- Profitability Ratios
  - Profit Margin on Sales
  - Return on Assets
  - Return on Equity
  - Basic Earning Power Ratio

# Liquidity Ratio

- A liquid asset is one that can be easily converted into cash at a fair market value
- Liquidity deals Will the firm be able to meet its current obligations?
- Two times of liquidity ratio
  - Current Ratio
  - Quick/Acid Test Ratio

# Asset Management Ratios

- Asset management ratio measures how effectively the firm is managing/using its assets
- Do we have too much investment in assets or too little investment in assets in view of current and projected sales levels?
- What happens if the firm has
  - Too much investment in assets
  - Too little investment in assets

# Asset Management Ratios

- Inventory Turnover Ratio
  - Measures the efficiency of Inventory Management
  - A high ratio indicates that inventory does not remain in warehouses, but rather turns over rapidly into sales
- Two cautions
  - Market prices for sales and inventories at cost
  - Sales over the year and inventory at the end of the year

# Asset Management Ratio

- Days Sales Outstanding (DSO)
  - To appraise the quality of accounts receivables
  - Average length of time that the firm must wait after making a sale before receiving cash from customers
  - Measures effectiveness of a firm credit policy
  - Indicates the level of investment needed in receivables to maintain firm's sales level

# Asset Management Ratios

- Fixed Assets Turnover Ratio
  - Measures efficiency of long-term capital investment
  - How effectively a firm is using its plant and machinery to generate sales?
  - How much fixed assets are needed to achieve a particular level of sales?



# Asset Management Ratio

- Total Asset Turnover Ratio
  - Measure efficiency of total assets for the company as a whole or for a division of the firm

# Debt Management Ratio

- Implications of use of borrowings
  - Creditors look to Stockholders' equity as a safety margin
  - Interest on borrowings is a legal liability of the firm
  - Interest is to be paid out of operating income
  - Debt magnifies return and risk to common stockholders

- Total Debt to Total Assets Ratio
  - Measures percentage of assets being financed through borrowings
  - Too high a number means increased risk of bankruptcy
- Leverage
  - What percentage of total assets are being financed through equity?

- Times Earned Interest (TIE)
  - Measure the extent to which operating income can decline before the firm is unable to meet its annual interest costs
  - Failure to pay interest can result in legal action by creditors with possible bankruptcy for the firm

# Profitability Ratios

- Net result of a number of policies and decisions
- Show the combined effect of liquidity, asset management, and debt management on operating results

- Net Profit Margin on Sales
  - Relates net income available to common stockholders to sales
- Basic Earning Power
  - Relates EBIT to Total Assets
  - Useful for comparing firms with different tax situations and different degrees of financial leverage
- Return on Assets (ROA)
  - Relates net income available to common stockholders to total assets
- Return on Common Equity (ROE)
  - Relates net income available to common stockholders to common stockholders equity

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