

# FINANCIAL MANAGEMENT

# Financial Statement Analysis

The process of determining financial strengths and weaknesses of a firm by establishing strategic relationship between the items of the balance sheet, profit and loss account and other operative data.

# Financial Statement Analysis

## Metcalfe and Titard: -

It is a process of evaluating the relationship between component parts of a financial statement to obtain a better understanding of a firm's position and performance.

# Financial Statement Analysis

## Purpose: -

To diagnose the information contained in financial statements so as to judge the profitability and financial soundness of the firm.

# Types of Financial Analysis

On the basis of:

- The materials used.
- The modus operandi of analysis – i.e., the method of operation followed in the analysis.

# Types of Financial Analysis

On the basis of materials used:

- External analysis.
- Internal analysis.

# Types of Financial Analysis

## On the basis of materials used:

- External analysis.
  - This analysis is done by outsiders who do not have access to the detailed internal accounting records of the business firm. (Investors, creditors, government agencies, credit agencies and general public.)

# Types of Financial Analysis

## On the basis of materials used:

- Internal analysis.
  - This analysis is conducted by persons who have access to the internal accounting records of a business firm. (Executives and employees of the organization and government agencies which have statutory powers vested in them.)

# Types of Financial Analysis

On the basis of modus operandi:

- Horizontal analysis.
- Vertical analysis.

# Types of Financial Analysis

On the basis of modus operandi :

- Horizontal analysis.
  - Comparison of financial data of a company for several years. The figures for this type of analysis are presented horizontally over a number of columns. The figures of the various years are compared with standard or base year. – **Dynamic Analysis.**

# Types of Financial Analysis

On the basis of modus operandi :

- Horizontal analysis.
  - **Dynamic Analysis.**
  - Tools employed are:
    - Comparative statements.
    - Trend percentages.

# Types of Financial Analysis

On the basis of modus operandi :

- Vertical analysis.
  - The study of relationship of the various items in the financial statements of one accounting period. Figures from financial statements of a year are compared with a base selected from the same year's statement. – **Static Analysis.**

# Types of Financial Analysis

On the basis of modus operandi :

- Vertical analysis.
  - Static Analysis.
  - Tools employed are:
    - Common-size Financial statements.
    - Financial ratios.

# Procedure for Financial Statement Analysis

- Selection
- Classification
- Interpretation

# Procedure for Financial Statement Analysis

## ■ Selection

- selection of information necessary for analysis of financial statements.

## ■ Classification

- the methodical classification of the data.

## ■ Interpretation

- drawing of conclusions.
- explaining the meaning and significance of the data.

## Procedure adopted for Analysis and Interpretation of Financial Statement

- The analyst should know the plans and policies of the management so that he may be able to find out whether these policies are properly executed or not.

## Procedure adopted for Analysis and Interpretation of Financial Statement

- The extent of analysis should be determined. Then only the sphere of work can be decided.

# Procedure adopted for Analysis and Interpretation of Financial Statement

- The extent of analysis should be determined. Then only the sphere of work can be decided. For e.g. if the aim is to find out the earning capacity of the firm, then analysis of income statement is made. On the other hand, if financial position is to be studied Balance Sheet analysis is made.

# Procedure adopted for Analysis and Interpretation of Financial Statement

- The data given in the financial statements should be reorganized and rearranged.

# Procedure adopted for Analysis and Interpretation of Financial Statement

- The data given in the financial statements should be reorganized and rearranged. Similar data is grouped under same heads and individual components are broken down according to nature, ie. The data is reduced to standard form.

# Procedure adopted for Analysis and Interpretation of Financial Statement

- A relationship is established among financial statements with the help of tools and techniques of analysis.

# Procedure adopted for Analysis and Interpretation of Financial Statement

- A relationship is established among financial statements with the help of tools and techniques of analysis. For eg:- Ratios, trends, comparative statements, common size statements, fund flow statements and cash flow statements.

# Procedure adopted for Analysis and Interpretation of Financial Statement

- The information is interpreted in a simple and understandable way.
- The conclusions are drawn from interpretation and presented to the management in the form of reports.

# Tools of Financial Analysis (Methods or Devices)

Financial statements are analyzed for the purpose of measuring financial soundness and operational efficiency of a business concern.

# Tools of Financial Analysis (Methods or Devices)

- Comparative statements
- Common size statements
- Trend Analysis
- Ratio Analysis
- Fund Flow analysis
- Cash Flow Analysis
- Cost-Volume-Profit Analysis

# Comparative Statements

By preparing the comparative statements, we are analyzing:

- the changes in the performance of two or more periods of a firm.
- two or more firms.

# Comparative Statements

Comparative statements contain the changes (increase or decrease) in the financial statements of two or more periods. The changes are shown in absolute figures and percentages.

# Comparative Statements

This comparison can be made only if the same accounting procedures are followed. If the procedures are different it should be taken into account by the analyst while making the analysis.

# Comparative Statements

Comparative statement may show the following:

- Absolute figures.
- Changes in absolute figures – increase or decrease.
- Increase or decrease in terms of percentages.

# Comparative Statements

Two Comparative statements are:

- Comparative Balance Sheet.
- Comparative Income Statement .

# Comparative Balance Sheet

The comparative balance sheet analysis is the study of the trend of the same items, group of items and computed items in two or more balance sheets of the same business enterprise on different dates.

# Comparative Balance Sheet

The changes can be observed by comparison of the balance sheet at the beginning and at the end of a period and these changes can help in forming an opinion about the progress of an enterprise.

# Comparative Balance Sheet

The comparative balance sheet has two columns for the data of original balance sheet. A third column is used to show increase in figures. The fourth column may be added for giving percentages of increases or decreases.



# Comparative Balance Sheet

Interpretation of Comparative Balance Sheet:  
Consider the following aspects:

- Current financial position and liquidity position.
- Long-term financial position.
- Profitability of the concern.

# Comparative Balance Sheet

Interpretation of Comparative Balance Sheet:

## 1. Current Financial Position / Short-term Financial Position

❖ Working Capital = Current Assets –  
Current Liabilities

The increase in working capital means improvement in the current financial position of the business. An increase in current assets accompanied by an increase in current liabilities of the same amount will not show any improvement in the short-term financial position.

# Comparative Balance Sheet

Interpretation of Comparative Balance Sheet:

## 1... Current Financial Position / Short-term Financial Position

- ❖ Liquidity position of the Concern

Increase in liquid assets like cash-in-hand, cash-at-bank, bills receivables, debtors, etc will improve the liquidity position of the concern. An increase in inventory may increase working capital of the business but will not be good for the business.

# Comparative Balance Sheet

Interpretation of Comparative Balance Sheet:

## 2. Long-term Financial Position

- ❖ Changes in Fixed Assets, Long-term Liabilities and Capital.

An increase in fixed assets should be compared to the increase in long-term loans and capital. If the increase in fixed assets is more than the increase in long-term securities then part of fixed assets has been financed from the working capital. A wise policy will be to finance fixed assets by raising long-term funds.

# Comparative Balance Sheet

Interpretation of Comparative Balance Sheet:

## 2... Long-term Financial Position

- ❖ Nature of Assets/Liabilities which have increased or decreased .

An increase in Plant & Machinery will increase production capacity of the concern. An increase in loaned funds will mean an increase in interest liability whereas an increase in share capital will not increase any liability for paying interest.

# Comparative Balance Sheet

Interpretation of Comparative Balance Sheet:

## 3. Profitability of the Concern

- ❖ Increase or decrease in retained earnings, various resources and surpluses, etc.

An increase in the balance of Profit and Loss Account and other resources created from profits will mean an increase in profitability to the concern. The decrease in such accounts may mean issue of dividend, issue of bonus shares or deterioration in profitability of the concern.

# Comparative Income Statements

This statement exhibits the working result of the enterprise for a given period of time and serves the purpose of comparison. It gives an idea of the progress of a business over a period of time. The working results of two or more firms or two or more periods of the same firm can be expressed in money or percentages.



# Comparative Income Statements

Steps involved in the interpretation of Income Statements:

1. The increase or decrease in sales should be compared with the increase or decrease in cost of goods sold. An increase in sales will not always mean increase in profits. The profitability will improve if the increase in sales is more than the increase in cost of goods sold.

# Comparative Income Statements

Steps involved in the interpretation of Income Statements:

2. The second step is the study of operating profit. For calculating operating profit, operating expenses such as office and administrative expenses, selling and distribution expenses etc. should be deducted from Gross Profit.

# Comparative Income Statements

Steps involved in the interpretation of Income Statements:

2... An increase in operating profit will result from an increase in sales position and control of operating expenses. At the same time a decrease in profit may be due to an increase in operating expenses or a decrease in sales.

# Comparative Income Statements

Steps involved in the interpretation of Income Statements:

3. The increase or decrease in profit will give an idea about the overall profitability of the concern. There are certain non-operating expenses which will result in a decrease in the operating profit. Such expenses are interest paid, loss on sale of asset, writing off deferred expenses, payment of tax etc.

# Comparative Income Statements

Steps involved in the interpretation of Income Statements:

3... When all non-operating expenses are deducted from the operating profit we get net profit. Some non-operating incomes may also be there which will increase net profit. An increase in net profit will give us an idea about the progress of the concern.

# Comparative Income Statements

Steps involved in the interpretation of Income Statements:

4. An opinion should be formed about profitability of the concern and it should be given at the end. It should be mentioned whether the overall profitability is good or not.

# TREND ANALYSIS

The financial statements may be analyzed by computing trends of series of information. This method determines the direction upwards or downwards and involves the computation of the percentage relationship that statement item bears to the same item in base year. The information for a number of years is taken up and one year, generally the first year, is taken as a base year.

# TREND ANALYSIS continue...

## For example:

If sales figures for the year 1995 to 1999 are to be studied, then sales of 1995 will be taken as 100 and the percentage of sales for all other years will be calculated in relation to the base year, i.e., 1995.



# TREND ANALYSIS continue...

## Interpretation of Trend Analysis:

- The mere increase or decrease in trend percentage may give misleading results if studied in isolation. An increase of 20% in current assets may be treated favourable. If this increase in current asset is accompanied by an increase in current liabilities, then the increase.
- An increase in sales may not increase profits if the cost of production has also gone up.

# TREND ANALYSIS continue...

## Interpretation of Trend Analysis:

- The base period should be a normal period. The price level changes in subsequent years may reduce the utility of trend ratios. If the figure of the base period is very small, then the ratios calculated on this basis may not give a true idea about the financial data. The accounting procedures and conventions used should be similar, otherwise the figures will not be comparable.

# COMMON-SIZE STATEMENT

The common-size statements, balance sheet and income statement, are shown in analytical percentages. The figures are shown as percentages of total assets, total liabilities and total sales.

Two types:

- COMMON-SIZE BALANCE SHEET
- COMMON-SIZE INCOME STATEMENT

# COMMON-SIZE STATEMENT

## COMMON-SIZE BALANCE SHEET

A statement in which balance sheet items are expressed as the ratio of each asset to total assets and the ratio of each liability is expressed as a ratio of total liabilities is called common-size balance sheet.

The common-size balance sheet can be used to compare companies of differing size. The comparison of figures in different periods is not useful because total figures may be affected by a number of factors.

# COMMON-SIZE STATEMENT

## COMMON-SIZE INCOME STATEMENT

The items in income statement can be shown as percentages of sales to show the relation of each item to sales. A significant relationship can be established between items of income statement and volume of sales.

# COMMON-SIZE STATEMENT

## COMMON-SIZE INCOME STATEMENT

Continue...

The increase in sales will certainly increase selling expenses and not administrative and financial expenses. In case the volume of sales increases to a considerable extent, administrative and financial expenses may go up. In case the sales are declining, the selling expenses should be reduced at once.

# COMMON-SIZE STATEMENT

## COMMON-SIZE INCOME STATEMENT

Continue...

A relationship is established between sales and other items in income statement and this relationship is helpful in evaluating operational activities of the enterprise.

# FUNDS FLOW STATEMENT

(STATEMENT OF CHANGES IN FINANCIAL POSITION)

The Fund Flow Statement is a statement of sources and application of funds. It shows the movement of funds and is a report of the financial operations of the business undertaking. It indicates various means by which funds were obtained during a particular period and the ways in which these funds were employed.

# FUNDS FLOW STATEMENT

## STATEMENT OF CHANGES IN FINANCIAL POSITION

Fund flow statement is a statement by which we study changes in the financial position between two accounting periods.

# FUNDS

In a popular sense the term funds means

**Working Capital**

**The excess of current asset over current liabilities**

The working capital concept of funds has emerged due to the fact that total resources of a business are invested partly in fixed assets and partly in form of liquid or nearly liquid form.

# FLOW OF FUNDS

The term *FLOW* means movement and includes both "inflow" and "outflow"

Flow of funds is said to have taken place when any transaction makes changes in the amount of funds available before happening of the transaction.

According to the working capital concept of funds, the term flow of funds refers to the movement of funds in the working capital.

# FLOW OF FUNDS

continue...

- **Source or Inflow of Funds**

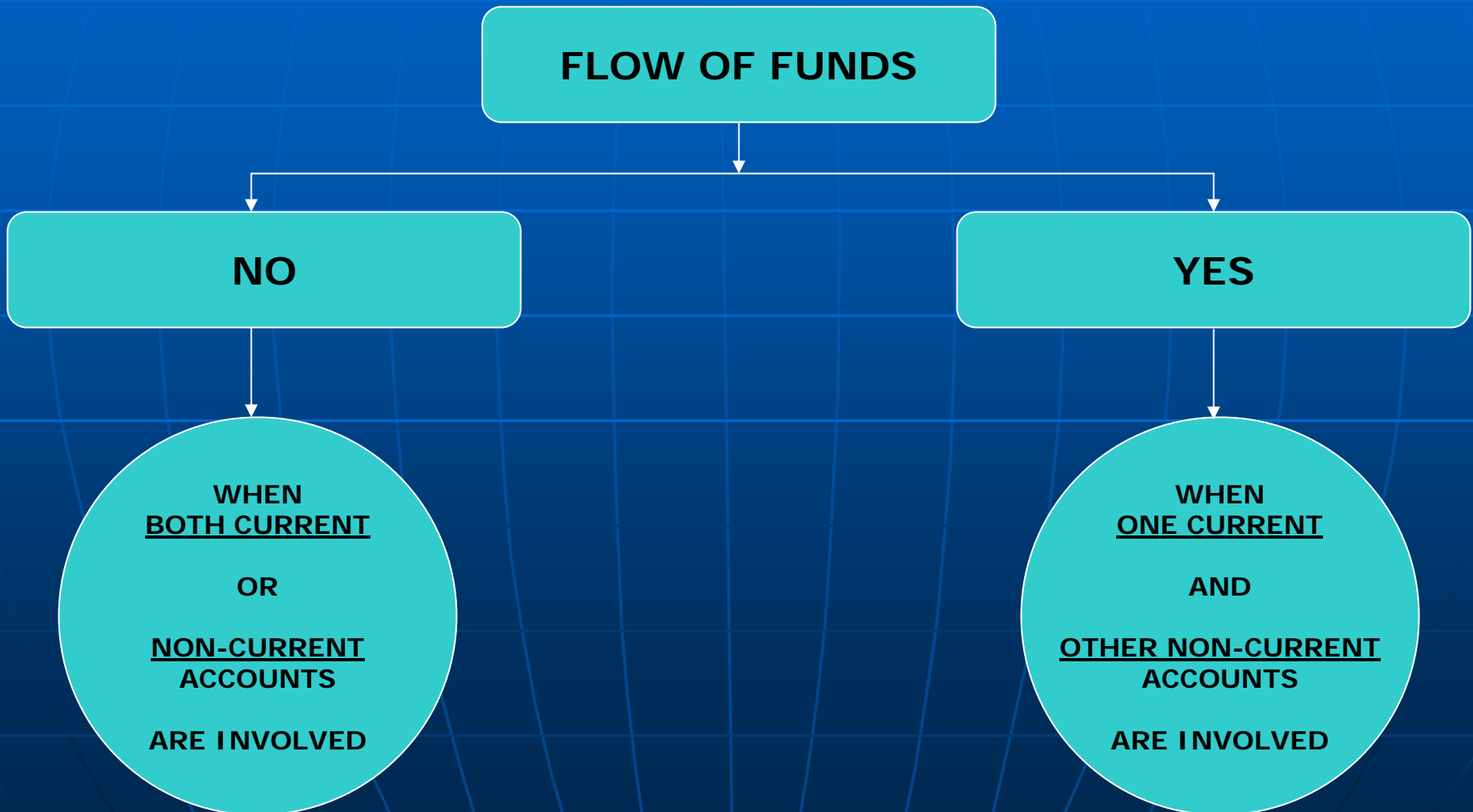
Transaction results in the increase in Working Capital

- **Application or outflow of Funds**

Transaction results in the decrease of Working Capital

# FLOW OF FUNDS

continue...



# FLOW OF FUNDS

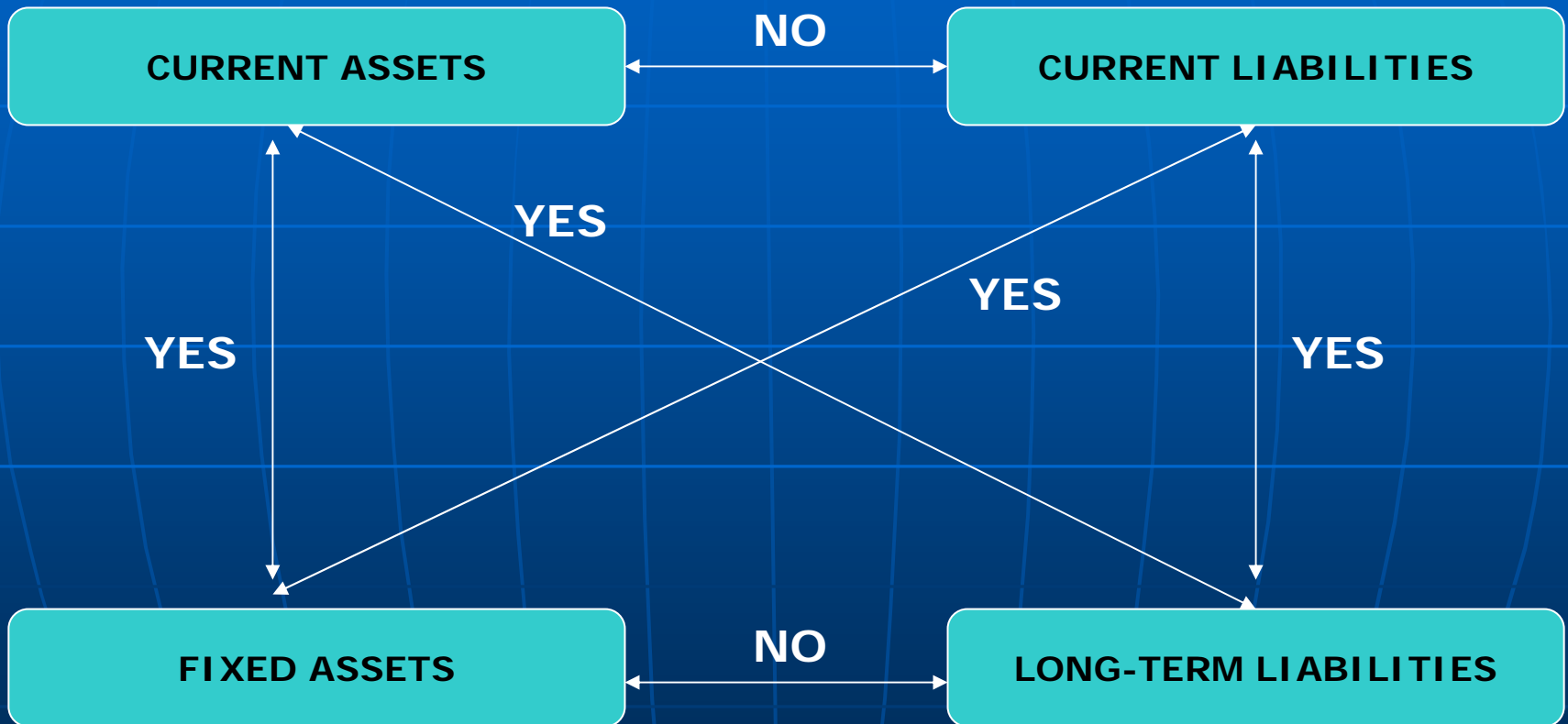
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The flow of funds occurs when a transaction changes on the one hand a non-current account and on the other a current account and vice versa.

When a change in a non-current eg:- fixed asset, long-term liabilities, etc. is followed by a change in another non-current account, it does not amount to flow of funds – **neither working capital increase nor decreases**. Similarly changes in two current accounts – **does not affect funds**.

# FLOW OF FUNDS

continue...



## FUNDS FLOW STATEMENT - Importance

The basic purpose of fund flow statement is to reveal the changes in the working capital on the two balance sheet dates. It also describes the sources from which additional working capital has been financed and the uses to which working capital has been applied.

This statement is particularly useful in assessing the growth of the firm, its resulting financial needs and in determining the best way of financing these needs.

# FUNDS FLOW STATEMENT – How to prepare ?

The funds flow statement is prepared by comparing two balance sheets and with the help of such other information derived from the accounts.

The preparation of a funds flow statement consists of two parts:

- Statement or Schedule of Changes in Working Capital
- Statement of Sources and Application of Funds.

# STATEMENT OF CHANGES IN WORKING CAPITAL

Working Capital = Current Assets – Current Liabilities

- An increase in current assets increases working capital
- A decrease in current assets decreases working capital
- An increase in current liabilities decreases working capital
- A decrease in current liabilities increases working capital



# STATEMENT OF SOURCES AND APPLICATION OF FUNDS

This statement indicates various sources from which funds have been obtained during a particular period of time and the uses or application to which these funds have been put.

# SOURCES OF FUNDS

- Funds From Operations or Trading Profits.
- Issue of Share Capital.
- Issue of Debentures and Raising of Loans, etc.
- Sale of Fixed (non-current) Assets and Long-term Investments.
- Non-Trading Receipts – dividends.
- Decrease in Working Capital

# APPLICATION or USES OF FUNDS

- Funds Lost in Operation.
- Redemption of Preference Share Capital.
- Repayment of Long-term Loans and Redemption of Debentures.
- Purchase of Non-Current Assets.
- Payment of Dividend and Tax.
- Non-Trading Payments.
- Increase in Working Capital

# FUND FROM OPERATION

Trading profit or profit from operation is the major source of funds. Sales is the main source of inflow in to the business but at the same time fund flow out of the business for expenses and cost of good sold.

The net effect of operation will be a source of fund if the inflow from sales is more than out flow for expenses and cost of goods sold.

It will application of funds if  $\text{inflow} < \text{out flow}$ .

# FUND FROM OPERATION continue...

The profit shown by P & L a/c may not represent the funds from operation, since certain non-fund and non-operating items have been debited or credited to the P & L a/c. So to find the funds from operations, such items to be adjusted to the profit obtained from the P & L a/c.

- Amortization of fictitious and intangible assets.
- Appropriation of Retained earnings.
- Depreciation.
- Loss on sale of fixed assets
- Payment of dividend.

# FUND FROM OPERATION - formats



# CASH FLOW STATEMENT

- Statement which describes the inflows (sources) and outflows (uses) of cash and cash equivalents in an enterprise during a specified period of time.
- This statements enumerates net effects of the various business transactions on cash and its equivalents and takes into account receipts and disbursement of cash.
- It summarizes the causes of changes in cash position of a business enterprise between dates of two balance sheets.

# CASH, CASH EQUIVALENTS, CASH FLOWS

- Cash Comprises Cash on Hand and demand deposits with Banks.
- Cash Equivalents are liquid investments that are readily convertible into known amount of cash.
  - Cash equivalents are held for the purpose of meeting short-term cash commitments rather than for investment.
  - An Investment normally qualifies as cash equivalent only when it has a short-maturity from the date of acquisition.
- Cash flows are inflows and outflows of cash and cash equivalents.

# CASH FLOWS

- Cash flows are inflows and outflows of cash and cash equivalents.
- Flow of cash is said to have taken place when any transaction makes changes in the amount of cash and cash equivalents available before happening of the transaction.
- Transaction results in the increase in Cash and its equivalents – Inflow (Source) of Cash.
- Transaction results in the decrease in Cash and its equivalents – Outflow (Use) of Cash.

# CLASSIFICATION OF CASH FLOWS

- Cash Flows from Operating Activities.
- Cash Flows from Investing Activities.
- Cash Flow from Financing Activities.

# CASH FLOWS FROM OPERATING ACTIVITIES

- Cash Receipts from the Sale of goods and rendering services.
- Cash Receipts from Royalties, Fees, Commission, and other revenues.
- Cash Payments to Suppliers of goods and other services.
- Cash Payments to and on behalf of Employees.
- Cash Receipts and Payments of an Insurance Enterprises for Premium and Claims, annuities and other policy benefits.

# CASH FLOWS FROM OPERATING ACTIVITIES

- Cash Payments or Refunds of Income Taxes unless they can be specifically identified with Financing and Investing activities.
- Cash Receipts and Payments relating to future contracts if the contracts are held for trading purposes.

# CASH FLOWS FROM INVESTING ACTIVITIES

- Cash Payments to acquire Fixed Assets (including intangible).
- Cash Receipts from Disposal of Fixed Assets.
- Cash Payments to acquire Shares, Warrant, or debt instruments of other enterprise.
- Cash Receipts from disposal of Shares, Warrant, or debt instruments of other enterprise.
- Cash Advances and Loans made to third parties.
- Cash receipts from repayment of Advances and Loans made to third parties.

# CASH FLOWS FROM INVESTING ACTIVITIES

- Cash Receipts and Payments for future contracts if the contracts are held not for trading purposes.

# CASH FLOWS FROM FINANCING ACTIVITIES

- Cash proceeds from issuing Shares or other similar instruments.
- Cash proceeds from issuing Debentures, Loans, Notes, Bonds, and other short-or long-term borrowings.
- Cash repayments of amounts borrowed such as redemption of Debentures, Bonds, Preference Shares, etc.