

# **SRI CHANDRASEKHARENDRA SARASWATHI VISWA MAHAVIDYALAYA**

(University established under section 3 of the UGC act 1956)

**Enathur, Kanchipuram – 631561**

## **ONLINE COURSE**



**FACULTY OF MANAGEMENT  
STUDIES  
DEPARTMENT OF COMMERCE**

# INTRODUCTION TO MANAGEMENT ACCOUNTING



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A white directional sign with a dark brown border and a dark brown arrow pointing left. The sign is mounted on a metal pole and is set against a blue sky with scattered white clouds. The text on the sign is in a bold, sans-serif font.

**Management Accounting**

# UNIT-I

- Management Accounting – Nature and Scope – Basic Cost concepts – Management Accounting Vs Financial Accounting – utility of management accounting – limitations of management accounting.



MANAGEMENT  
ACCOUNTING



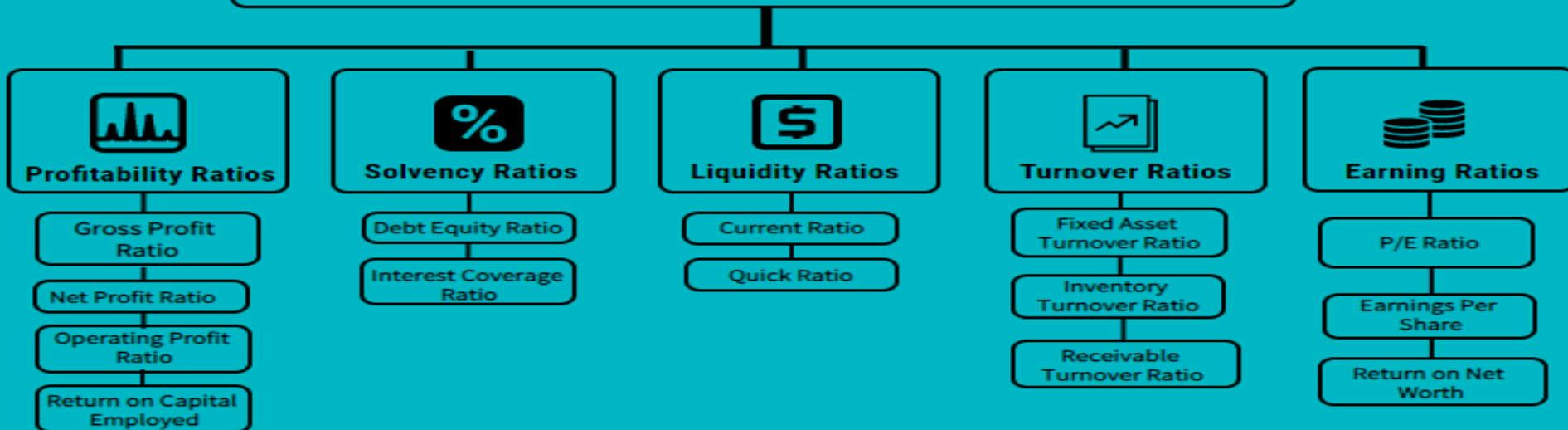
# Ratio Analysis



# UNIT-2

- Meaning of Ratios – Classification of ratios – Profitability ratios – coverage ratio – turnover ratio-financial ratio – DuPont Control Chart – Inter firm and

## Ratio Analysis Types



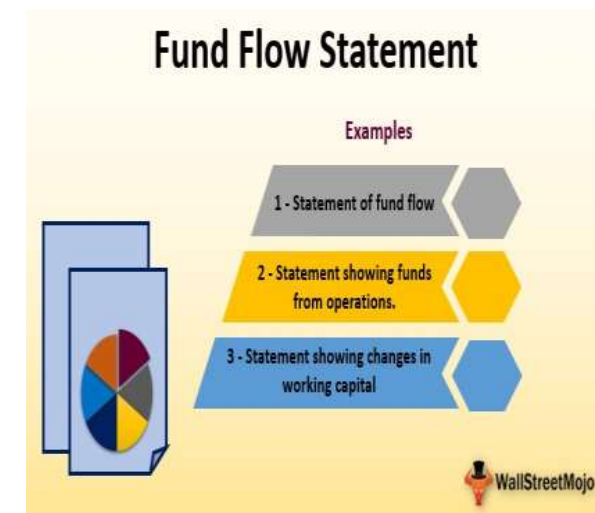
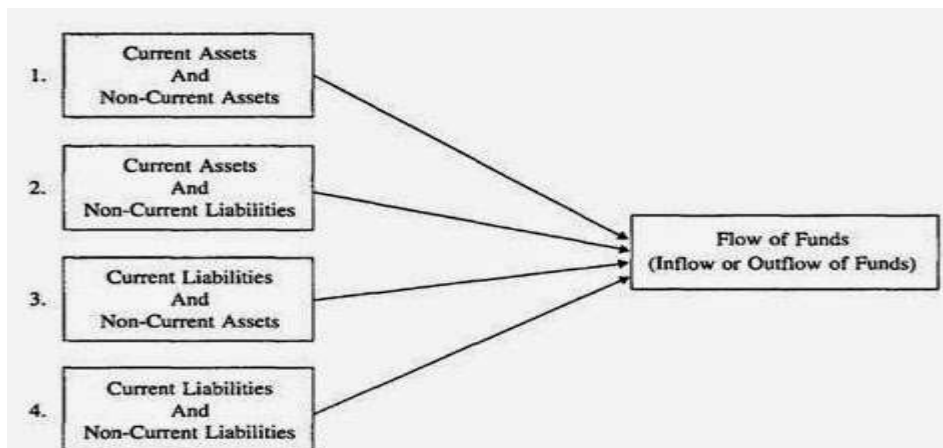
# FUND FLOW ANALYSIS



# Unit- III

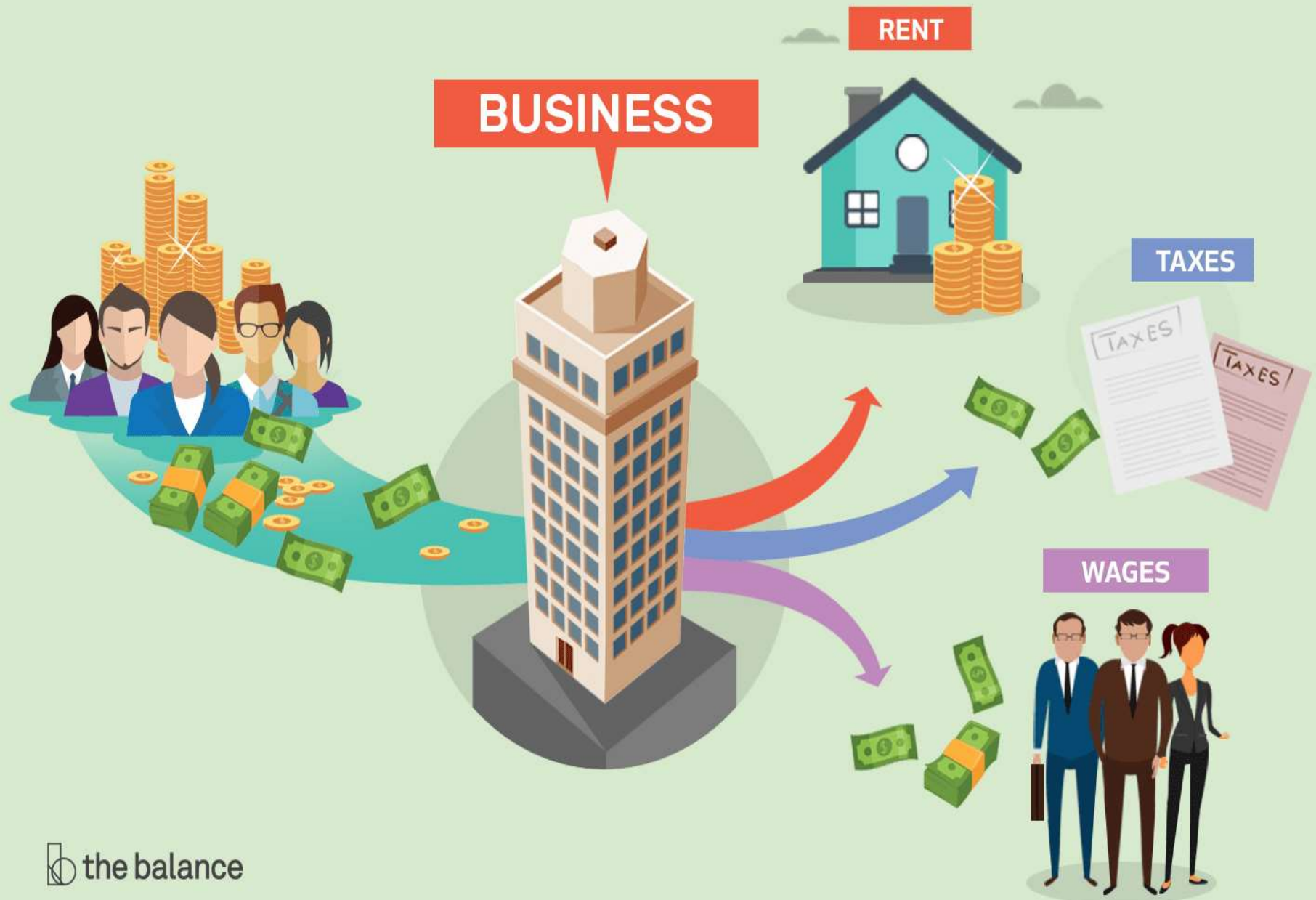


- Meaning of Fund Flow Statement – Uses of Fund Flow Statement – Parties interested in Fund Flow Statement – Preparation of Fund Flow Statement – Depreciation as source of funds





# Cash Flow - How It Works to Keep Your Business Afloat



# Unit-IV

Meaning of Cash Flow – Preparation of Cash Flow – Difference between Cash Flow and Fund Flow Utility of Cash Flow – Limitations of Cash Flow



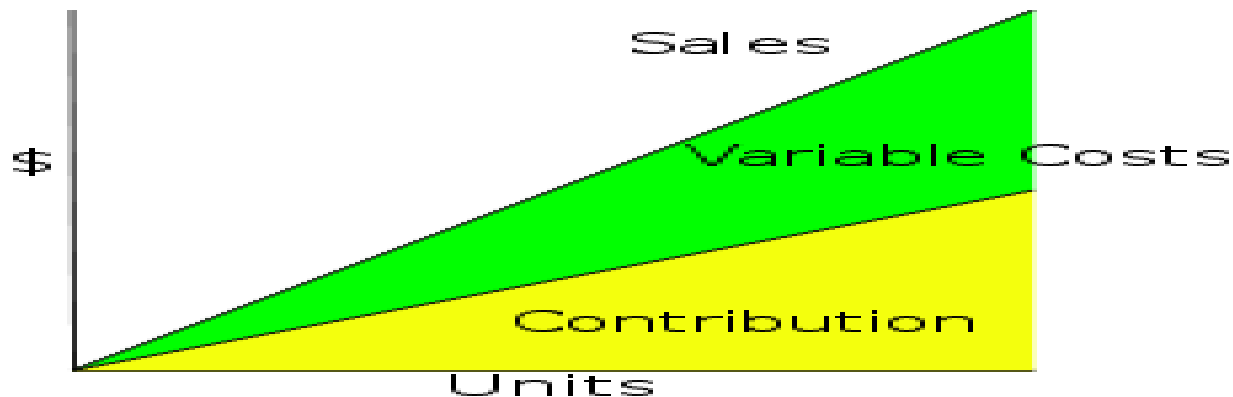
MARGINAL



COSTING

# Unit- V

Marginal Costing – Meaning – Importance – Application – Break Even Analysis – simple decision making problems.



# In this lecture

- **Management Accounting**
  - Role of management accountant
  - Nature and scope
  - Management accounting vs financial accounting
  - Utility of management accounting
  - Limitations of management accounting.

MANAGEMENT  
ACCOUNTING



# What is Management Accounting?

- It is that field of accounting which deals with providing information to managers for their use in planning, Decision making, performance evaluation, control, Management of cost, Financial Reporting.



# The Functions of Management



# Meaning of management accounting

- It refers to accounting for management.
- It is concerned with management.
- **Management accounting provides information to the management to use it as a base for decision making.**
- It refers to **presentation of accounting information** in such a way as to assist management in **the creation of policy to manage the day to day operation** of an undertaking.
- Management accounting also is known as managerial accounting and can be defined as a process of providing financial information and resources to the managers in decision making.

Management  
Accounting



# Role of management accountant

- <https://www.youtube.com/watch?v=JoOeaWxAbSQ>





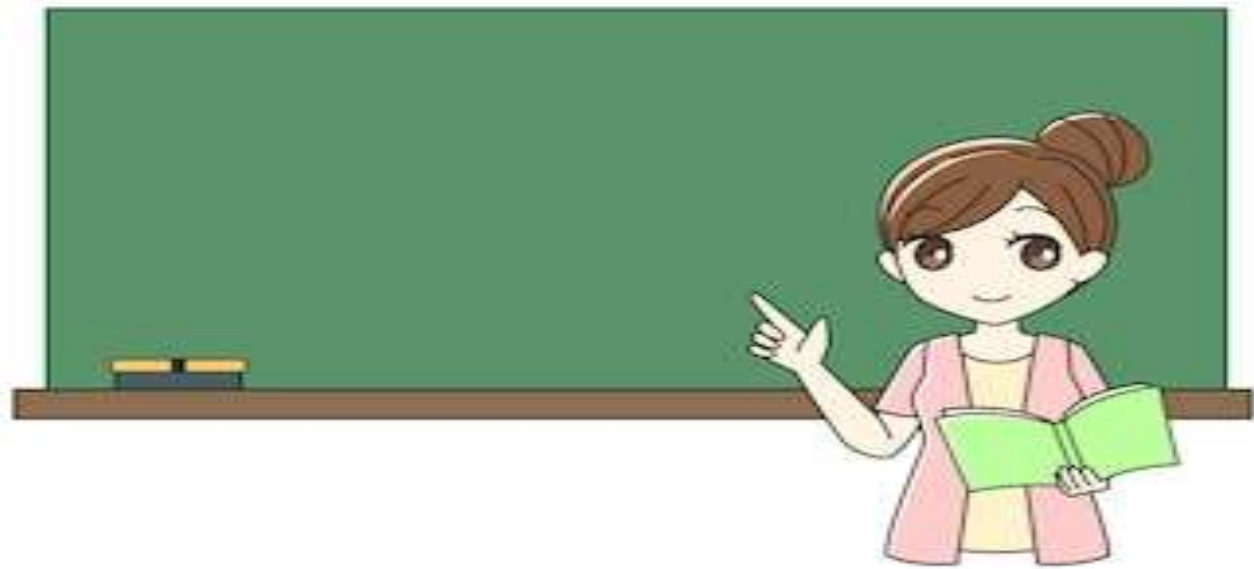
# Definition



- ICMA – Management accounting is the presentation of accounting information in such a way as to assist management in the creation of policy and in the day to day operation of an undertaking
- ROBERT N. ANTONY – Management accounting is concerned with accounting information that is useful to management.

# EVOLUTION OF MANAGEMENT ACCOUNTING

- <https://youtu.be/z5yxN4TaK6g>





# BRANCHES OF ACCOUNTING

## Financial Accounting

- Ascertain the profit and financial position of the business

## Cost Accounting

- Ascertain the cost of goods produced or services rendered by a business

## Management Accounting

- Supplies relevant information at the appropriate time to the management to enable decision making and exercise effective control

# Branches of Accounting



## Financial Accounting

Journal

Subsidiary Books

Ledger

Trial Balance

### Reports

Balance Sheet  
Profit & Loss A/c

Display

Out

## Cost Accounting

Cost Sheet

Material Cost

Labour Cost

Other Expenses Cost

### Reports

Standard Cost Report

Variance Report

Break Even Analysis

Marginal Cost Report

Price determination Report

## Management Accounting

Trend Analysis

Ratio Analysis

Fund Flow Statement Analysis

Cash Flow Statement Analysis

### Reports

Budgetary Reports

MIS Report

Interpretation

# BRANCHES OF ACCOUNTING

- **Financial Accounting**:- The accounting system concerned only with the financial state of affairs and financial results of operations is known as Financial Accounting.
- **Cost Accounting**:- It is that branch of accounting which is concerned with the accumulation and assignment of historical costs to units of product and department, primarily for the purpose of valuation of stock and measurement of profits.
- **Management accounting**:- It is the presentation of accounting information in such a way as to assist management in the creation of policy and the day-to-day operation of an undertaking.

# Characteristics of Management Accounting

<https://www.accountingnotes.net/management-accounting/management-accounting-meaning-nature-characteristics-objectives-tools-advantages-and-limitations/17041>

- The objective of Management accounting is **to record, analyze and present financial data to the Management** in such a way that it becomes useful and helpful in planning and running business operations systematically and effectively.

**(a) It helps management in decision making.**

**The information provided through** management accounting is only for internal use of management and is not distributed to third parties.

- (b) It is an optional technique** – There are no statutory obligations regarding adoption of management accounting tools nor are there any obligations to furnish management accounting information. A firm may choose to adopt accounting techniques totally depending upon its utility and desirability.

- (c) It is concerned with the future as it helps managers to take decisions related to** the future.

- (d) There is flexibility in presentation of information as there are no prescribed** formats for presentation of accounting information. The management may identify and choose their problems and pick the relevant format that solves the problem depending upon its utility.

# Functions

## Functions of Management Accounting

Provides data

Modifies data

Analyses and interprets data

Serves as a means for communicating

Facilitates control

Use of qualitative information





## Scope of Management Accounting

- **Financial Accounting:** Financial Accounting provides historical information useful for future planning and financial forecasting
- **Cost Accounting:** It provides various techniques of costing which are used in the process of planning and decision-making.
- **Forecasting and budgeting:** Management Accounting exercises the tool of forecasting and budgeting in the process of planning, controlling and decision-making
- **Tax accounting and tax planning:** the analysis of implication of tax provisions on future projects comes under management accounting.

## Top 4 Careers in Management Accounting



Contd..

- **Internal Control & Audit:** Management Accounting highly depends on internal control system existing in the organization to identify the weaker sections of the organization.
- **Cost Control Procedures:** include inventory control, cost control, budgetary control, variance analysis etc.
- **Financial Analysis and Interpretation:** Various financial analysis techniques such as Ratio Analysis, Fund Flow Analysis, Trend analysis are used to analyze and interpret financial data.

## Top 4 Careers in Management Accounting



Contd...

- **Reporting to Management:** The Management Accountant is required to submit reports to the management as per their requirements.
- **Office Services:** Management Accountant is expected to maintain and control office routines and procedures like filing, copying, communicating, data processing etc.
- **Statistical Tools:** Various statistical tools like graphs, charts, diagrams are used in the process of planning, controlling and decision-making.

## Top 4 Careers in Management Accounting



# TOOLS & TECHNIQUES of MANAGEMENT ACCOUNTING



<https://accountlearning.com/tools-and-techniques-of-management-accounting/>



# Tools & Techniques of Management Accounting

- Financial Statement Analysis
- Fund Flow Analysis
- Cash Flow Analysis
- Budgetary Control
- Standard Costing
- Marginal Costing
- Management Reporting
- Statistical and Operations Research techniques

FINANCIAL  
ACCOUNTING

VS

MANAGEMENT  
ACCOUNTING

<https://www.youtube.com/watch?v=MTf0-r4Dkr4>



## DIFFERENCE BETWEEN FINANCIAL ACCOUNTING AND COST ACCOUNTING

After studying financial accounting and cost accounting, you can understand the difference between these two accounting systems. Therefore, difference between financial accounting and cost accounting is as follows:

Table 27.1 Differences between financial accounting and cost accounting

Basis	Financial Accounting	Cost accounting
(i) Objective	It provides information about the financial performance and financial position of the business.	It provides information of ascertainment of cost to control cost and for decision making about the cost.
(ii) Nature	It classifies records, presents and interprets transactions in terms of money.	It classifies, records, presents, and interprets in a significant manner the material, labour and overheads cost.
(iii) Recording of data	It records Historical data.	It also records and presents the estimated/budgeted data. It makes use of both the historical costs and pre-determined costs..
(iv) Users of information	The users of financial accounting statements are shareholders, creditors, financial analysts and government and its agencies, etc.	The cost accounting information is used by internal management at different levels.
(v) Analysis of costs and profits	It shows the profit/ loss of the organisation.	It provides the details of cost and profit of each product, process, job, contracts, etc.
(vi) Time period	Financial Statements are prepared for a definite period, usually a year.	Its reports and statements are prepared as and when required.
(vii) Presentation of information	A set format is used for presenting financial information.	There are not any set formats for presenting cost information.

Cost  
Accounting

Management  
Accounting

a) Explain to the management three differences between management accounting and cost accounting to help them make a fair decision.

Points of differences	Cost Accounting	Management Accounting
1. Objective	The main objective of cost accounts is to ascertain and control cost	The main objective of management accounting is to provide useful information to management for decision-making.
2. Basis	It is based on both present and future recording transactions for cost ascertainment	It is concerned purely with the transactions relating to future.
3. Scope	Cost accounting has narrow scope as it covers matters relating to ascertainment and control of cost.	It has a wide scope in as much as it covers the areas of financial accounts, cost accounts, taxation, etc.
4. Utility	Cost accounts serves the needs of both internal management and external parties	Management accounting serves the needs of only internal management
5. Types of transactions	It deals only with monetary transactions i.e., it covers only quantitative aspect	It deals with both monetary and non-monetary transactions monetary transactions, i.e., both quantitative dealt with and qualitative aspects.
6. Observation	Cost accounts follow a definite principle of principles for ascertaining cost and a format	It does not follow a definite principle and instead, the data to be presented and format for recording. depends on the need of the management

**Financial Accounting**



**Cost Accounting**



**Management Accounting**



**Relationship For Better Results**

## Core Difference Between Financial Accounting, Cost Accounting And Management Accounting

<b>Financial Accounting</b>	<b>Cost Accounting</b>	<b>Management Accounting</b>
Financial Accounting is used to keep the record of transactions and determine profit and loss and the financial status of the firm.	Cost Accounting is used to allocate, ascertain, accumulate and accounting for cost.	Management Accounting helps management in policy forming and decisions-making.
It is concerned with historical data.	It is concerned with past and present recorded data.	It deals with the estimation of data for the future.
Financial accounting is governed by GAAP.	Some principles in cost accounting are followed for keeping a record of costs.	There are no set principles followed in management accounting.
In financial accounting, qualitative data are not recorded.	In cost accounting, only quantitative aspects are recorded.	Management accounting uses both quantitative as well as qualitative aspects.

# Advantages of Management Accounting

- Planning
- Controlling
- Coordination
- Performance Evaluation
- Organizing
- Motivating
- Communicating
- Decision-making

# Limitations of Management Accounting

- Reliance on accounting data
- Based on historical data
- Highly Expensive
- Complicated application
- Lack of objectivity

# Point to remember:

- Management accounting coined by James H. Bliss.
- Management accounting deals with the accounting and reporting of information to management for decision making.
- Management accounting is the presentation of accounting information in such a way to assist management in creation of policy and in the day-to-day operation of the undertaking.”
- It enables the management to discharge all its functions( management functions), i.e., planning, organization, staffing, direction and control efficiently with the help of accounting information
- Management accounting is applicable to Service Entities, Manufacturing Entities and Non-profit Entities and its subjective in nature.
- Management accounting today is a branch of accounting. And usage is not an compulsory.
- Management accounting deals with both Quantitative information and Qualitative information



# Continued.....

- The two major dominant forces of management accounting are financial accounting and cost accounting.
- The management accounting can be stated an extension of financial accounting ,cost accounting and responsibility accounting.
- Financial accounting was found efficient for management decision-making because it reported the state of affairs of the company as a whole posthumously. Financial accounting limitation gives way for introduction of management accounting.
- This was all right for the owners and other outsiders. But when management got divested from ownership and the survival of management depended on their competitive performance, financial accounting was found inadequate.

# Keyword:

- ***Cost Accounting:*** This helps management to conduct performance appraisal and also facilitates in formulating price policies.
- ***Financial Accounting:*** Financial accounting is a traditional method of accounting that supplies historical information about the firm during the past.
- ***Management Accounting:*** Management accounting provides necessary information to assist the management in the creation of policy and in the day-to-day operations.

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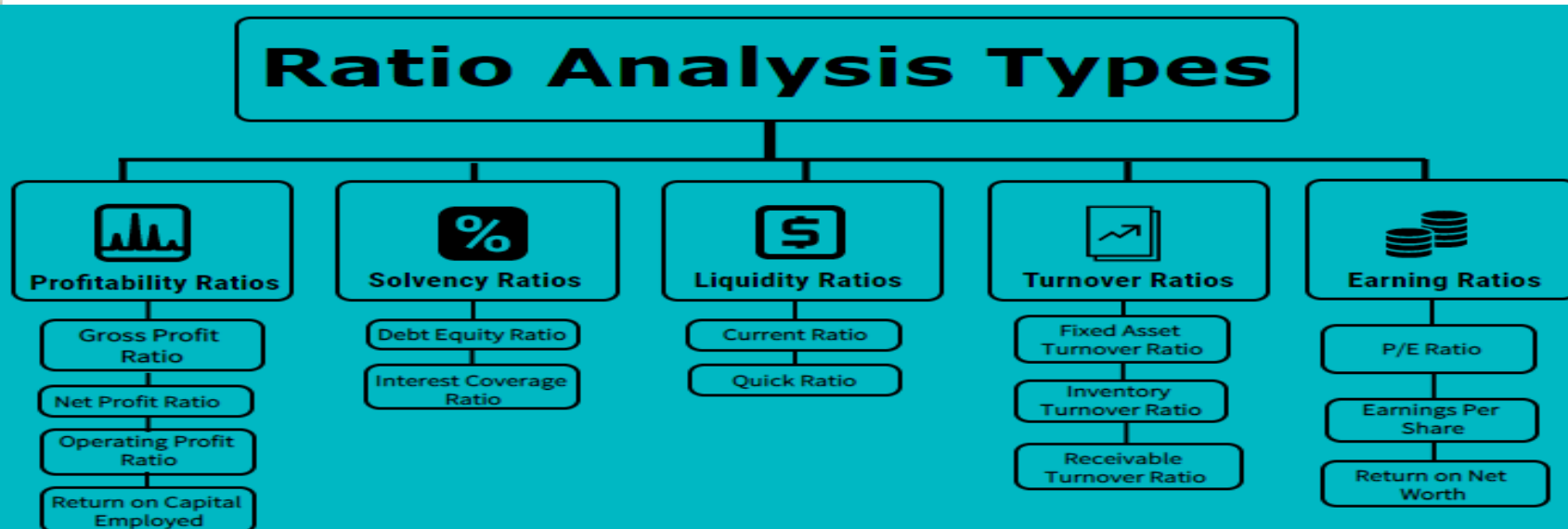
EMAIL: [vsjayarani@kanchiuniv.ac.in](mailto:vsjayarani@kanchiuniv.ac.in)

# Ratio Analysis



# In this lecture:

- Meaning of Ratios – Classification of ratios – Profitability ratios – coverage ratio – turnover ratio-financial ratio – DuPont Control Chart – Inter firm and Intra firm comparison



# Ratio Analysis







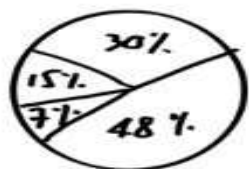
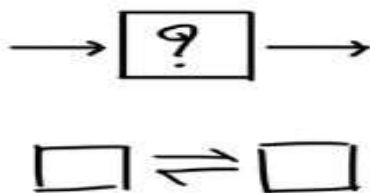
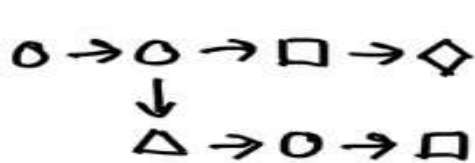
# Ratio Analysis



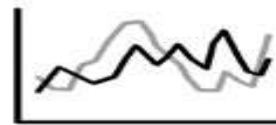
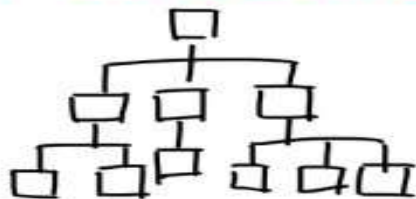
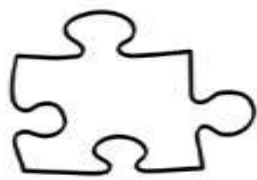
- The analysis of the financial statements and interpretations of financial results of a particular period of operations with the help of 'ratio' is termed as "ratio analysis." Ratio analysis used to determine the financial soundness of a business concern. **Alexander Wall designed a system of ratio analysis and presented it in useful form in the year 1909.**



**2 : 3**  
**2 to 3**  
 **$\frac{2}{3}$**



**Analysis**



# RATIO ANALYSIS

## INTRODUCTION

Ratio Analysis was pioneered by *Alexander wall* who presented a system of ratio analysis in the year **1909**.

## RATIO

A Ratio is a mathematical relationship between **two items** expressed in a **Quantitative form**.

## RATIO ANALYSIS

It is “The process of determining and presenting the relationship of items and groups of items in the financial statements”.

# Meaning and Definition

- The term 'ratio' refers to the mathematical relationship between any two inter-related variables. In other words, it establishes relationship between two items expressed in quantitative form.
- Ratio analysis involves the process of computing, determining and presenting the relationship of items or groups of items of financial statements.
- According J. Batty, Ratio can be defined as “the term **accounting ratio** is used to describe significant relationships which exist between figures shown in a **balance sheet and profit and loss account** in a budgetary control system or any other part of the accounting management.”

# RATIO ANALYSIS

Ratio analysis is a tool used to determine the financial health and operational efficiency of a company.

## USAGE

- ❖ **Inter Company Comparison** : Used for benchmarking the performances against competitors
- ❖ **Intra Company Comparison** : Comparison of performance of various departments within the organization.
- ❖ **Establishing Future Funds** : It can be helpful in establishing a future trend.

The Investors can use this for various types of assessment such as – Assessment of Liquidity ; Assessment of Long Term Solvency ; Assessment of Profitability ; Assessment of Operating Efficiency etc.



# STEPS IN RATIO ANALYSIS



- ✓ Selection of relevant information
- ✓ Comparison of calculated Ratio
- ✓ Interpretation and Reporting

# Steps in Ratio Analysis

- **(1) Selection of Relevant Information:**

The first step in ratio analysis is to select relevant information from financial statements and calculate appropriate ratios required for decision under consideration.

- **(2) Comparison of Calculated Ratios:**

In order to assess the relative meaning, the ratios calculated are compared with the past ratios and industry ratios.

- **(3) Interpretation and Reporting:**

- The third step in ratio analysis is to interpret the significance of various ratios, draw inferences and to write a report. The report may recommend specific action in the matter of the decision situation or may present alternatives with comparative merits or it may just state the facts and interpretation.





**MODE**

**RATIO  
ANALYSIS**



# Modes of expression of Ratio

Proportion

Rate or times

Percentage

# Modes of expression

- **(a) In Proportion:**

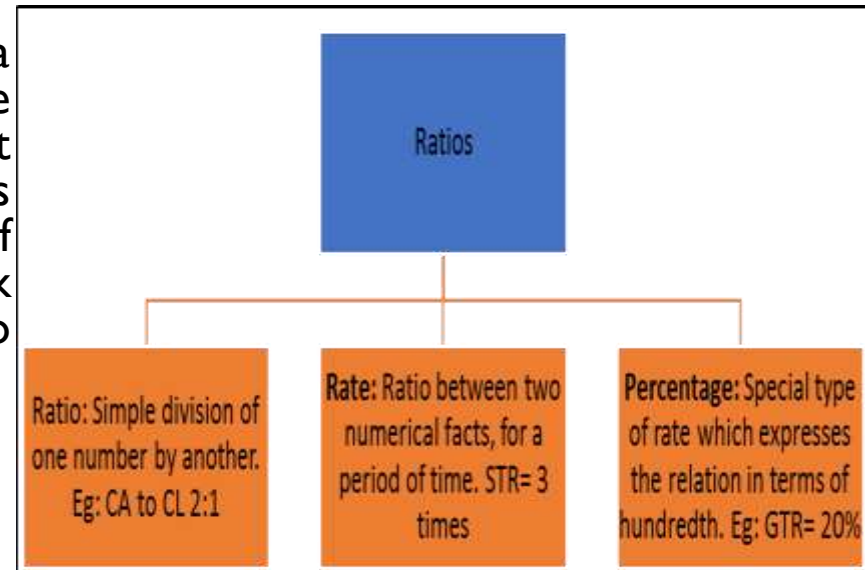
- In this type of expression the amounts of two items are expressed in a common denominator. An example of this form of expression is the relationship between current assets and current liabilities as "2":"1".

- **In Rate or Times or Coefficient:**

In this type of expression, a quotient obtained by dividing one item by another is taken as Unit of expression. Example of this form of expression is cost of sales divided by average stock (say 8), thus 8 times is the ratio between cost of sales and stock.

- **In Percentage:**

- In this type of expression, a quotient obtained by dividing one item by another is multiplied by one hundred to show the relationship in terms of percentage. For example- the relationship between net profit and sales may be expressed as say 25%.



# MODES OF EXPRESSION OF RATIO

- **In Proportion**

- Two items expressed in a common Denominator.
- **Ex.** Current Ratio 2:1

- **Rate or Time or Co-efficient**

- A Quotient obtained by dividing one items by another is taken as unit of expression.

- **Ex.** 
$$\frac{\text{Cost of sales}}{\text{Avg. stock}}$$

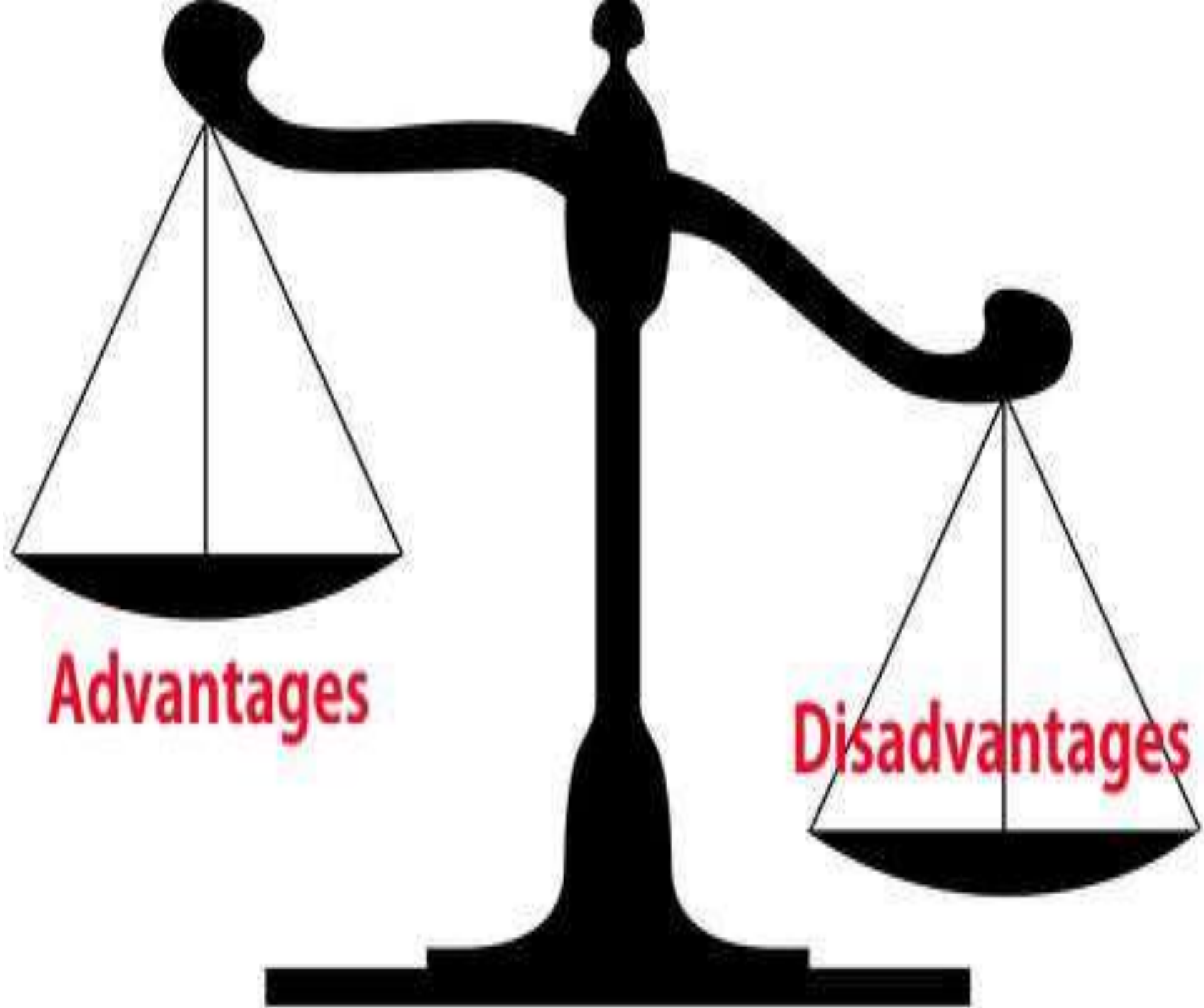
( say 8. thus 8 times in the ratio between cost of sale and stock)

- **In Percentage**

- A quotient obtained by dividing one items by another is multiplied by one hundred to show the relationship in terms of percentage.

- **Ex.** 
$$\frac{\text{Net profit} \times 100}{\text{Sales}}$$

( may be expressed as say 25%)



## MERITS OF RATIO ANALYSIS

- ❖ Forecasting
- ❖ Managerial control
- ❖ Facilitates communications
- ❖ Measuring efficiency
- ❖ Facilitating Investment Decision
- ❖ Useful in measuring Financial Solvency
- ❖ Inter Firm Comparisons

## DEMERITS OF RATIO ANALYSIS

- ❖ Practical knowledge
- ❖ Ratios are means
- ❖ Inter- relationship
- ❖ Non- availability of Standard or Norms
- ❖ Time lag
- ❖ Change in Price Level

# Advantages of Ratio Analysis



## **The following are the advantages of ratio analysis:**

### **(1) Forecasting:**

Ratios reveal the trends in costs, sales, profits and other inter-related facts, which will be helpful in forecasting future events.

### **(2) Managerial Control:**

Ratios can be used as 'instrument of control' regarding sales, costs and profit.

### **(3) Facilitates Communication:**

Ratios facilitate the communication function of management as ratios convey the information relating to the present and future; quickly, forcefully and clearly.

### **(4) Measuring Efficiency:**

Ratios help to know operational efficiency by comparison of present ratios with those of the past working and also with those of other firms in the industry.

<https://www.yourarticlelibrary.com/accounting/ratio-analysis/ratio-analysis-meaning-advantages-and-limitations-accounting/65204>



### **5) Facilitating Investment Decisions:**

Ratios are helpful in computing return on investment. This helps the management in exercising effective decisions regarding profitable avenues of investment.

### **(6) Useful in Measuring Financial Solvency:**

The financial statements disclose the assets and liabilities in a format. But they do not convey relationship of various assets and liabilities with each other, whereas ratios indicate the liquidity position of the company and the proportion of borrowed funds to total resources which reveal the short term and long term solvency position of a firm.

### **(7) Inter Firm Comparisons:**

The technique of inter-firm comparisons can be carried out successfully only with the help of ratio analysis. Otherwise no firm may come forward to disclose full information. Inter-firm comparisons help the management to compare its performance with an external 'benchmark' or standard.

# **Limitations of Ratio Analysis**

**The following are the limiting factors which minimize or reduce the value of ratio analysis:**

**(1) Practical Knowledge:**

The analyst should have thorough knowledge and experience about the firm and industry.

**(2) Ratios are Means:**

Ratios are not an end in themselves but they are means to achieve a particular purpose or end.

**(3) Inter-Relationship:**

Ratios are inter-related and therefore a single ratio cannot convey any meaning. It has to be interpreted with reference to other related ratios to draw meaningful conclusions.

**(4) Non Availability of Standards or Norms:**

Ratios will be meaningful if they can be compared with standards or norms. Except for a few financial ratios, other ratios lack standards which are universally recognized.

**(5) Accuracy of Financial Information:**

The accuracy of a ratio depends on the accuracy of information derived from financial statements. If the statements are-inaccurate, same will be the result with ratios.

### **(6) Consistency in Preparation of Financial Statements:**

Inter-firm comparisons with the help of ratio analysis will be useful only if the firms use uniform accounting procedures consistently. Otherwise the comparison may be useless.

### **(7) Detachment from Financial Statements:**

Ratios are not substitutes to financial statements. They can be meaningful only if they are read along with information with which they are prepared. If the information is detached, ratios themselves cannot convey much useful message.

### **(8) Time Lag:**

Ratio analysis will be fruitful only if the conclusions are conveyed quickly to the management. If there is a delay, the utility of the data is diminished and the purpose itself may be defeated.

### **(9) Change in Price Level:**

Ratio analysis becomes redundant during periods of heavy price fluctuations.

# Classification of ratio

```
graph TD; A[Classification of ratio] --> B[Profitability ratio]; A --> C[Turnover Ratio]; A --> D[Solvency Ratio]
```

Profitability  
ratio

Turnover  
Ratio

Solvency  
Ratio

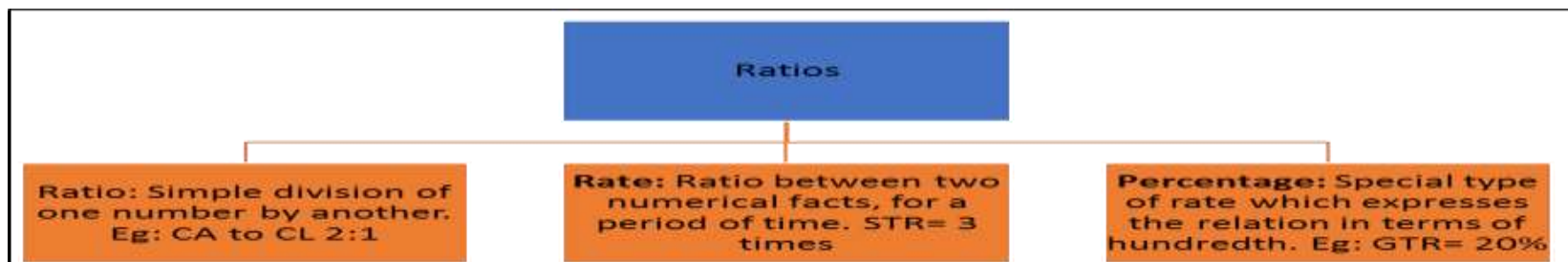
**Ratio Analysis** : It is a technique of analysis of financial statements to conduct a quantitative analysis of information in a company's financial statements.

“Ratio analysis is a study of relationship among various financial factors in a business.”

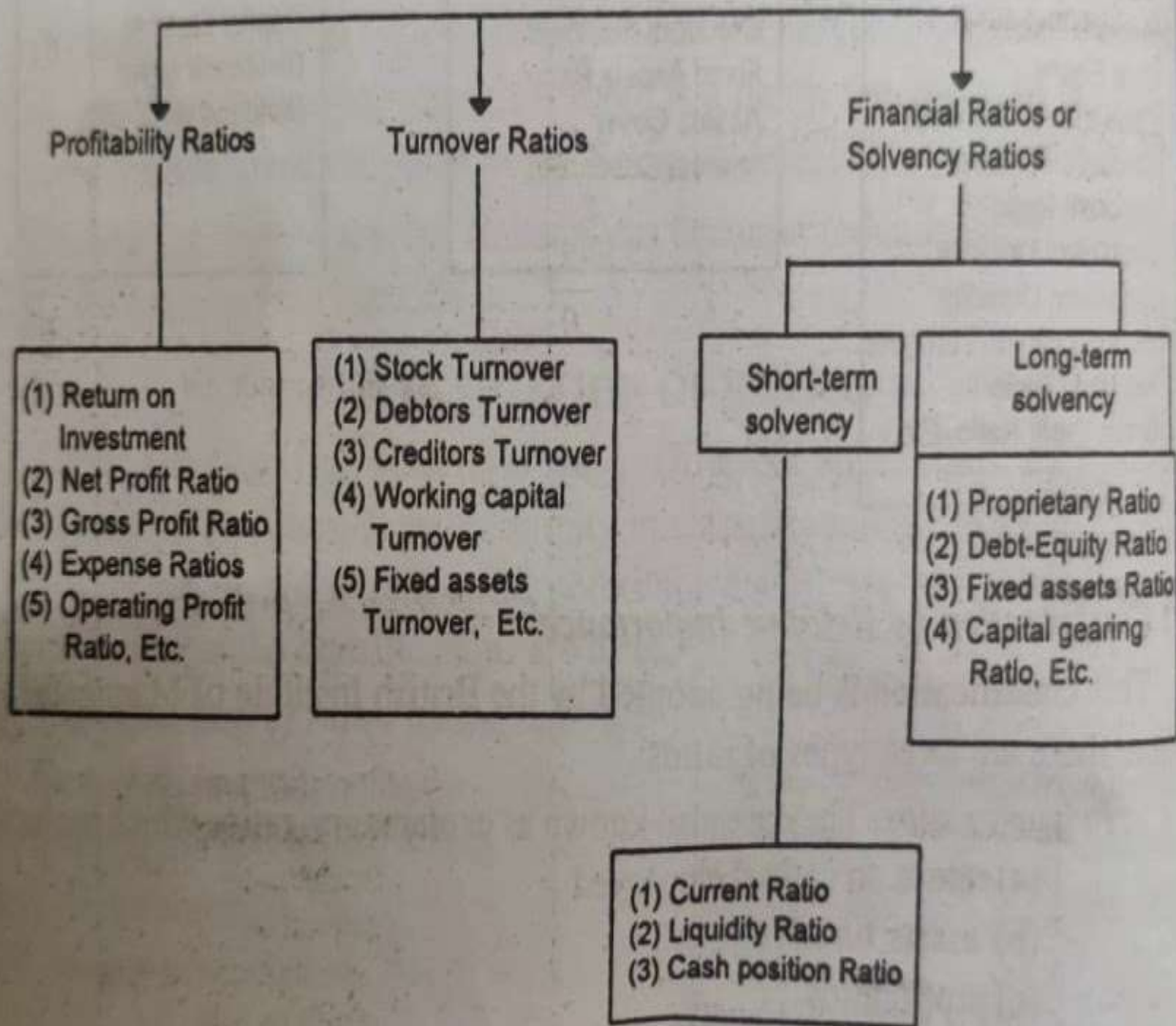
– Myers

Expression of ration: Ratios are expressed in following four ways:

- Pure Ratio Like 2:1. All liquidity and solvency ratios are expressed in pure form.
- Percentage e.g. 15%. All profitability ratios are presented in percentage form.
- Times Like 4 times. All turnover ratios and Interest Coverage Ratio are presented in this form.
- Fraction like  $\frac{3}{4}$ .



## Classification of Ratios by Purpose/Function



The above classification *i.e.*, classification based on purpose is used in this chapter and a detailed discussion of each ratio is made in the following pages.

# CLASSIFICATION OF RATIOS BY PURPOSE

Financial ratio/ solvency ratio



Profitability ratio	Turnover ratio	Short term solvency ratio	Long term solvency ratio
<ul style="list-style-type: none"><li>• Return on investment</li><li>• Net profit ratio</li><li>• Gross profit ratio</li><li>• Expense ratio</li><li>• Operating profit ratio</li></ul>	<ul style="list-style-type: none"><li>• Stock turnover</li><li>• Debtors turnover</li><li>• Creditors turnover</li><li>• Working capital turnover</li><li>• Fixed assets turnover</li></ul>	<ul style="list-style-type: none"><li>• Current ratio</li><li>• Liquidity ratio</li><li>• Cash position ratio</li></ul>	<ul style="list-style-type: none"><li>• proprietary ratio</li><li>• Debt equity ratio</li><li>• Fixed assets ratio</li><li>• Capital gearing ratio</li></ul>



# IMPORTANCE OF RATIO ANALYSIS

Enables the banker or lender to arrive at the following factors :

- Liquidity position
- Profitability
- Solvency
- Financial Stability
- Quality of the Management
- Safety & Security of the loans & advances to be or already been provided

# Objectives of Ratio Analysis

- To simplify the accounting information
- To assess the operating efficiency of the business.
- To help in comparative analysis
- To analyze the profitability of the business.
- <https://www.careerlauncher.com/cbse-ncert/class-12/Accounts/CBSE-Accountingratios-Notes.html>
- <https://mycbseguide.com/blog/accounting-ratios-class-12-notes-accountancy/>

# INCOME STATEMENT FORMAT

- Sales XXXX
- Less: cost of goods sold XXXX
- **GROSS PROFIT** XXXX
- LESS: operating expenses XXXX
- **OPERATING PROFIT** XXXX
- Less: Non operating Expenses XXXX
- Add: Non operating Income XXXX
- **NET PROFIT** XXXX

# PROFITABILITY RATIOS

The term profitability means the profit earning capacity of any business activity. Thus, profit earning may be judged on the volume of profit margin of any activity and is calculated by subtracting costs from the total revenue accruing to a firm during a particular period. Profitability Ratio is used to measure the overall efficiency or performance of a business. Generally, a large number of ratios can also be used for determining the profitability as the same is related to sales or investments.

The following important profitability ratios are discussed below:

1. **Gross Profit Ratio.**
2. **Operating Ratio.**
3. **Operating Profit Ratio.**
4. **Net Profit Ratio.**
5. **Return on Investment Ratio.**
6. **Return on Capital Employed Ratio.**
7. **Earning Per Share Ratio.**
8. **Dividend Payout Ratio.**
9. **Dividend Yield Ratio.**
10. **Price Earning Ratio.**
11. **Net Profit to Net Worth Ratio.**

<https://www.slideshare.net/Gurumoorthicommerce/ratio-analysis-71633481>

- Operating Expenses:
- Office expenses
- Administrative expenses
- Selling and Distribution expenses

- Non operating Expenses:
  - Finance expenses
  - Loss on sale of assets
  - Income tax
  - Good will written off
- Non operating Income:
  - Profit on sales of assets
  - interest received ,
  - dividend received

# I) Gross Profit Ratio

- Gross Profit Ratio established the relationship between gross profit and net sales. This ratio is calculated by dividing the Gross Profit by Sales. It is usually indicated as *percentage*.
- It represents **the operating profit of the company after adjusting the cost of the goods that are been sold.** Higher the gross profit ratio, lower the cost of goods sold and greater the satisfaction of the management.
- **Gross profit ratio =  $\frac{\text{Gross profit}}{\text{Net Sales}} \times 100$**

## *II. GROSS PROFIT RATIO*

- It is also known as “**Gross Margin or Trading Margin Ratio**”.
- It indicates the difference between sales and Direct costs.

$$\text{G.P Ratio} = \frac{\text{Gross Profit} \times 100}{\text{Net Sales}}$$

Higher Ratio Indicates Higher Profitability.

- $\text{Gross Profit} = \text{Sales} - \text{Cost of goods sold}$
- $\text{Net Sales} = \text{Total sales} - \text{sales return}$
- $\text{Cost of goods sold} = \text{opening stock} + \text{purchases} - \text{closing stock}$ 
  - (or)
  - $= \text{sales} - \text{Gross profit}$



# I. Calculate Gross profit ratio

- Cash sales 40,000
- Sales return 5,000
- Credit sales 65,000
- Gross profit 40,000
- Solution:
  - $\text{Gross profit ratio} = \text{gross profit} / \text{Net sales} \times 100$
  - $\text{Net sales} = \text{total sales} - \text{sales return}$ 
    - $1,05,000 - 5,000$
    - $= 1,00,000$
    - $\text{Gross profit ratio} = 40,000 / 1,00,000 \times 100$
    - $= 40\%$

# Sakthi Ltd submit the following data calculate the gross profit ratio

- Sales 1,00,000
- Sales return 20,000
- Cost of goods sold 50,000
- Solution:
  - Gross profit ratio =  $\frac{\text{gross profit}}{\text{net sales}} \times 100$ 
    - =  $\frac{30,000}{80,000} \times 100$
    - = **37.5%**
  - Gross profit = sales – cost of goods sold
  - Net sales = sales – sales return
    - 1,00,000-20,000
    - =80,000
    - Gross profit = sales – cost of goods sold
    - 80,000-50,000
    - = 30,000

# Net profit ratio

- This ratio determines the overall efficiency of the business. The relationship of net profit to sales.
- Net profit Ratio =  $\frac{\text{Net profit}}{\text{sales}} \times 100$

### III. OPERATING RATIO

- This ratio indicates the relationship between total operating expenses and sales.

$$\text{operating Ratio} = \frac{\text{Cost of sales} + \text{Operating Expenses} \times 100}{\text{Net sales}}$$

- It measures the amount of expenditure incurred in production sales and distribution of output.
- “**Lower**” the ratio indicated **more efficiency**.
- Operating Expenses Incurred, Cost of goods Sold + administrative exp, & selling & distribution exp.
- Generally Finance Exp not included (Interest)...

## *IV. OPERATING PROFIT RATIO*

- It made from the operating sources to the sales.
- It shows the operational efficiency of the firm and it is a measures of the management efficiency in running the routine operations of the firm.

$$\text{Operating Profit Ratio} = \frac{\text{Operating Profit} \times 100}{\text{Sales}}$$

- Operating profit = Net profit + Non.op.Exp - Non-op.Income (or) gross profit - operating exp.
- Operating expenses include administration, selling and distribution exp. ( exclude Finance exp)

## V. EXPENSES RATIO

- These ratio are also known as supporting ratios to operating Ratio.
- It shows the concern to know how it is able to save or waste over expenditure in respect of different items of expenses.
- Each aspect of cost of sales and operating expenses are analysed.

**formula:**

$$\text{Administration Exp} = \frac{\text{Administrative Exp} \times 100}{\text{Net sales}}$$

$$\left. \begin{array}{l} \text{Selling and} \\ \text{Distribution exp} \end{array} \right\} = \frac{\text{Selling \& Distribution exp} \times 100}{\text{Net sales}}$$

$$\text{Financial Exp. Ratio} = \frac{\text{Financial Exp} \times 100}{\text{Net Sales}}$$

Further, Direct Material exp. Ratio, Direct Wages & Factory overhead (net sales)

## 2. TURNOVER RATIOS

- It is also called **Efficiency Ratio** and **Activity Ratio**. (velocity)
- It shows operational efficiency of the business.
- i.e., Effective, profitable and rational use of resources available to the concern.
- Which is calculated with reference to sales or cost of sales and expressed in number of times, i.e., rate of turning over or rotation

The Turnover ratios are:

- ✓ Stock Turnover Ratio
- ✓ Debtors Turnover Ratio
- ✓ Creditors Turnover Ratio
- ✓ Working Capital Turnover Ratio
- ✓ Fixed Assets Turnover Ratio
- ✓ Capital Turnover Ratio

## I. A. Inventory / stock turnover ratio

- It is also called **stock velocity Ratio**
- It Indicates whether the investment is optimum.
- The quantity of stock should be enough to meet the requirements of the business.
- But it should not be too excessive
- In short, the number of times the inventory is turned over during a particular accounting period.



$$\text{stock Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Avg. Inventory}} \quad (\text{or})$$

$$= \frac{\text{Net Sales}}{\text{Avg. Inventory cost}} \quad (\text{or})$$

$$= \frac{\text{Net sales}}{\text{Avg. Inventory at selling price}}$$

$$\text{Cost of Goods Sold} = (\text{op. stock} + \text{purchase} + \text{direct exp}) - \text{cls. Stock}$$

(or)

$$= (\text{Total cost of production} + \text{op. Stock of finished goods}) - \text{cls. Stock}$$

(or)

$$= \text{sale} - \text{Gross profit.}$$

High ratio = Efficient Inventory mgt.

## B. Stock turnover period/ inventory turnover period

- Inventory turnover Ratio can be related to “time”
- The ratio can be expressed in term of “Days or Months”.

$$\text{Inventory Turnover period} \left. \vphantom{\text{Inventory Turnover period}} \right\} = \frac{\text{Days or Months in the year}}{\text{Inventory Turnover Ratio}}$$

- It refers with in a particular days or months the stock can used or sold.

## II. DEBTOR TURN OVER RATIO

- It is also called, **Receivable turnover Ratio or debtors velocity.**
- It measures the number of times the receivables are rotated in a year in terms of sales.
- It is relationship between total sales and closing balance of debtors.

$$\text{D.T.R} = \frac{\text{Net Credit sales (total sales- [cash sales + sales returns])}}{\text{Avg. Debtors - avg. B/R (Trade Debtor)}}$$

Note: Bad debts & their provision are not deducted from total Debtors .

The higher ratio indicates that the debts are being collected promptly.

**AVERAGE COLLECTION PERIOD** ( Avg. No of days for which a firm has to wait before its receivables are collected into cash).

$$\text{A.C.P} = \frac{\text{Months or days in a year}}{\text{Debtors turnover Ratio}}$$

### III. Creditors turnover ratio / accounts payable turnover

- It is also called “creditors velocity”.
- It indicates the number of times the payable rotate in a year.
- It shows the relationship between credit purchase and accounts payable i.e., ( sundry creditors, B/P).

$$\text{C.T.R} = \frac{\text{Net credit purchase}}{\text{Avg. Accounts payable}}$$

$$\left. \begin{array}{l} \text{Avg. Payment} \\ \text{period} \end{array} \right\} = \frac{\text{Days or months in a year}}{\text{Creditors Turnover Ratio}}$$

**Lower Ratio shows** creditors being paid promptly.

## iv. Working capital turnover ratio

- It establishes relationship between cost of sales and working capital.
- It explain the effective utilisation of working capital.
- Higher sales in comparison to working capital indicates overtrading.

$$\text{W.C.T} = \frac{\text{sales/ cost of sales}}{\text{Net working capital ( C.A- C.L)}}$$

## V. Fixed assets turnover ratio

- It determines effective utilisation of fixed assets.
- It is relationship between sales and fixed assets.

$$\text{F.A.T.R} = \frac{\text{Net sales}}{\text{Net Fixed Assets}}$$

N.F. Assets = value of Assets – depreciation.

## VI. Capital turnover ratio

- It established by relationship between cost of sales or sales with the amount of capital invested.
- It helps to evaluating Management Efficiency.

$$\text{C.T.R} = \frac{\text{cost of sales}}{\text{capital Employed}}$$

Capital employed = shareholders funds + long-term loans

$$\text{Owned C.T} = \frac{\text{cost of sales}}{\text{shareholders funds}}$$

$$\text{Total Capital Turnover} = \frac{\text{cost of sales/ sales}}{\text{Total Capital employed}}$$


Total capital Employed = total assets.


Higher Ratio indicates Higher Efficiency.

# Point to remember:

- Financial statement analysis can be explained as a method used by interested parties such as investors, creditors, and management to evaluate the past, current, and projected conditions and performance of the firm.
- Financial statements are also known as annual records (Profit and Loss a/c & Balance sheet). Financial statements are historic.
- Financial statement represents the accounting equation  $ASSETS = LIABILITIES + OWNER'S EQUITY$  is balance sheet.
- Under the financial statement analysis, the information available are grouped together in order to cull out the meaningful relationship which is already available among them; for interpretation and analysis.



- 
- Three primary types of financial statement analysis are commonly known as horizontal analysis, vertical analysis, and ratio analysis.
  - To reveal qualitative information about the firm in terms of solvency, liquidity, profitability, etc., are extracted from the analysis of financial statements.
  - Comparative (income) financial statement analysis is being carried out in between the income statements of the various accounting durations of the firm, with other firms in the industry and with the industrial average.
  - After having been procured the financial data pertaining to various time periods are ready for comparison; to determine or identify the level of increase or decrease taken place in the operating financial performance of the firms.
  - Trend analysis involves calculating each year's financial statement balances as percentages of the first year, also known as the base year. When expressed as percentages, the base year figures are always 100 percent, and percentage changes from the base year can be determined.

- 
- Financial ratio analysis is the calculation and comparison of ratios which are derived from the information in a company's financial statements.
  - The level and historical trends of these ratios can be used to make inferences about a company's financial condition, its operations and attractiveness as an investment.
  - Financial ratios are calculated from one or more pieces of information from a company's financial statements.
  - A ratio gains utility by comparison to other data and standards.
  - Ratios are classified as liquidity, leverage, profitability, activity, integrated and growth ratio.
  - Net operating profit ratio determines Working efficiency of the management, while net profit ratio determines overall efficiency of the business
  - Although financial ratio analysis is well-developed and the actual ratios are well-known, practicing financial analysts often develop their own measures for particular industries and even individual companies.
  - Analysts often differ drastically in their conclusions from the same ratio analysis.

# Keywords

- Interpretation explanation of meaning and significance of the data in Financial Statements.
- Standard current ratio is 2:1
- An ideal liquid ratio is 1:1
- An ideal debt equity ratio is 1
- Links: [www.bcasonline.org](http://www.bcasonline.org)

# **SRI CHANDRASEKHARENDRA SARASWATHI VISWA MAHAVIDYALAYA**

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**Enathur, Kanchipuram – 631561**

## **ONLINE COURSE**



**FACULTY OF MANAGEMENT  
STUDIES  
DEPARTMENT OF COMMERCE**

# FUNDS FLOW STATEMENT



**FUND FLOW ANALYSIS**

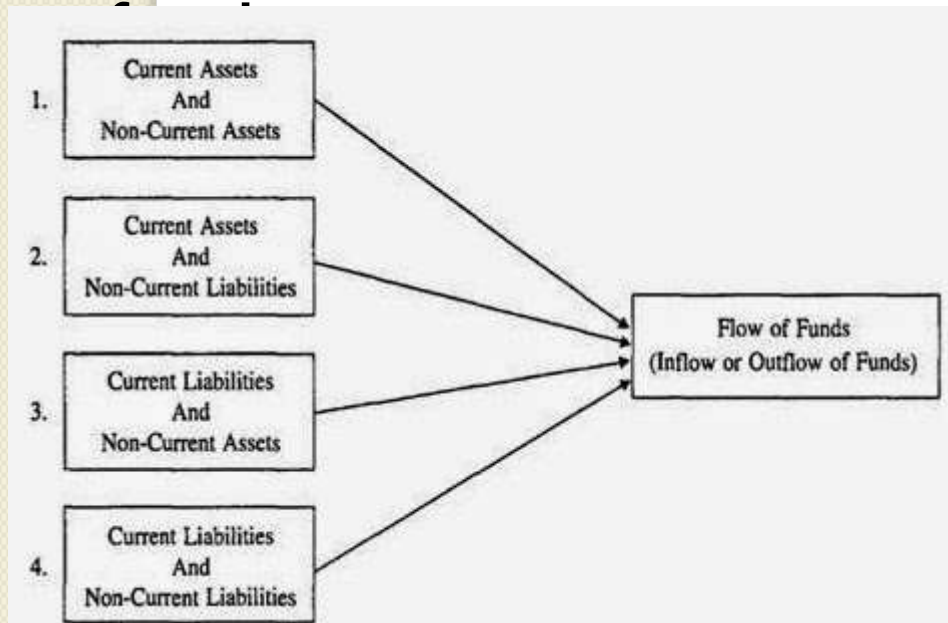


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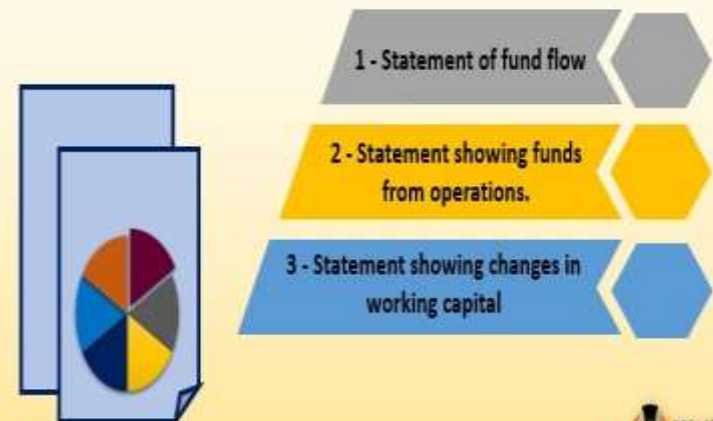


- Meaning of Fund Flow Statement – Uses of Fund Flow Statement – Parties interested in Fund Flow Statement – Preparation of Fund Flow Statement – Depreciation as source of



## Fund Flow Statement

### Examples



# Terminology

- **FUND-CASH, CASH EQUIVALENTS, AS PER ACCOUNTING STANDARDS**
  - FUNDS INTERPRETED AS WORKING CAPITAL
- **FLOW – change or movement**
- **Funds flow – changes in working capital**
- **FFS-financial statement which reveals the methods by which the business has been financed and how it has used its funds between the opening and closing balance sheet dates.**
  - It shows working capital concept of funds.
  - It measure the inflow and outflow of working capital resulting form different business transaction.



## MEANING:

The Fund flow statement is a report on the movement of funds or working capital. It explains how working capital raised and used during an accounting period.

## DEFINITION:

“A statement of sources and application of funds is a technical device designed to analyze the changes in the financial conditions of a business enterprise between two dates.” - Foulke.



# MEANING OF FUND

The term fund has a variety of meaning such as **cash fund**, **capital fund** and **working capital fund**.

**Cash fund**- in a narrow sense fund means only cash. Cash flow statement portrays net effect of the various business transactions on cash into account receipts and disbursement of cash.

This concept of preparing fund flow statement is not accepted as there are many such transactions which do not affect cash but represent the flow of fund. For example: purchase of furniture on credit does not affect cash but there is flow of fund.

**Capital fund**- here fund means all financial resources used in the business, whether in the form of men, money, material, machine and others.

**Net working capital**- net working capital means difference between current assets and current liabilities. Funds generally refers to cash or cash equivalent or to working capital.

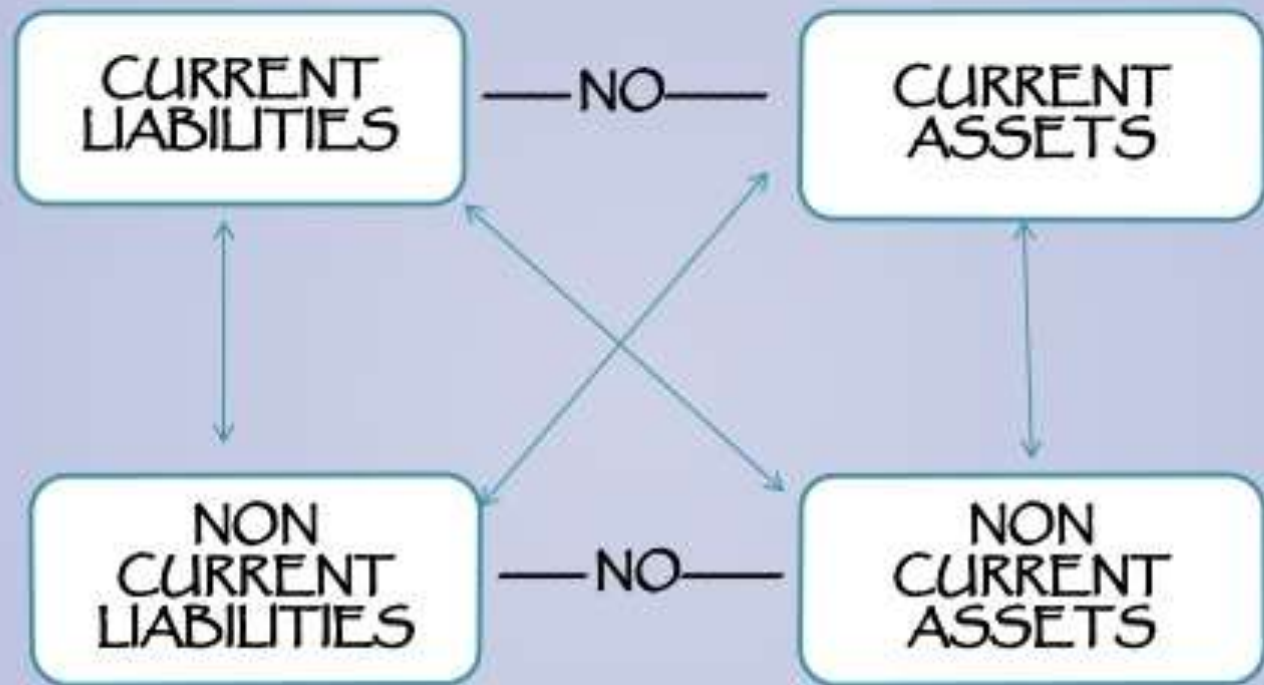
# MEANING OF FLOW

The term 'flow' refers to changes or transfer and therefore the 'flow of funds' means transfer of economic values from one asset to another, from one liability to another, from one asset to another, from one liability to another, from one asset to liabilities or vice-versa or a combination of these. So flow of fund refers to increase or decrease in net working capital.

The increase or decrease in net working capital will take place only when one account, out of two accounts to be affected in a transaction, is a current account i.e current asset or current liabilities and the other account is no current account i.e fixed asset or long term liability or capital.

When a change in non current account is followed by a change in another non current account, it does not amount to flow of fund. It is because, in such case neither the working capital increase nor decrease

# FIGURE SHOWING FLOW OF FUND



In the above figure the dotted line displays there will be no flow of fund and the Dark line displays the flow of fund

## OBJECTIVES OF FUND FLOW STATEMENT:

- To show how the resources have been obtained and used
- To indicate the results of current financial management.
- To throw light upon the most important changes that have taken place during a specific period.
- To show how the general expansion of the business has been financed.
- To indicate the relationship between profits from operations, distribution of dividend and raising of new capital or term loans.
- To have an assessment of the working capital position of the concern.

## MANAGERIAL USES OF FUNDSFLOW STATEMENT:

- Analysis of Financial Operations
- Evaluation of the Firm's Financing
- Answer to Intricate Question
- Allocation of Scarce Resources
- Helps in Working Capital Management
- Acts as a Guide to Future
- Helps Financial Institutions.

## LIMITATIONS OF FUNDS FLOW STATEMENT:

- ◆ It provides only some additional information regarding changes in working capital.
- ◆ Changes in cash are more important and relevant for financial management than the working capital.
- ◆ It is not an original Statement. It is only a rearrangement of data given in financial Statement.
- ◆ Fund flow statement is essentially historic in nature. A Projected funds flow statement, on the basis of it cannot be prepared with much accuracy.
- ◆ It cannot reveal continuous changes.

## ITEMS COME IN SOURCES AND APPLICATION OF FUNDS

### SOURCES OF FUNDS:

- ◆ Issue of shares and debenture
- ◆ Raising of long term loans
- ◆ Income from investments
- ◆ Sales of fixed Assets and long term investments
- ◆ Funds from operations.

### APPLICATION OF FUNDS:

- ◆ Redemption of preference shares and debenture
- ◆ Repayment of loans
- ◆ Purchase of long term Investments
- ◆ purchase of fixed assets
- ◆ Payments of taxes and dividends
- ◆ Drawings (incase of Proprietary or partnership business)
- ◆ Loss of cash by embezzlement
- ◆ Funds lost in Operations.

## PROCEDURE FOR PREPARATION OF FUND FLOW STATEMENT

- ◆ Schedule of Changes in Working Capital.
- ◆ Opening of Accounts for non-Current Items
- ◆ Preparation of Adjusted Profit And Loss Account
- ◆ Preparation of Fund Flow Statement.



# STATEMENT OR SCHEDULE OF CHANGES IN WORKING CAPITAL

Item	Previous year	Current Year	Effect on Increase Rs.	Working Capital Decrease Rs.
<b>A. CURRENT ASSETS</b>				
Cash At Bank				
Cash in hand				
Stock in Trade				
Debtors				
Bills receivable				
Advance Payment				
Short term investment				
Prepaid expenses				
Accrued income				
<b>TOTAL (A)</b>				
<b>B. CURRENT LIABILITIES</b>				
Short term loans				
Bank overdraft				
Creditors				
Bills Payable				
Outstanding expenses				
Unclaimed dividend				
<b>TOTAL (B)</b>				
Net working Capital (A-B)				
Increase/Decrease in working capital				
<b>TOTAL</b>				

# Cash flow statement

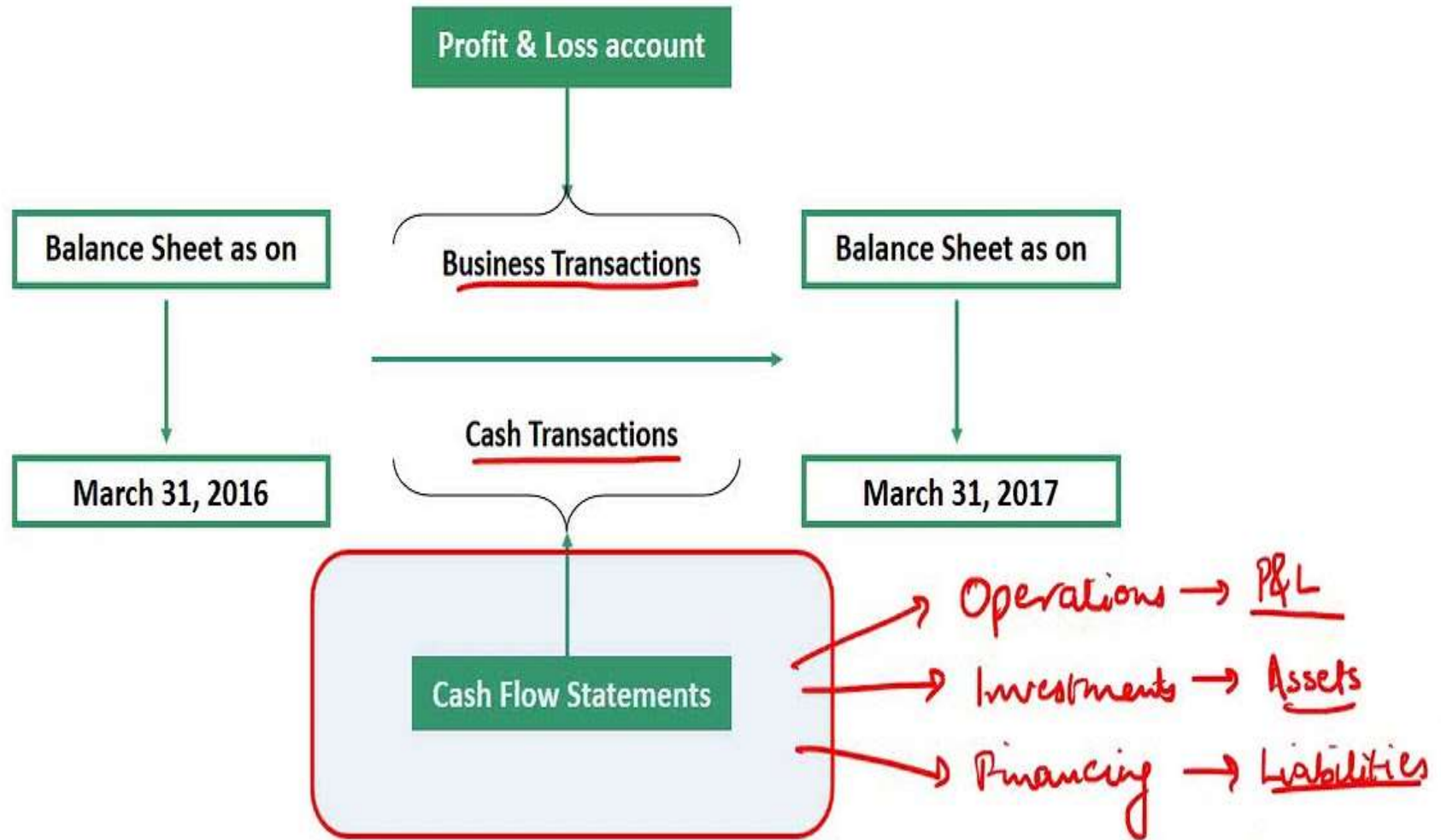
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graph TD; A((Cash flow statement)) --> B((operating activities)); A --> C((Investing activities)); A --> D((Financing activities));
```

operating activities

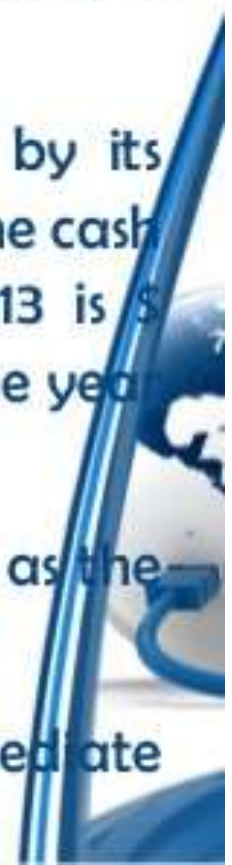
Investing activities

Financing activities

# Cash Flow Statement



# Cash flow statement

- Cash flow statement provides information about the cash receipts (Inflows) and payments (outflows) of a firm for a given period.
  - It is a statement depicting change in cash position from one period to another.
  - For example, if the cash balance of business is shown by its Balance sheet on 31st December, 2012 at \$20,000 while the cash balance as per its balance sheet on 31st December, 2013 is \$30,000. There has been an inflow of cash of \$10,000 in the year 2013 as compared to the year 2012.
  - It explains the reasons for such inflows or outflows of cash, as the case may be.
  - It also helps management in making plans for the immediate future.
- 

It is a statement that shows flow (Inflow or outflow) of cash and cash equivalents during a given period of time.

# Purpose of the Statement

- To provide relevant information about the cash receipts and cash payments of an enterprise during a period.
- The statement provide answers to the following questions:
  1. Where did the cash come from?
  2. What was the cash used for?
  3. What was the change in the cash balance?



# Objectives of Cash Flow Statement

Highlighting cash flow from different activities

Short-term Planning

Cash Flow information helps to understand liquidity

Efficient cash management

Prediction of sickness

Comparison with budget

Cash position



# Distinction between Cash flow Statement and Funds Flow Statement

Basis of Difference	Cash Flow	Funds Flow
Basis of Accounting	It recognizes Cash basis Of accounting	It is based upon accrual Basis of accounting I.e Working capital
Significance	It is useful for short-Term financial planning	It is useful for long-term Financial planning
Schedule of Changes in Working Capital	Such a schedule is not Prepared for preparing Cash flow statement	Schedule of changes in Working capital is Prepared separately
Causes of Variation	It studies only the Causes of cash variation	It studies causes of change in working capital



# The Cash Flow Statement

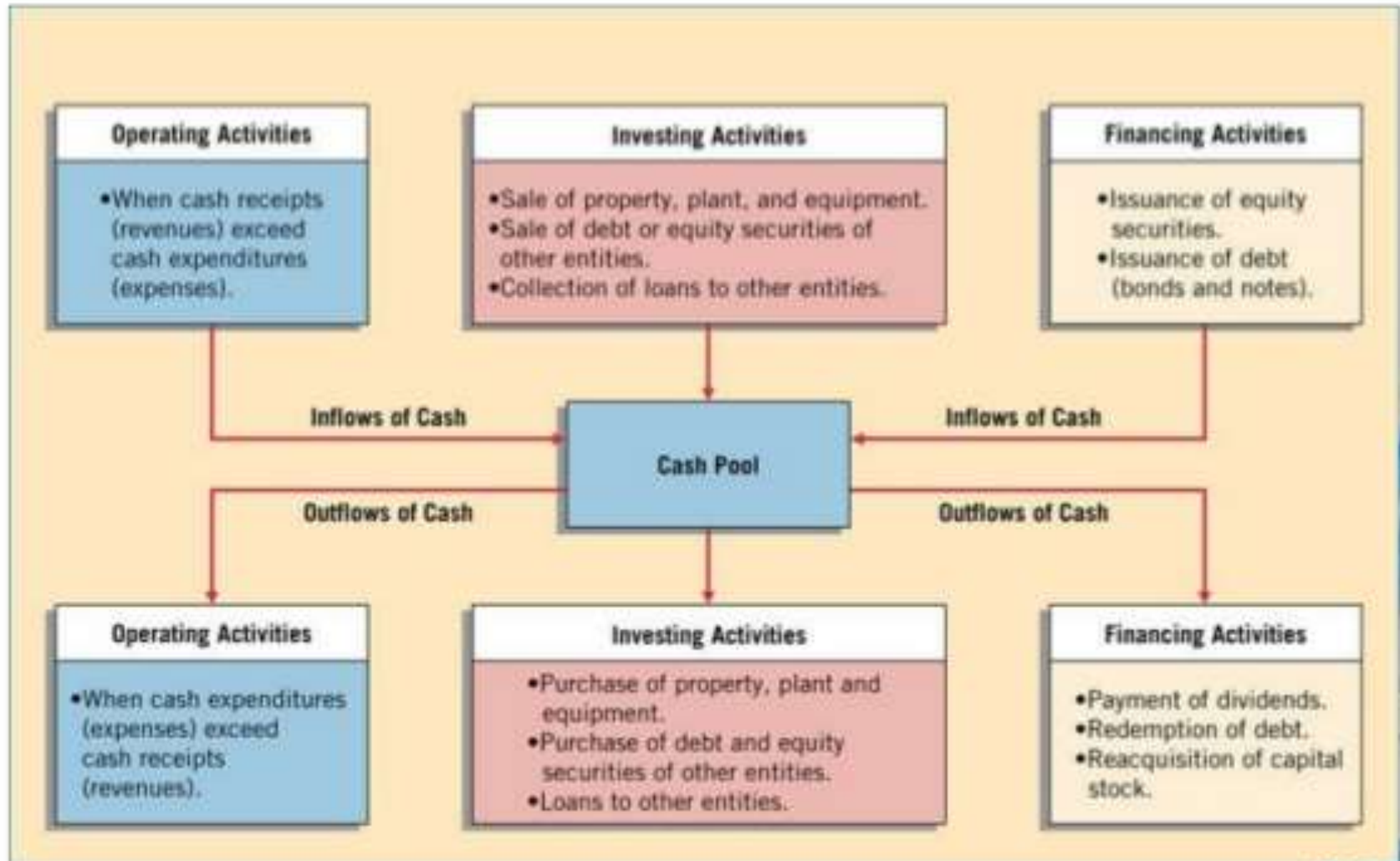
The cash flow statement provides information about:

- Cash Receipts (cash inflows)
- Uses of Cash (cash outflows)
- During a Period of Time

Inflows and outflows are reported for:

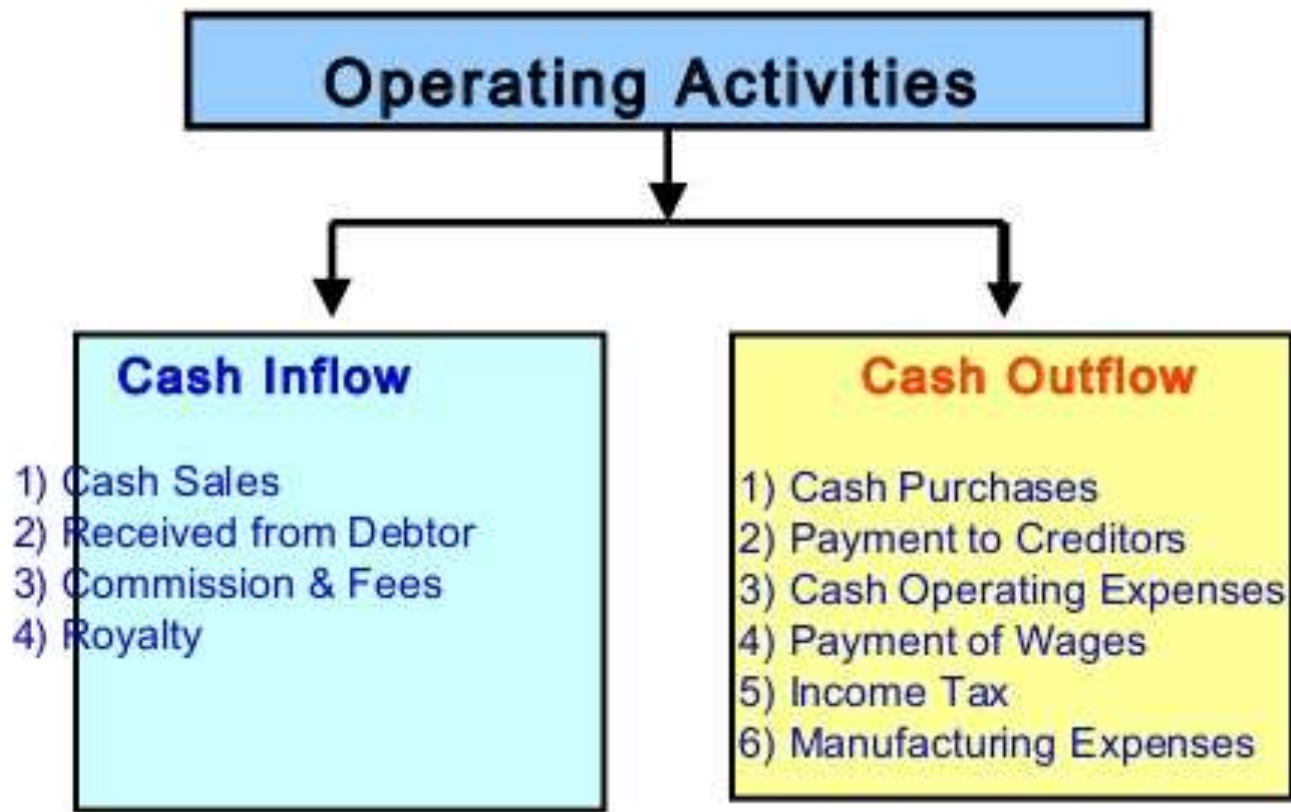
- Operating activities
- Investing activities
- Financing activities

# Classification of Cash Inflows and Outflows



## Operating activities

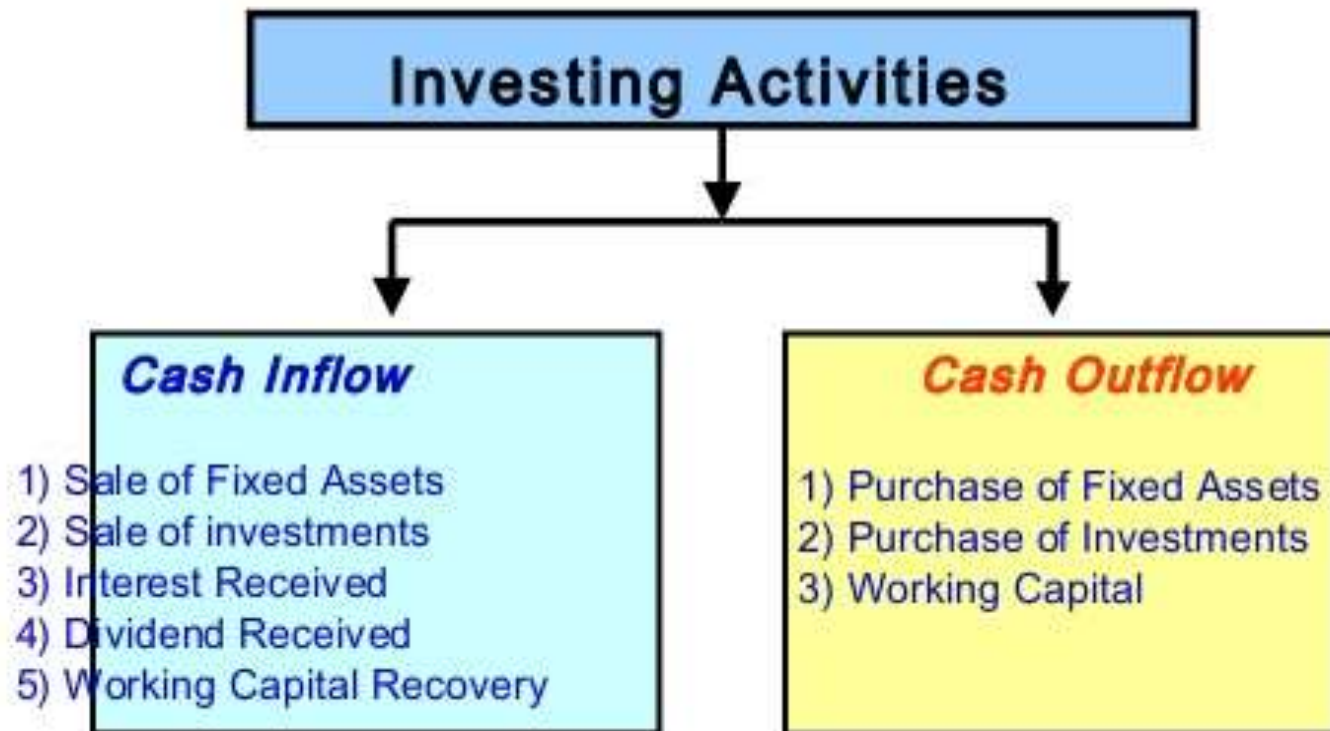
It includes **receiving cash** from customers for the sale of goods and services, receiving interest and dividends on loans and investments, and **making cash payments** for wages, goods and services purchased, interest, and taxes.



**Cash effects the transaction on Net Income**

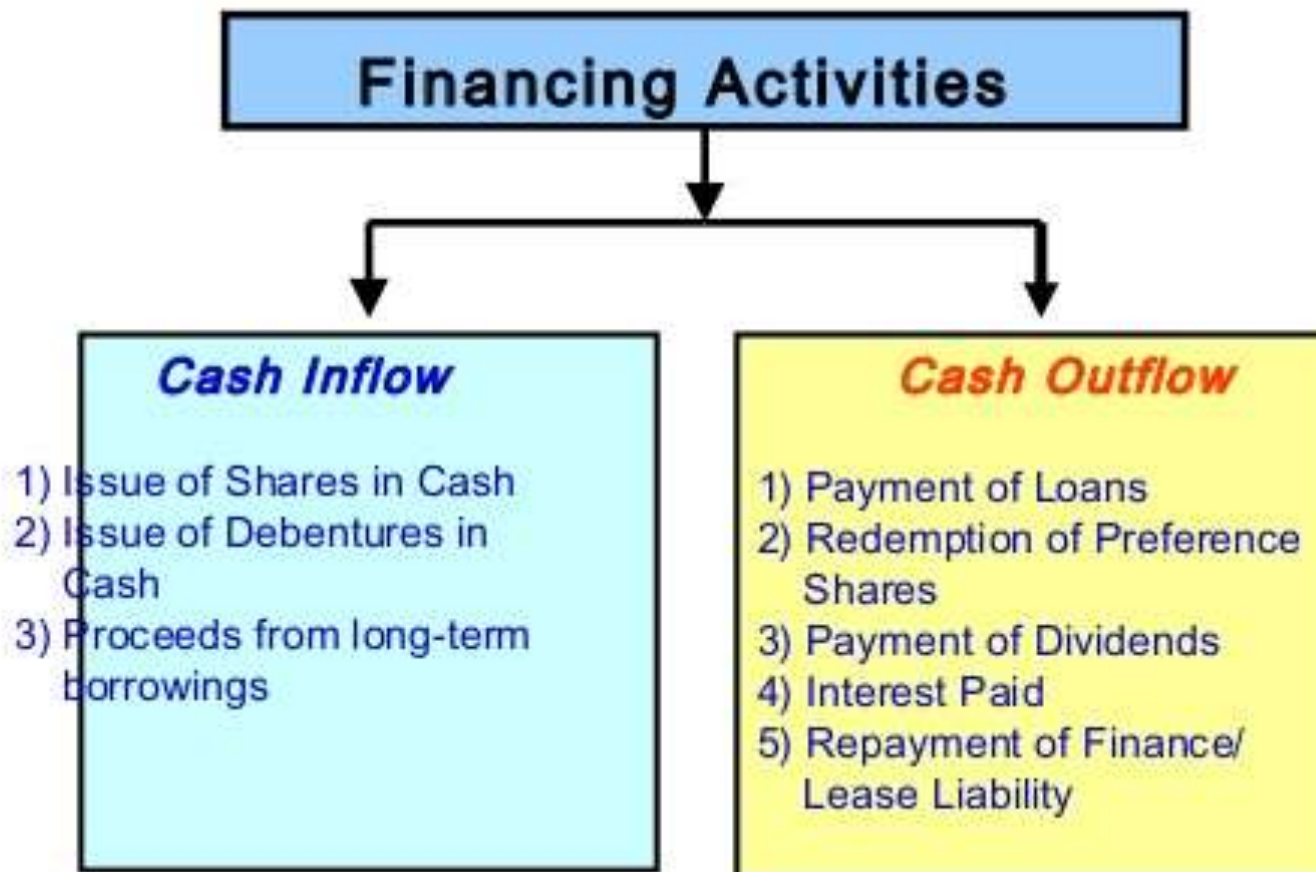
## Investing activities

It includes ***purchasing and selling*** long-term assets and marketable securities (other than cash equivalents), as well as making and collecting on loans.



## Financing activities

It includes issuing and buying back capital stock, as well as borrowing and repaying loans on a short- or long-term basis (issuing bonds and notes). Dividends paid are also included in this category.



The specimen form for computation of cash from operations is given below :

### Calculation of Cash from Operations :

(Combining Current Assets & Current Liabilities & Non-Cash & Non-Operating Items)

<i>Particulars</i>	<i>Rs.</i>	<i>Rs.</i>
Net Profit (Closing Balance of Profit & Loss A/c)		* * *
<i>Add:</i>		
Depreciation on Fixed Assets	* * *	
Transfer to General Reserve		
Loss on Sale of Fixed Assets		
Loss on Sale of Investments		
Goodwill Written off		
Increase in Outstanding Expenses		
Decrease in Prepaid Expenses		
Decrease in Current Assets (Other than Cash and Bank)		
Increase in Current Liabilities		
Preliminary Expenses Written off	* * *	* * *
<i>Less :</i>	* * *	
Profit on Sale of Fixed Assets		
Profit on Sale of Investments		
Decrease in Outstanding Expenses		
Increase in Prepaid Expenses		
Increase in Current Assets (Other than Cash and Bank)		
Decrease in Current Liabilities		
Opening Balance of Profit & Loss A/c		* * *
<b>Cash From Operations</b>		* * *

**Illustration: 1**

From the following Balance Sheet of ABC Ltd., you are required to calculate Cash From Operations:

<i>Particulars</i>	<i>2002</i> <i>Rs.</i>	<i>2003</i> <i>Rs.</i>
<b>Capital and Liabilities :</b>		
Share Capital	20,000	20,000
Profit made during the year	14,100	17,300
Provision for Depreciation	1,000	1,400
Long-Term Loans	2,000	3,000
Trade Creditors	6,450	5,300
Outstanding Expenses	850	150
	<b>44,400</b>	<b>47,150</b>
<b>Assets :</b>		
Plant and Machinery	28,500	30,000
Stocks	9,800	11,300
Trade Debtors	3,950	2,850
Cash Balances	2,150	3,000
	<b>44,400</b>	<b>47,150</b>

**Solution :**

### Calculation of Cash from Operations

<i>Particulars</i>	<i>2002 Rs.</i>	<i>2003 Rs.</i>
Profit made during the year (Closing Balance of P & L A/c)		17,300
<i>Add :</i>		
Provision for Depreciation	400	
Decrease in Debtors	1,100	1,500
		18,800
<i>Less :</i>		
Decrease in Creditors	1,150	
Decrease in Outstanding Expenses	700	
Increase in Stock	1,500	
Net Profit (Opening Balance of P & L A/c)	14,100	17,450
Cash From Operations		1,350



## Illustration: 2

From the following balance you are required to calculate cash from operations

<i>Particulars</i>	2002 <i>Rs.</i>	2003 <i>Rs.</i>
Trade Debtors	1,00,000	94,000
Bills Receivable	20,000	25,000
Trade Creditors	40,000	50,000
Bills Payable	16,000	12,000
Outstanding Expenses	2,000	2,400
Prepaid Expenses	1,600	1,400
Accrued Income	1,200	1,500
Income Received in Advance	600	500
Profit made during the year	—	2,60,000

**Solution:**

### Calculation of Cash from Operations

<i>Particulars</i>	<i>Rs.</i>	<i>Rs.</i>
Net Profit (Closing Balance)		2,60,000
<b>Add :</b>		
Decrease in Debtors	6,000	
Increase in Creditors	10,000	
Increase in Outstanding Expenses	400	
Decrease in Prepaid Expenses	200	16,600
		2,76,600
<b>Less :</b>		
Increase in Bills Receivable	5,000	
Decrease in Bills Payable	4,000	
Increase in Accrued Income	300	
Decrease in Income Received in Advance	100	9,400
Cash From Operations		2,67,200

**Illustration: 3**

From the following information given by RR Ltd., you are required to prepare Cash From Operations:

<i>Particulars</i>	<i>2002 Rs.</i>	<i>2003 Rs.</i>
Bills Payable	10,000	16,000
Trade Creditors	24,000	32,000
Outstanding Expenses	4,000	2,000
Bills Receivable	40,000	36,000
Trade Debtors	80,000	1,20,000
Prepaid Expenses	4,000	6,000
Accrued Incomes	10,000	16,000
Incomes Received in Advance	4,000	2,000

**Additional Information**

RR Ltd., earned profit of Rs. 4,00,000 after charging or crediting the following items to its profit and loss account during the year 2003:

- (1) Profit on Sale of Investments Rs. 8,000
- (2) Loss on Sale of Building Rs. 18,000
- (3) Depreciation on Fixed Assets Rs. 14,000
- (4) Good Will Written off Rs. 4,000

**Solution:****Calculation of Cash from Operations**

<i>Particulars</i>	<i>Rs.</i>	<i>Rs.</i>
Net Profit during the year		4,00,000
<b>Add :</b>		
Loss on Sale of Building	18,000	
Depreciation on Fixed Assets	14,000	
Good will Written off	4,000	
Increase in Bills Payable	6,000	
Increase in Trade Creditors	8,000	
Decrease in Bills Receivable	4,000	54,000
		<b>4,54,000</b>
<b>Less :</b>		
Profit on Sale of Investments	8,000	
Decrease in Outstanding Expenses	2,000	
Decrease in Income Received in Advance	2,000	
Increase in Trade Debtors	40,000	
Increase in Prepaid Expenses	2,000	
Increase in Accrued Income	6,000	60,000
Cash From Operations		<b>3,94,000</b>

# FUND FLOW STATEMENT

**FUND FLOW STATEMENT** is a statement that reflects the relative position of funds of the company over a two-period horizon and enables analysis of sources and uses of funds for a particular period of time.

## SOURCES OF FUNDS

- ✓ Issue of Shares and Debentures for cash
- ✓ Sale of Asset
- ✓ Long term loans
- ✓ Decrease in Working Capital
- ✓ Funds from operations

## APPLICATION OF FUND

- ✓ Redemption of shares and debentures
- ✓ Purchase of Fixed Assets
- ✓ Repayment of Long Term Loans
- ✓ Increase in Working Capital
- ✓ Dividend and Tax Payment

# Point to remember:

- Fund flow statements summarize a firm's inflow and outflow of funds.
- In funds flow statement, purchase of fixed assets, repayment of long-term loans is applications of funds
- Simply put, it tells investors where funds have come from and where funds have gone.
- The statements are often used to determine whether companies efficiently source and utilize funds available to them.
- Fund flow statements are prepared by taking the balance sheets for two dates representing the coverage period.
- The increases and decreases must then be calculated for each item. Finally, the changes are classify under four categories: (1) Long-term sources, (2) Long-term uses, (3) Short-term sources, and (4) Short-term uses. A firm that issues stocks and bonds to raise funds results in increase cash.
- It is also important to zero out the non-fund based adjustments in order to capture only the changes that are accompanies by flow of funds.
- However, income accrued but received and expenses incurred but not received reckoned in the profit and loss statement should not be excluded from the profit figure for the fund flow statement.
-

- The statement of cash flow clarifies cash flows according to Operating, Investing, and Financing Activities
- In case of other enterprises cash flow arising from interest paid should be classified as cash flow from financial activity. Cash flow example from a **financial activity** is purchase of fixed assets.
- While dividends and interest received should be stated as cash flow from **investing activity** Cash flow example from an investing activity is Sale of Investment by Non-Financial Enterprise
- **Operating activity** In the case of financial enterprises, the cash flow resulting from interest and dividend received and interest paid should be classified as cash flow from Cash flow example from an operating activity is Interest Paid on Term-deposits by a Bank
- Fund flow statements can be used to identify a variety of problems in the way a company operates.
- Funds Flow Statement is also known as Statement of Funds Flow, Statement of Sources and Application of Funds , Statement of Sources and Uses of Funds
- A transaction affecting current and non-current assets will affect the flow of funds.
- In cash flows, when a firm invests in fixed assets and short-term financial investments results in Decreased Cash .
- As per AS-3, Cash Flow Statement is mandatory for Companies listed on a stock exchange and Companies with a turnover of more than Rs 50 crores


Cash flow statement indicates sources of cash inflows and transactions of cash outflows prepared for a period.

- It is an important tool of financial analysis and is mandatory for all the listed companies.
- The cash flow statement indicates inflow and outflow in terms of three components:  
(1) Operating, (2) Financing, and (3) Investment activities.
- Cash inflows include sale of assets or investments, and raising of financial resources.
- Cash outflows include purchase of assets or investments and redemption of financial resources.
- There are two methods of converting net profit into net cash flows from operating activities:
  - Direct method, and
  - Indirect method.
- Cash flow statement is based upon Cash basis of accounting while Funds Flow Statement recognizes accrual basis of accounting .
- The objectives of Cash Flow Statement are
  - Analysis of cash position
  - Short-term cash planning
  - Evaluation of liquidity
  - Comparison of operating Performance



# Keywords:

- Current Assets: Assets which are in the form of cash, equivalent to cash or easily convertible into cash.
- Current Liabilities: Short-term financial resources of the firm.
- Decrease in Working Capital: Decrease in Net working capital i.e. Excess of current liabilities over the current assets – Resources side of the fund flow.
- Flow: Flow means changes occurred in between two different time periods.
- Fund: Fund means working capital
- Fund from Operations: Income generated from only operations.
- Fund Lost in Operations: Loss incurred in the operations.
- Increase in Working Capital: Increase in Net working capital i.e. Excess of current assets over the
- current liabilities- Applications side of the fund flow.
- Non-current Assets: Long-term assets.
- Non-current Liabilities: Long-term financial resources.
- Statement of changes in Working Capital: Enlisting the changes taken place in between the
- current assets and current liabilities of two different time horizons.

- 
- **Cash:** It includes cash in hand and demand deposits with bank.
  - **Cash Equivalents:** Refer short-term risk free highly liquid investment
  - **Cash Flow Statement:** The statement which indicates the flow (movement) of cash during a period.
  - **Flow of Cash:** It means the change in cash. It also includes the inflow and outflow of cash.

# **SRI CHANDRASEKHARENDRA SARASWATHI VISWA MAHAVIDYALAYA**

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## **ONLINE COURSE**



**FACULTY OF MANAGEMENT  
STUDIES  
DEPARTMENT OF COMMERCE**

# MARGINAL

# COSTING



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**Fixed cost**



**Production cost**



**Variable cost**

# MEANING & DEFINITION

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- It is the additional cost of producing an additional unit of a product.

Marginal cost = prime cost + total variable overheads

- J. BATTY: ' a technique of cost accounting which pays special attention to the behavior of costs with changes in the volume of output'.

# Definition of Marginal Cost

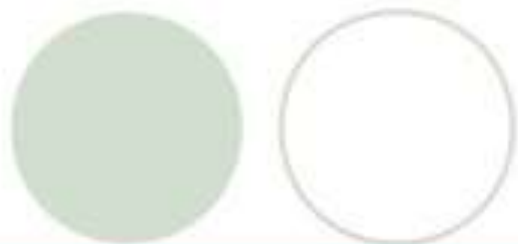
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- Marginal cost is the additional cost of producing an additional unit of a product.
- According to I.C.M.A. London as "the amount to any given volume of output by which aggregate costs are changed if the volume of output is increased or decreased by one unit". In practice, this is measured by the total variable cost attributable to one unit.
- Thus, Marginal Cost = Prime cost+ Total variable overheads

(or)

Total cost – Fixed cost.

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- **Marginal Costing:**

Marginal costing is defined by, I.C.M.A. as “the ascertainment of marginal cost and of the effect on profit of changes in volume or type of output by differentiating between fixed costs and variable costs.





# FEATURES OF MARGINAL COSTING

- 1) Control or decision making
- 2) Classification
- 3) Fixed cost
- 4) Variable cost
- 5) Contribution
- 6) Profitability
- 7) Ascertain profit
- 8) Cost-volume-profit relationship



# Applications of marginal costing

- Following are the important areas of decision-making or applications of marginal costing:
  - 1. Fixation of Price,
  - 2. Decision to Make or Buy,
  - 3. Selection of a Profitable Product Mix,
  - 4. Decision to Accept a Bulk Order,
  - 5. Closure of a Department or Discontinuing a Product,
  - 6. Maintaining a Desired Level of Profit, and
  - 7. Evaluation of Performance.

# Assumptions of marginal costing

- All the elements of cost can be divided into fixed and variable components.
- Total fixed cost remains constant at all levels of output.
- Total variable costs varies in proportion to the volume of output.
- Per unit selling price remain unchanged at all levels of operating activity.

# ADVANTAGES

1. **Simplicity**
2. **Stock valuation**
3. **Meaningful reporting**
4. **Effect of fixed costs**
5. **Profit planning**
6. **Cost control and cost reduction**
7. **Pricing Policy**
8. **Helpful to Management**



# LIMITATIONS

1. **Classification of cost**
2. **Not suitable for external reporting**
3. **Lack of Long-term perspective**
4. **Under valuation of stock**
5. **Automation**
6. **Production aspect is ignored**
7. **Not applicable in all types of business**
8. **Misleading picture**
9. **Less scope for Long-term policy decision**



# Cost-Volume-profit analysis

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- The term 'contribution' mentioned in the formal definition is the term given to the difference between Sales and Marginal cost. Thus
  - $\text{MARGINAL COST} = \text{VARIABLE COST DIRECT LABOUR} + \text{DIRECT MATERIAL} + \text{DIRECT EXPENSE} + \text{VARIABLE OVERHEADS}$
  - $\text{CONTRIBUTION SALES} - \text{MARGINAL COST}$   
The term marginal cost sometimes refers to the marginal cost per unit and sometimes to the total marginal costs of a department or batch or operation. The meaning is usually clear from the context.
-

# MARGINAL COST STATEMENT

<b>Particulars</b>	<b>Rs</b>	<b>Rs</b>
<b>Sales</b>		<b>XXXXX</b>
<b>Less: Variable Expenses</b>		<b>(XXXX)</b>
<b>Contribution</b>		<b>XXXXX</b>
<b>Less Fixed Cost</b>		<b>(XXXX)</b>
<b>Marginal Costing Profit</b>		<b>XXXXX</b>

# CONCEPTS AND TERMS

1. FIXED COST
2. VARIABLE COST
3. CONTRIBUTION
4. CONTRIBUTION TO SALES/ PROFIT VOLUME RATIO
5. BREAK EVEN ANALYSIS
6. MARGIN OF SAFETY
7. ANGLE OF INCIDENCE
8. BREAK EVEN CHARTS



## MARGINAL COSTING STATEMENT

Sales	xxx	
(-) VC	xxx	
Contribution	xxx	$C - F = P$
(-) FC	xxx	$C = P + F$
Profit	xxx	

Formula for CVP analysis :-

$$\begin{aligned}
 \text{D) MC} &= \text{Direct material} + \text{Direct Wages} + \\
 &\quad \text{Direct exp} + \text{Variable O(H) (or)} \\
 &= \text{Prime cost} + \text{Variable O(H) (or)} \\
 &= \text{Total cost} - \text{Fixed Cost}
 \end{aligned}$$

$$\begin{aligned}
 \text{2) Contribution} &= \text{Sales} - \text{VC (or)} \\
 \frac{C}{S} &= \text{Sales} \times \text{P/V ratio (or)} \\
 &= \text{Fixed Cost} \pm \text{Profit/Loss}
 \end{aligned}$$

$$\text{3) P/V ratio} = \frac{\text{Contribution}}{\text{Sales}} \times 100$$

$$\text{If 2 periods given} \left. \vphantom{\begin{matrix} \text{If 2 periods} \\ \text{given} \end{matrix}} \right\} = \frac{\text{Changes in profit}}{\text{Changes in sales}} \times 100$$

4) Break even point sales :-

$$\text{In units} = \frac{\text{Fixed Cost}}{\text{Contribution per unit}}$$

$$\text{In Rupees} = \frac{FC}{\text{P/V ratio}} \quad (\text{or})$$

$$= \text{BEP in units} \times \text{selling price per unit}$$

$$5) \text{ Margin of Safety in units} = \frac{\text{Profit}}{\text{Contribution per unit}}$$

$$\text{In Rupees} = \frac{\text{Profit}}{\text{P/V ratio}}$$

$$\text{MOS} = \text{Actual Sales} - \text{B.E.P. Sales}$$

b) Sales Required to earn profit :-

$$\text{In Rupees} = \frac{FC + \text{Desired profit}}{\text{P/V ratio}}$$

$$\text{In units} = \frac{FC + \text{Desired profit}}{\text{Contribution per unit}}$$

1) Profit from given Sales :-


$$\begin{aligned} \text{Contribution} &= \text{Sales} \times \text{P/V ratio} \\ \text{Profit} &= \text{Contribution} - FC \end{aligned}$$

# MARGINAL COSTING

- ITS INTERPRETS THE COST ON THE BASIS OF NATURE OF COST
- EMPHASIS IS ON BEHAVIOUR COST AND THEIR IMPACT ON PROFITABILITY.
- MC IS THE **ADDITIONAL COST OF PRODUCING AN ADDITIONAL UNIT OF A PRODUCT.**
- MC D/B FIXED COST AND VARIABLE COST.
- MC INVOLVES:
  - ASCERTAINMENT OF MARGINAL COST
  - DERIVING OF CVP RELATIONSHIP BY DIFFERENTIATING BETWEEN FA & VA

# CVP ANALYSIS (helps for mgt in profit planning)

- Important concepts and terms used in CVP
  - Fixed cost/period cost/time cost
  - Variable cost / product cost / marginal cost
  - Contribution
  - Profit volume ratio (P/V ratio) one year and two year
  - BEP
  - Margin of safety



Contribution = sales-(prime cost + variable  
cost)

90,000 -60,000

= 30,000

# Marginal costing statement (ref )

- Marginal cost = direct material + Direct wages + Direct Expenses + variable OH
- Contribution = sales – variable cost  
Sales \* P/V Ratio

P/V RATIO

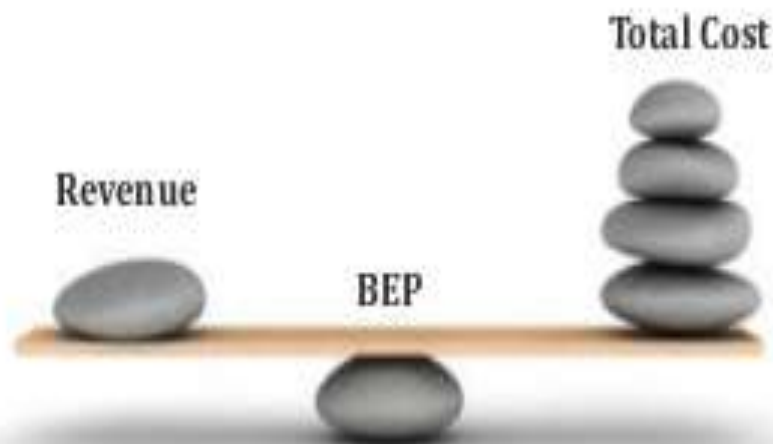
ONE PERIOD = Contribution / sales \* 100

Two period = changes in profit / changes in sales \* 100

## What is BEP?

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Point in time (or in number of units sold) when forecasted revenue exactly equals the estimated total costs; where loss ends and profit begins to accumulate. This is the point at which a business, product, or project becomes financially viable.



## BREAK - EVEN ANALYSIS :-

It is a method of studying relationship between revenue & cost in relation to sales volumes of a business.

## BREAK - EVEN POINT :-

A business man neither earn any profit nor incur any loss in this level of activity. generally termed as Break even point. It is also called zero profit & zero loss (or) no profit no loss.



# POINT TO Remember

- Marginal costing is one of the important tools of management not only to take decision, but also to fix an appropriate price and to assess the level of profitability.
- Marginal costing is not an independent system of costing. In marginal costing all elements of cost are divided into fixed and variable components.
- Marginal costing is concerned with variable cost. It is also known direct costing and variable costing.
- Marginal cost is nothing, but a change occurred in the total cost due to small change in the quantity produced. Absorption costing technique is also known by other names as “Full costing” or “Traditional costing”.
- Marginal costing technique helps the management is deciding Price of the product ,Make or buy decision and accept fresh orders at low price
- The marginal cost is less than buying price, additional requirement of the component should be met by making rather than buying.
- The cost-volume-profit analysis is a tool to show the relationship between various ingredients of profit planning.
- The ratio or percentage of contribution margin to sales is known as P/V ratio.

# Continue.....

- The crucial step in this analysis is the determination of break-even point.
- BEP is defined as the sales level at which the total revenue equals total cost.
- Margin of safety is the difference between the actual sales and sales at break-even point. MOS can be increased by reduction in fixed or the variable costs .
- P/V ratio is also used to determine profit at a given volume of sales
- Sales beyond break-even volume brings in profits.

# Key words

- BEP consist of  $\text{Contribution} = \text{Fixed cost}$ ,  $\text{Sales} = \text{Total Cost}$  and Sales curve cuts total cost line
  - BEP (Units): It is the level of units at which the firm neither incurs a loss nor earns profit.
  - BEP (Volume): It is the level of sales in Rupees at which the firm neither incurs a loss nor earns profit.
- Contribution: It is an amount of balance available after the deduction of variable cost from the sales. Contribution margin is also known as marginal income(gross margin)
- Fixed Cost: It is a cost which is fixed or remains the same for irrespective level of production and it is also known as period cost.
- Marginal Cost: Change occurred in the cost of operations due to change in the level of production.
- PV Ratio: Profit volume ration which is nothing but the ratio in between the contribution and sales.
- Variable Cost: It varies along with the level of production.