

FINANCIAL STATEMENT ANALYSIS



***BY:**

***CA VAIBHAV JAIN**

***FCA, ACS, DISA**

***Phone: +91 9711310004**

***E-mail id:**

vaibhavjain@inmacs.com

WHAT IS A FINANCIAL STATEMENT

“Financial Statements are financial data presented in an orderly manner in compliance with relevant accounting principles which help in assessing the profitability, solvency, liquidity, growth potential etc.”

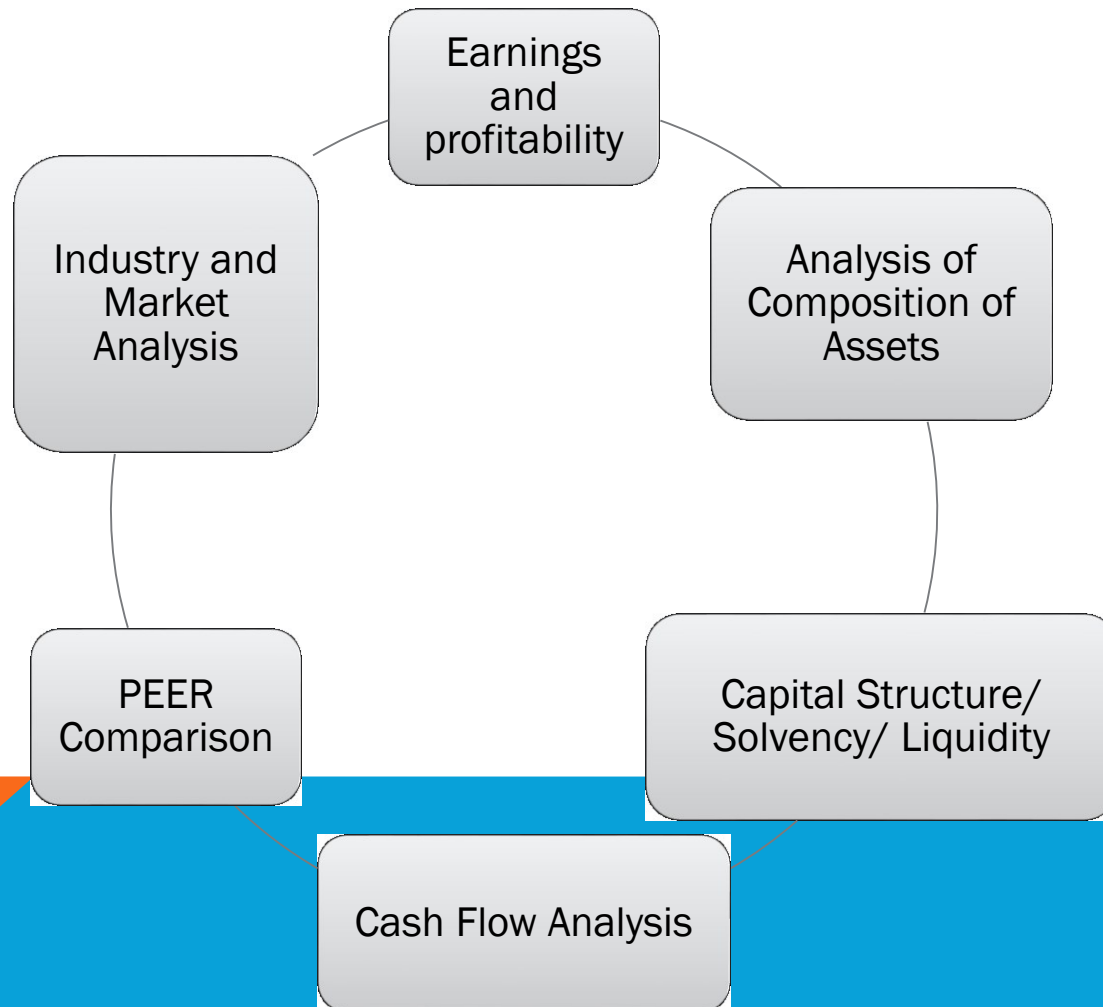
Components of Financial Statement are:

- ❖ Statement of financial position/ Balance Sheet
 - ❖ Statement of Operations/ Income Statement
 - ❖ Cash Flow Statement
 - ❖ Statement of Changes in Equity
 - ❖ Notes and schedules forming part of financial statement.
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COMPONENTS OF FINANCIAL STATEMENT

- ❖ Statement of financial position/ Balance Sheet : Represents financial position of the entity at a point in time.
 - ❖ Statement of Operations/ Income Statement : Represents net financial results of the entity over a period of time.
 - ❖ Cash Flow Statement : Represents sources and applications of cash of the entity.
 - ❖ Statement of Changes in Equity : Depicts movement in shareholder's equity, net profit or loss during the period, increase or decrease in reserves and dividend payments to shareholders.
 - ❖ Notes and schedules forming part of financial statement : Represents a summary of accounting policies, assumptions, explanations forming integral part of accounts.
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KEY FOCUS AREAS FOR FINANCIAL STATEMENT ANALYSIS



TECHNIQUES OF FINANCIAL ANALYSIS

Financial Statement Analysis refers to reading, interpreting and using financial data of a company to understand the company and make economic decisions.

Ratio Analysis

- Expresses relationship between metrics reflecting an entity's performance, liquidity, solvency, cash flow position etc.

Common-size Analysis (Vertical Analysis)

- Standardizes Income statement and balance sheet for easier and meaningful comparison in the form of % of total assets or total sales for balance sheet or Income statement respectively.

Comparative Statements

- These statements show the profitability and financial position for different periods of time in a comparative form to give an idea of the position of two or more periods.

Trend Analysis

- This technique is used to study the operational results and financial position over a series of years. Using previous year's data, trend analysis can be done to observe % change over time in selected data.

Cash Flow Analysis

- Analysis of actual movement of cash into and out of an organisation

BALANCE SHEET

$$\text{Assets} = \text{Liabilities} + \text{Equity}$$

Elements of Balance Sheet

Assets

Liabilities

Equity

Tangible or Intangible resources controlled by an enterprise as a result of past events and from which future economic benefits are expected to flow to the entity.

Obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from resources embodying economic benefits.

Residual Interest in the assets of an entity after deducting all its liabilities.

ANALYSIS OF ASSETS

Assets are classified into two categories, depending on their liquidity:

- Current Assets
- Non-Current Assets

CURRENT ASSETS

Assets that can be converted into cash or can be used up within one year and indicate operating activities of the entity.

Example:

- Cash
- Accounts Receivable
- Inventory
- Short term Investments

NON CURRENT ASSETS

Assets that cannot get converted into cash or used up within one year and provide information about the entity's investing activities.

Example:

- Property, Plant and Equipment
- Intangible Assets
- Long term Investments

ANALYSIS OF LIABILITIES

Liabilities are classified into two categories, depending on their settlement:

- Current Liabilities
- Non-Current Liabilities

CURRENT LIABILITIES

Obligations that will be satisfied within one year or an operating cycle.

Example:

- Accounts Payable
- Provisions
- Accrued Expenses
- Short term Borrowings

NON CURRENT LIABILITIES

Obligations that are not satisfied within one year and reflect the entity's long term financing activities.

Example:

- Long Term Financial Liabilities
- Long term Borrowings

INCOME STATEMENT

$$\text{Profit} = \text{Income} - \text{Expenses}$$

Elements of Income Statement

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graph TD; A[Elements of Income Statement] --> B[Income]; A --> C[Expenses]; B --> D[Inflows from selling goods or rendering services constituting the entity's on going or operational activities.]; C --> E[Outflows from selling goods or rendering services constituting the entity's on going or operational activities.]
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Income

Expenses

Inflows from selling goods or rendering services constituting the entity's on going or operational activities.

Outflows from selling goods or rendering services constituting the entity's on going or operational activities.

PERFORMANCE ANALYSIS

Purpose of Performance Analysis is as follows:

- It is an On going Process.
- It is linked to specified goals and objectives of the entity
- It Determines the financial strengths and weaknesses of a business.

Performance Analysis can be conducted using three types of ratios viz,

- ❖ Margin Ratios;
- ❖ Ratios relative to Invested Funds;
- ❖ Activity Ratios.

PERFORMANCE ANALYSIS USING MARGIN RATIOS

Gross Profit
Margin (%)

=

Gross Profit

÷

Revenue or
Sales

EBITDA margin
(%)

=

Earnings before
Interest, Tax,
Depreciation
(EBITDA)

÷

Revenue or
Sales

EBIT/Operating
Margin (%)

=

Earning Before
Interest and Tax
(EBIT)

÷

Revenue or
Sales

PBT or Pre-tax
margin (%)

=

Profit before Tax
(PBT)

÷

Revenue or
Sales

Net Profit
Margin

=

Net Income

÷

Revenue or
Sales

PERFORMANCE ANALYSIS USING INVESTED FUNDS

Return on
Assets (ROA)

=

Net Income

÷

Average Total
Assets

Return on
Assets

=

Net Income +
interest
expense(1-tax
rate)

÷

Average Total
Assets

Operating return
on assets

=

Operating
income or EBIT
or EBITDA

÷

Average Total
Assets

Return on
capital

=

EBIT

÷

Average Total
equity

Return on Equity

=

Net Income

÷

Average Total
equity

PERFORMANCE ANALYSIS USING ACTIVITY RATIOS (FEW EXAMPLES)

Receivables
turnover ratio

=

Annual Sales

÷

Average
Receivables

Days of Sales
Outstanding

=

365

÷

Receivable
turnover ratio

Inventory
turnover ratio

=

Cost of goods
sold

÷

Average
Inventory

Assets turnover
ratio

=

Revenue

÷

Average Total
assets

Fixed Assets
Turnover ratio

=

Revenue

÷

Average net
fixed assets

CAPITAL STRUCTURE ANALYSIS

- Capital structure analysis is a periodic evaluation of all components of the debt and equity financing used by a business.
- The intent of the analysis is to evaluate what combination of debt and equity the business should have. This mix varies over time based on the costs of debt and equity and the risks to which a business is subjected.
- Capital structure analysis is usually confined to short-term debt, leases, long-term debt, preferred stock, and common stock.

Objectives for analyzing Capital Structure

- To determine if the proportion of debt to equity enables an entity to create wealth without unduly jeopardizing the firm.

RATIOS FOR CAPITAL STRUCTURE ANALYSIS

Capital Structure can be analysed using following ratios:

- 1) Liquidity Ratios – To determine the entity's ability to settle its short term obligation within due date .
- 2) Solvency Ratios - To determine the entity's ability to settle its long term obligation within due date .
- 3) Coverage Ratios – Helps in determining the entity's ability to pay interest charges on borrowings.
- 4) Du-point Analysis - helps in analyzing Return on Equity (ROE) by breaking down ROE into various ratios for analysing the impact of profit margins, leverage and turnover on returns to shareholders.

LIQUIDITY RATIOS

- 1) Current Ratio = Current Assets / Current Liabilities
- 2) Quick Ratio = (Cash + Short-term + Securities + Receivables) / Current Liabilities
- 3) Cash Ratio = (Cash + Short-term Securities) / Current Liabilities
- 4) Defensive interval ratio = (Cash + Short-term Securities + Receivables) / Average daily expenditures

SOLVENCY RATIOS

- 1) Total Debt to Capital = (Long-term Debt + Short-term Debt) / Total Capital
 - 2) Total Debt to Equity = [Total Debt (Long-term and Short-term Debt)] / Equity
 - 3) Debt to Assets Ratio = [Total Debt (Long-term and Short-term Debt)] / Total Assets
 - 4) Financial Leverage = Average Total Assets / Average Total Equity.
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COVERAGE RATIOS

- 1) Interest coverage ratio = Earnings before interest and taxes / Interest payments
- 2) Fixed charge coverage ratio = (Earnings before interest and taxes + Lease payments) / (Interest payments + Lease payments).

CREDIT ANALYSIS

- ❖ Credit analysis is the method by which one calculates the creditworthiness of a business or organization. In other words, It is the evaluation of the ability of a company to honor its financial obligations. The audited financial statements of a large company might be analyzed when it issues or has issued bonds. Or, a bank may analyze the financial statements of a small business before making or renewing a commercial loan. The term refers to either case, whether the business is large or small.
- ❖ The objective of credit analysis is to look at both the borrower and the lending facility being proposed and to assign a risk rating. The risk rating is derived by estimating the probability of default by the borrower at a given confidence level over the life of the facility, and by estimating the amount of loss that the lender would suffer in the event of default.

3 C'S OF CREDIT ANALYSIS

- 1) **Character** - This is the part where the general impression of the protective borrower is analysed. The lender forms a very subjective opinion about the trust – worthiness of the entity to repay the loan. Discrete enquires, background, experience level, market opinion, and various other sources can be a way to collect qualitative information and then an opinion can be formed, whereby he can take a decision about the character of the entity.
- 2) **Capacity** - Capacity refers to the ability of the borrower to service the loan from the profits generated by his investments. This is perhaps the most important of the five factors. The lender will calculate exactly how the repayment is supposed to take place, cash flow from the business, timing of repayment, probability of successful repayment of the loan, payment history and such factors, are considered to arrive at the probable capacity of the entity to repay the loan.
- 3) **Collateral** - Collateral are form of security that the borrower provides to the lender, to appropriate the loan in case it is not repaid from the returns as established at the time of availing the facility.

CASH FLOW ANALYSIS

- Cash Flow Analysis means studying or analysing the Cash Flow Statement comprising part of Financial Statements.
- It provides information about cash inflows and outflows during an accounting period which is developed from Balance Sheet and Income Statement Data.
- Valuation models used in financial analysis are often based on projection of future cash flows for which the valuer needs to have good analytical cash flow analysis.

Cash Flow statement is divided into 3 parts viz,

- Operating Activities
 - Investing Activities
 - Financing Activities.
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Operating Activities

Cash Flow from Operating Activities	Amount (Rs.)	Amount (Rs.)
Cash Receipts from :		
Sales	XXX	
Commission & Fees	XXX	
Interest Received	XXX	
		XXX
Cash Payment for :		
Purchases	XXX	
Payments to and for employees	XXX	
Operating Expenses	XXX	
Interest Payments	XXX	
Direct Taxes Paid		XXX
		XXX
<i>Net Cash Flow from Operating Activities</i>		XXX

Direct Method

Cash Flow from Operating Activities	Amount (Rs.)	Amount (Rs.)
<i>Net Profit before Tax</i>		XXX
Adjustment for :		
Depreciation	XXX	
Loss on Sale of Fixed Assets	XXX	
Loss on revaluation	XXX	XXX
<i>Operating Profit before Working Capital Changes</i>		XXX
Adjustment* for :		
Trade and other Receivables	XXX	
Inventories or Stocks	XXX	XXX
Trade Payments or (Creditors and B/P)		XXX
<i>Cash Generated from Operations</i>		XXX
Interest Paid	XXX	
Taxes Paid	XXX	
<i>Net Cash Flow from Operating Activities</i>		XXX

Indirect Method

Investing Activities

- Acquiring/disposing of securities that are not cash equivalents
- Cash flows related to the acquisition or sale of non-current assets.
- Lending money/collective on loans

Examples of Investing Activities:

- Cash received from sales of assets that are not held for the regular trading purposes such as sale of building; marketable securities such as trading and available for sale securities, and investments
- Cash payments to acquire property, plant, and equipment (PPE), other tangible or intangible assets, and other long term assets.
- Cash received from sale of, and paid for purchases of derivative instruments

➤ Cash flows from investing activities

Sale of old equipment	₹ XXXX
Sale of van	XXXX
Sale of investment	XXXX
Purchase of land	(XXXX)
Purchase of new plant	(XXXX)
Purchase of building	(XXXX)
Net cash provided (or used) by investing activities	₹ XXXX

Financing Activities

- Borrowing from creditors/repaying the principal
- Obtaining resources from owners
- Providing owners with a return on investment

Examples of Financing Activities

- Cash received from issuing share capital
- Cash proceeds from issuing bonds, loans, notes, mortgages and other short or long-term borrowings
- Cash payments to shareholders to redeem existing shares-treasury stock
- Cash repayment of loans and other borrowings;and
- Cash payment to shareholders as dividends.

Cash flows from financing activities

Issuance of common stock	₹ XXXX
Issuance of preferred stock	XXXX
Sale of treasury stock	XXXX
Payment of long-term loan	(XXXX)
Purchase of treasury stock	(XXXX)
Payment of dividends	(XXXX)

Net cash provided (or used) by financing activities	₹ <u>XXXX</u>
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CASH FLOW PERFORMANCE RATIO

- 1) Cash flows to revenue = Operating cash flows / Revenue
- 2) Cash Return on Assets = Operating cash flows / Average total assets
- 3) Cash Return on Equity = Operating cash flows / Average total equity
- 4) Cash to Income = Operating cash flows / Operating Income
- 5) Cash flow per share = (Operating cash flows – Preferred dividends) / Weighted average number of common shares.

CASH FLOW COVERAGE RATIO

- 1) Interest coverage = (Operating cash flows + taxes paid + interest paid) / Interest paid
- 2) Debt coverage = Operating cash flows / Total debt
- 3) Dividend payment ratio = Operating cash flows / Average total equity
- 4) Debt payment = Operating cash flows / Cash debt repayment
- 5) Investing and financing = Operating cash flows / Cash outflows from investing and financing activities



THANK YOU!

CA VAIBHAV JAIN

INMACS Management Services Limited

32, Global Business Square, Sector 44, Gurgaon, Haryana

909, Chiranjiv Tower, 43, Nehru Place, New Delhi - 110019

Phone: +91 9711310004