UNIT- I ECONOMICS, COST AND PRICING CONCEPTS

1. Economic theories of development

• What development economists agree on:

**Development economics**: deals with the economic, social, political, and institutional mechanisms, both public and private, necessary to bring about **improvements in wellbeing**.

**Structural change** is an essential part of this process

**BUT**: does this mean a shift away from agriculture or increases in productivity throughout the economy? (see Timmer’s papers on Blackboard)
1945-mid1950s

**Context**: political independence of several developing countries, Worldwide policies to boost aggregate demand (Keynesian), setting up of the Bretton Woods institutions (World Bank, IMF, WTO), state intervention and planning of the economy (Soviet Union)

**Ideas** underdevelopment as low-level equilibrium caused by low savings, high population growth, market failures due to scale economies and externalities (Rosenstein-Rodan, Nurkse), dual economy with backward sector (agriculture) and modern sector (industry) (Lewis), emphasis on intersectoral linkages and discussions about the benefits of balanced versus unbalanced economic growth (Lewis, Hirschman)

...mid1950s-late 1960s

**Context** uneven international development (Myrdal) and import substitution policies to promote industrialisation

**Ideas** Marxist theorists (Baran): importance of political and social factors in development and inefficiency and corruption of capitalist state. Structuralism (Cardoso, and Prebisch at the UN ECLA, Chenery): recognition of structural rigidities typical of DCs: supply rigidities in agriculture and industry, terms of trade weighted against DCs exports (Singer and Prebisch)
...mid1960s-1980

**Context** emergence of the Newly Industrialised Countries – Taiwan, Singapore, South Korea, Hong Kong, debt problem in LA and SSA

**Ideas** revival of neoclassical economics, free market policies and export orientation (Lal, Little, Scitovsky); emergence of basic needs agenda, emphasising neglect of the poor; dependency school: criticism of structure of international relations and trade (and transnational corporations) which systematically hampers efforts of ISI countries

...1980s and 1990s:

**Context** Debt crisis, IMF and WB first structural adjustment wave: recession and poverty increases. Revision of the NIC’s experiences showing the scope for state intervention and the synergies between states and markets, BUT continuing pressure to liberalise.


**POST CRISIS:** rediscovery of state intervention and regulation (back to the 1940s???)
"What is Demand?"

"Demand means effective desire or want for a commodity which is backed up by the ability (purchasing power) and willingness to pay for it".

- Demand = Desire + Ability to pay + Willingness to spend

- Demand is a relative concept – not absolute
  It is related to price, time and place.

"The demand for a commodity refers to the amount of it which will be bought per unit of time at a particular price (in a particular market)".
INDIVIDUAL AND MARKET DEMAND

- **Individual Demand**: Individual demand for a product is the quantity of it a consumer would buy at a given price, during a given period of time.

- **Market demand**: Market demand for a product is the total demand of all the buyers in the market taken together at a given price during a given period of time.

**Demand Schedule**: ‘A tabular statement of price – quantity (demanded) relationship at a given period of time’

- Individual demand schedule
- Market demand schedule.
DETERMINANTS OF DEMAND

- Price of the product
- Price of the related goods
- Consumer’s income level
- Distribution pattern of national income
- Consumer’s taste and preferences
- Advertisement of the product
- Consumer’s expectation about future price and supply position
- Demonstration effect and Band-Wagon effect
- Consumer credit facility
- Demography and growth rate of population
- General std. of living and spending habits
- Climatic and weather conditions
- Customs

**Demand Function**: It states the (functional/mathematical) relationship between the demand for the product (dependent variable) and its determinants (independent variables).
DEMAND FORECASTING

Demand forecasting is predicting or anticipating the future demand for a product.

→ Micro level → Industry level → Macro level

USES OF DEMAND FORECASTING DATA

Short term demand forecasting
1) Evolving production policy
2) Determining price policy
3) Evolving purchase policy
4) Fixation of sales targets
5) Short term financial policy

Long term demand forecasting
1) Business planning
2) Man power planning
3) Long term financial planning
Demand Forecasting

Accurate demand forecasting is essential for a firm to enable it to produce the required quantities at the right time and arrange well in advance for the various factors of production, viz., raw materials, equipment, machine accessories, labour, buildings, etc.

In a developing economy like India, supple forecasting seems more important. However, the situation is changing rapidly.


Factors involved in Demand Forecasting

1. How far ahead?
   a. Long term – eg., petroleum, paper, shipping. Tactical decisions. Within the limits of resources already available.
   b. Short-term – eg., clothes. Strategic decisions. Extending or reducing the limits of resources.
Factors involved in Demand Forecasting

2. Undertaken at three levels:
   b. Macro-level
   c. Industry level eg., trade associations
   d. Firm level

3. Should the forecast be general or specific (product-wise)?

4. Problems or methods of forecasting for “new” vis-à-vis “well established” products.

5. Classification of products – producer goods, consumer durables, consumer goods, services.

6. Special factors peculiar to the product and the market – risk and uncertainty. (eg., ladies’ dresses)
Recent trends in demand forecasting

1. More firms are giving importance to demand forecasting than a decade ago.
2. Since forecasting requires close cooperation and consultation with many specialists, a team spirit has developed.
3. Better kind of data and improved forecasting techniques have been developed.
4. There is a greater emphasis on sophisticated techniques such as using computers.
5. New products’ forecasting is still in infancy.
6. Forecasts are usually broken down in monthly forecasts.
7. In spite of the application of newer and modern techniques, demand forecasts are still not too accurate.
8. The usefulness of personal feel or subjective touch has been accepted.
9. Top-down approach is more popular then bottom-up approach.
ACTUAL COSTS AND OPPORTUNITY COSTS:

- Actual costs are the costs which the firm incurs while producing or acquiring a good or a service like the cost on raw material, labor, rent, interest, etc.

- The books of account generally record this information. The actual costs are also called the outlay costs or acquisition costs or absolute costs.
Opportunity cost can be defined as the cost of any decision measured in terms of the next best alternative, which has been sacrificed.

It is the comparison between the policy that was chosen and the policy that was rejected.

It can also be defined as the revenue forgone for not making the best alternative use.

The concept of opportunity cost is useful for managers in decision making.

Opportunity cost or imputed cost are not actually incurred.
INCREMENTAL & SUNK COSTS:

- Incremental cost is the total additional cost that a firm has to incur as a result of implementing a major managerial decision.

- Sunk costs are those costs which are incurred in the past or that have to be incurred in the future as result of a contractual agreement.

- The cost of inventory and future rent charges for a warehouse that have to be incurred as a part of a lease agreement are examples of sunk costs.
Fixed costs are those costs, which do not vary with the changes in the output of a product.

They are associated with the existence of a firm's plant and, therefore, must be paid even if the firm's level of output is zero.

Variable costs are those costs that vary with the level of output.

Variable costs increase but not necessarily in the same proportion as the increase in output.
TOTAL COST, AVERAGE COST AND MARGINAL COST:

× Total cost represents the money value of the total resources for production of goods and services by the firm.
× Average cost is the cost per unit of output, assuming that production of each unit of output incurs the same cost.
× Marginal costs are the incremental or additional costs incurred when there is additional to the existing output of goods and services.
Marginal Costs

- The additional cost incurred from producing an additional unit of output:

\[
MC = \frac{\Delta TC}{\Delta Output}
\]

\[
MC = \frac{\Delta TVC}{\Delta Output}
\]
Element of cost

Engineering Cost: Cost Elements to Consider

Cost = Owner’s Cost + User’s Cost + Externalities

- Construction
- Maintenance
- Operations
- Insurance
- Taxes

- Utilities
  - Efficiency of working space
  - Access time
  - Amenities
  - Safety

- Land Use
  - Air quality
  - Noise
  - Water quality
  - Aesthetics
  - Risks
G.R. Crowningshield: Break even point is the point at which sales revenue equals the cost to make and sell the product and no profit or loss is reported. This is why this point is called as ‘no profit no loss point’. If volume of output and sales is less than the break-even level, the business will incur a loss.

Fixed Costs

\[
\text{BEP} = \frac{\text{Fixed Costs}}{(\text{in units}) \times \text{Selling Price p.u.} - \text{Variable Cost p.u.}}
\]

Or,

\[
\text{BEP} = \frac{\text{Fixed Costs}}{(\text{in units}) \times \text{Contribution p.u.}}
\]

Or,

\[
\text{BEP} = \frac{\text{Fixed Costs}}{(\text{in value}) \times \text{P/V Ratio}}
\]
USES OF BREAK ENEVN POINT

Helpful in deciding the minimum quantity of sales
Helpful in the determination of tender price
Helpful in examining effects upon organization’s profitability
Helpful in deciding about the substitution of new plants
Helpful in sales price and quantity
Helpful in determining marginal cost
LIMITATIONS

Break-even analysis is only a supply side (costs only) analysis, as it tells you nothing about what sales are actually likely to be for the product at these various prices.

It assumes that fixed costs (FC) are constant.

It assumes average variable costs are constant per unit of output, at least in the range of likely quantities of sales.

It assumes that the quantity of goods produced is equal to the quantity of goods sold (i.e., there is no change in the quantity of goods held in inventory at the beginning of the period and the quantity of goods held in inventory at the end of the period.

In multi-product companies, it assumes that the relative proportions of each product sold and produced are constant.
CVP Analysis

• The intention of every business activity is to earn profit and maximize it.
• CVP analysis, also known as CVP relationship aims at studying the relationships existing among following factors and its impact on the amount of profits:
  – Selling price per unit and total sales amount
  – Total cost, which may be fixed or variable, and
  – Volume of sales
Relationship Of Costs And Profits With Volume

- In Management Accounting, it is very important to find out how costs and profits vary in relation to changes in volume, i.e. quantity of the product manufactured and sold. Under certain assumptions, the relationships are usually found to be linear.

- This means that if we draw a graph with volume on the X-axis and costs or profits on the Y-axis, the graph will be a straight line.
Profit Volume (P/V) Ratio

• This ratio indicates the contribution earned with respect to one rupee of sales.

• It is also known as Contribution Volume or Contribution sales ratio.

• Fixed costs remain unchanged in the short run, so if there is any change in profits, that is only due to change in contribution.
Pricing

An introduction

- Pricing method or strategy is the route taken by the firm in fixing the price.
- The method/strategy must be appropriate for achieving the desired pricing objectives.

Pricing methods

1. Cost Based Pricing

Types of cost based pricing

- Mark-Up Pricing (cost plus pricing)
- Absorption cost pricing (full cost pricing)
- Target rate of return pricing
- Marginal cost pricing
Absorption cost pricing

- Mainly used by manufacturing firms.
- It uses standard costing techniques.
- It includes:
  - Fixed cost
  - Variable cost
  - Selling and administering cost
  - Advertisement cost

- It is also known as full cost pricing.
Marginal Cost Pricing

- It takes cost and demand into consideration while fixing the price.
- It aims at maximizing contribution towards fixed cost.
- It gives flexibility to recover the fixed cost depending on the market condition.
- It also gives flexibility in recovering a large portion of cost from certain segment and a small portion from some other segment.
UNIT – II
CONCEPTS ON FIRMS AND MANUFACTURING PRACTICES

Firm and Industry demand

Firm demand

- Firm demand represents the demand for products of a single company.
- Example: Demand for Sony TV Colgate Paste

Industry demand

- Industry demand refers to the demand of an industry.
- Example: Demand for TVs Paste
Definition

Generally market is the place where buyers and sellers are physically present and finalize the transaction.

• *Prof Stonier and Prof Hague:*-

By a market economist mean any organization whereby buyers and sellers of a goods are kept in close touch with each other.
FEATURES OF MARKET

• **One Area:** Denote to a area or a region in which no of buyers and sellers are scattered. They are connected with one another via brokers, agents, letters. Etc.

• **Buyers and Sellers:** Buyers and Sellers are must for market. In Transaction Physical Presence is not necessary.

• **One Commodity:** For the existence of a market there should be at least one commodity like Wheat, vegetables, etc and the market is termed as wheat market, vegetables market and so on.
FACTORS AFFECTING THE SIZE AND EXTENT OF MARKET.

The Size and extent of market is affected by the following factors:-

1. Characteristics of commodity:-
   a. Nature of Demand
   b. Durability
   c. Portability
   d. Cognigability
   e. Sampling and grading of goods.
   f. Adequate Supply
   g. Substitutes.
   h. Multi Uses.
ON THE BASIS OF AREA/REGION.

1. **Local Market**- When buyers and sellers are limited to an area or region then the market is called local market.

2. **Regional Market**- When buyers and sellers are concentrated to a certain region/area. The area is wide then the local market.

3. **National Market**- When the demand of a commodity is limited the boundary of the country. Eg. Market of Gandhi cap, Nehru Cap.

4. **International Market**- When the demand of a commodity crosses the boundary of a country.
MARTKET STRUCTURE

- Market structure is the interconnected characteristics of a market, such as the number and relative strength of buyers and sellers, degree of freedom in determining the price, level and forms of competition, extent of product differentiation and ease of entry into and exit from the market.

- The types of market structures include- Perfect Competition, Monopoly, Monopolistic Competition, Oligopoly, Duopoly.

- Market structure is best defined as the organizational and other characteristics of a market.
## Motives for Diversification

<table>
<thead>
<tr>
<th>Category</th>
<th>Motivation</th>
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<tbody>
<tr>
<td><strong>GROWTH</strong></td>
<td>-- The desire to escape stagnant or declining industries</td>
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<td></td>
<td>a powerful motives for diversification (e.g. tobacco, oil, newspapers).</td>
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<tr>
<td></td>
<td>-- <em>But</em>, growth satisfies <a href="#">managers</a> not <a href="#">shareholders</a>.</td>
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<td></td>
<td>-- Growth strategies (esp. by acquisition), tend to destroy shareholder value.</td>
</tr>
<tr>
<td><strong>RISK SPREADING</strong></td>
<td>-- Diversification reduces variance of profit flows</td>
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<td></td>
<td>-- <em>But</em>, doesn't create value for shareholders—they can hold diversified portfolios of securities.</td>
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<td></td>
<td>-- Capital Asset Pricing Model shows that diversification lowers <em>unsystematic risk</em> not <em>systematic risk</em>.</td>
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<tr>
<td><strong>PROFIT</strong></td>
<td>-- For diversification to create shareholder value, then</td>
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<td>bringing together of different businesses under common ownership and must somehow increase profitability.</td>
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# Competitive Advantage from Diversification

## Market Power
- Predatory pricing
- Reciprocal buying
- Mutual forbearance

Evidence of these is sparse.

## Economies of Scope
- Sharing tangible resources (research labs, distribution systems) across multiple businesses
- Sharing intangible resources (brands, technology) across multiple businesses
- Transferring functional capabilities (marketing, product development) across businesses
- Applying general management capabilities to multiple businesses

## Economies from Internalizing Transactions
- Economies of scope not a sufficient basis for diversification—must be supported by transaction costs
- Diversification firm can avoid transaction costs by operating internal capital and labor markets
- Key advantage of diversified firm over external markets---superior access to information
When to Diversify

**Competitive Position**

<table>
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<th>Strong Position</th>
<th>Weak Position</th>
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<tr>
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<td>Diversification</td>
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<tr>
<td>top priority</td>
<td>merits consideration</td>
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<tr>
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Related Diversification

- **Competitive advantage** can result from related diversification if opportunities exist to:
  - *Transfer* expertise/capabilities/technology
  - *Combine* related activities into a single operation and *reduce* costs
  - *Leverage* use of firm’s *brand name reputation*
  - Conduct related value chain activities in a *collaborative fashion* to create valuable *competitive capabilities*

- **Approaches:**
  - *Sharing* of sales force, advertising, or distribution activities
  - Exploiting closely related technologies
  - Transferring know-how / *expertise* from one business to another
  - Transferring *brand name and reputation* to a new product/service
  - Acquiring new businesses to uniquely help firm’s position in existing businesses
Define Horizontal Integration

- Horizontal Integration is the addition of other business activities at the same level of the value chain.
- Two companies of the same industry and in the same stage of production work together.
- These companies belong to the same supply chain stage and normally produce or trade the same product.
- Firm add their strength to gain benefits.
- Affects the processes and structure design of distribution networks *
Horizontal Integration

Examples:
- The Standard Oil Company buying 40 refineries
- An automobile manufacturer buying a sport utility vehicle manufacturer
- A radio station that also owns a newspaper and magazine
Two option

- Acquisition
- Merger

HI can occur in a form of mergers or acquisitions. **Merger** is the joining of two similar sizes, independent companies to make one joint entity. **Acquisition** is the purchase of another company.
Advantages of Horizontal Integration

- Economics of scale: Selling more of the same product in different parts of the world
- Economics of Scope: Sharing resources common to different products. "Synergies" *
- Increased Market Power
- Reduction in cost
Disadvantages of Horizontal Integration *

- Costs
- Increased work load
- Increased Responsibilities
- Anti-trust issues
- HI can lead to a monopoly *
Drawbacks and Limits of Horizontal Integration

- Majority of mergers and acquisitions *do not* create value
- Implementing a horizontal integration strategy is not easy
- Mergers and acquisitions often fail to produce the anticipated gains
- Can bring the company into conflict with antitrust law
Define Vertical Integration

Vertical integration is the process in which several steps in the production and / or distribution of a product or service are controlled by a single company or entity, in order to increase that company’s power in the marketplace.

Three Types of Vertical Integration

- **Backward (upstream) vertical integration:**
  This is when a company owns some of the subsidiaries that produce some of the inputs used in the production of its products.
  - Example: When an automobile company owns a tire company

- **Forward vertical integration:**
  This is when a company owns the subsidiaries that market the product.
  - Example: A mobile company opening its own mobile retail chain

- **Balanced Vertical Integration:** is a company that sets up subsidiaries that supply them with inputs as well as market their product.
Advantages of Vertical Integration

- Reduce transportation cost
- Improve supply chain coordination
- More opportunities to differentiate by means of increased control of inputs
- Capture upstream and downstream profits
- Increase entry barriers to potential competitors
Disadvantages of Vertical Integration

- Capacity balancing: Making sure that inputs will match outputs at all levels
- Potentially higher cost due to the lack of supplier competition
- Decreased Flexibility
- Developing new competencies may compromise existing competencies
- Increase bureaucratic costs
- Monopolization of markets
UNIT -III
NATIONAL INCOME, MONEY AND BANKING, ECONOMIC ENVIRONMENT

National Income and Related Aggregates

- National income or national product is defined as the total market value of all the final goods and services produced in an economy in a given period of time.

- This suggests that the labor and capital of a country, working on the natural resources produces certain net amount of goods and services, the aggregates of which as known as national income or national products.

- There are many concepts of national income which are used by different economists and all of which are inter-related. These concepts are:
1. **Gross National Product at Market Price (GNP mp)**

GNP mp refers to the total value of all the final goods and services produced during the period of one year plus the net factor incomes earned from abroad during the year.

- The word “gross” is used to indicate that the total national product includes in it that part of product which represents depreciation.

- Depreciation means the wear and tear of the machinery and other fixed capital during the process of production.

- GNP includes the economic activities of all the residents of a nation whether operating within the country or outside it.
It takes into account the incomes which the residents get from rest of the world and at the same time it excludes those incomes which arise from the economic activities within the country but have to paid out to the non-residents operating in the country.

GNP being the monetary measure of all final goods and services produced, is widely used as an index for judging the performance of an economy.

2. **Net National Product at Marker Price (NNP mp):**

- NNP at market price is equal to GNP minus the charges of depreciation and replacements, where depreciation represents the values of fixed capital consumed during the process of production.

- \( \text{NNP mp} = \text{GNP mp} - \text{Depreciation} \)

- The concept of NNP is important because it gives an estimate of the net increase in the output of final goods and services.
3. Net National Product at Factor Cost (NNP fc) or National Income:

NNP fc or national income is equal to the sum total of factor incomes received by the factors of production during the year. It is equal to the sum of rent, wages, interests and profits in a given year.

➢ The sum total of incomes of the factors of production is known as national income or net national product at factor cost.

➢ Thus, the national income is equal to the NNP at mp minus revenue of the government by way of indirect taxes plus subsidies provided by the government to the business sector.

$$\text{NNP fc} = \text{NNP mp} - \text{Indirect tax + Subsidies}$$

(or)

$$\text{NNP fc} = \text{NNP mp} - \text{net Ind}$$

➢ Comparison between Product method and Income method: \( \text{NI fc} = \text{NI mp} - \text{Indirect tax + Subsidies} \)

➢ For the sake of convenience, economists suggest that the Product method is for Primary sector and the Income method is for Tertiary sector.

The Expenditure Method

➢ Because of identical relation the GNP=GNP=GNI, the expenditure of one becomes the income of other. Hence, the GNE is calculated which will be identical with GNI.

➢ The Expenditure in the Economy can be broadly divided into three types, such as,

- (g) Consumption Expenditure
- (h) Investment Expenditure
- (i) The pure Govt. Expenditure
The importance of estimating national income lies in the fact that it throws light on the distribution of income in a society.

It helps to see how equitably income is distributed in the societies.

Which tells us whether there are inequalities of income distribution, and if so, how vast is the inequalities.

It is regarded as the fair measure of overall economic activity of the nation and is therefore, commonly accepted as an index of economic conditions prevailing in the country.
4. **National Income at Current Price and Constant Price:**

when the value of goods and services is found out by multiplying the quantity produced during one year by the prices prevailing in that year, we call it National income at Current Prices.

on the other hand, when the value of goods and services is calculated by multiplying the quantity during one year with prices of the base year, we call it National Income at Constant Prices.

**Example:**

(1) \(q_1\) is the quantity of final product I in year 1980 and \(p_1\) is the price of that year.

Then, the value of the final product I = \(q_1p_1\)

Similarly, \(q_2\) is the quantity of final product II in year 1980 and \(p_2\) is the price of that year.

Then, the value of the final product II = \(q_2p_2\)

If we add up the value of all final goods and services produced, we get National Income at Current Prices.

So, National Income at Current Price will be: \(q_1p_1 + q_2p_2 + \ldots + q_np_n = NI \text{ at Current Prices} \).
Measurement of National Income

- The methods of estimating national income of a country depends upon the availability of proper statistics.
- This can be viewed from three interrelated angles, such as, in terms of production, income and expenditure.
- These three terms are broadly related to GNP, GNI and GNE respectively.
- The ideal national income equation shows that National Income or

$$ NI = GNP = GNI = GNE $$
To measure the national income of a country, we use three different methods, such as:

(b) The product method
(c) The income method
(d) The expenditure method

The Product Method

- The production method measures national income as the sum of net products produced by the production units in the given period.

Therefore, the production method involves the following steps:

(h) Identifying the production unit
(i) Estimating their net products
(j) Valuing the goods and services
(k) Estimation of net income from abroad
The next step in the production method is the estimation of net product of each sector.

This comes from the Gross products minus the intermediate products minus the depreciation during the process of production.

\[ \text{NNP} = \text{GNP} - \text{Intermediate products} - \text{Depreciation} \]

The total estimates would give us Net Domestic Product at factor cost.

The addition of net income from abroad to this total would give us net national income at factor cost or National Income.
The Income Method

- The income method measures national income as the sum total of factor income shares accruing to the factor owners.
- Factors of Production: Land, Labour, Capital and Organization.
- Factor Incomes: Rent, Wage, Interest and Profit.
- One can easily aggregate all the factor incomes over a period of time and this aggregate figure is known as national income at factor cost.
- There are major additions and deductions to the national income accounting.
- Additions: Income from foreign sectors in the form of rent, profits etc.
- Deductions: Incomes from all illegal activities: theft, robbery, smuggling, child labor, prostitutions etc.
- Incomes to the foreign sector acting in domestic sectors.
Comparison between Product method and Income method: \( NI_{fc} = NI_{mp} - \text{Indirect tax} + \text{Subsidies}. \)

For the sake of convenience, economists suggest that the Product method is for Primary sector and the Income method is for tertiary sectors.

**The Expenditure Method**

Because of identical relation the \( GNP = GNI = GNE \), the expenditure of one becomes the income of other. Hence, the GNE is calculated which will be identical with GNI.

The Expenditure in the Economy can be broadly divided into three types, such as,

(g) Consumption Expenditure
(h) Investment Expenditure, and
(i) The pure Govt. Expenditure
- Consumption expenditure provides direct satisfaction whereas the investment expenditure is necessary to increase the productivity of the nation.
- Pure Govt. expenditure is necessary for maintenance of law and order situation and providing the infrastructural facilities to the nation.
- In details, all expenses are again divide into five different categories:

  (v) Private Consumption Expenditure
  (vi) Public Consumption Expenditure
  (vii) Private Investment Expenditure
  (viii) Public Investment Expenditure
  (ix) Pure Government Expenditure
Meaning of Inflation

In economics, inflation is a rise in the general level of prices of goods and services in an economy over a period of time. When the general price level rises, each unit of currency buys fewer goods and services. Consequently, inflation also reflects an erosion in the purchasing power of money – a loss of real value in the internal medium of exchange and unit of account in the economy. A chief measure of price inflation is the inflation rate, the annualized percentage change in a general price index (normally the Consumer Price Index) over time.
Effects of Inflation

Inflation's effects on an economy are various and can be simultaneously positive and negative. Negative effects of inflation include a decrease in the real value of money and other monetary items over time, uncertainty over future inflation may discourage investment and savings, and high inflation may lead to shortages of goods if consumers begin hoarding out of concern that prices will increase in the future. Positive effects include ensuring central banks can adjust nominal interest rates (intended to mitigate recessions), and encouraging investment in non-monetary capital projects.
• **High Inflation**: Economists generally agree that high rates of inflation and hyperinflation are caused by an excessive growth of the money supply.

• **Low or moderate inflation** may be attributed to fluctuations in real demand for goods and services, or changes in available supplies such as during scarcities, as well as to growth in the money supply.

• **Long period of sustained inflation** is caused by money supply growing faster than the rate of economic growth.
Types of Inflation

There are four main types of inflation.

Wage Inflation: Wage inflation is also called as demand-pull or excess demand inflation. This type of inflation occurs when total demand for goods and services in an economy exceeds the supply of the same. When the supply is less, the prices of these goods and services would rise, leading to a situation called as demand-pull inflation. This type of inflation affects the market economy adversely during the wartime.

Cost-push Inflation: As the name suggests, if there is increase in the cost of production of goods and services, there is likely to be a forceful increase in the prices of finished goods and services. For instance, a rise in the wages of laborers would raise the unit costs of production and this would lead to rise in prices for the related end product. This type of inflation may or may not occur in conjunction with demand-pull inflation.
Deflation

It refers to continuous fall in price level. This happens in recession period. If it last for longer period, it harms the growth & development of the economy. The Government should adopt policies which are similar to the situation of recession. Eg.

• Increase income by reducing taxes
• Generate employment
• Adopt policies which enhance production
DEFLATION

- Deflation refers to the situation where price level fall is causing major increase in unemployment, reduction in output and decrease in the income off the people.

- “Deflation is that state of the economy where the value of money is rising or prices are falling.” -- Crowther

CAUSES OF DEFLATION

- When the level of money income falls relatively to the current supply of goods and services.
- Deflationary process may occur due to:
  - Fall in private investment
  - Persistent unfavorable balance of payments
  - Continued government-budgetary surplus
  - Sudden increase in the total output
  - By action of central bank to raise the discount rate or by selling securities
  - All are due to the combined effect of all of these factors
VALUE OF MONEY

- Value of money refers to its purchasing power: that is its capacity to command goods in exchange for itself.
- Value of money is high if it buys more commodities. And vice versa.
- The value of money varies inversely with the general level of prices.

1. Quantity theory of money
2. Cash balance theory of money
3. Modern quantity theory of money
MODERN THEORY OF VALUE OF MONEY

Wealth Theory of Demand:
- Money is a durable consumer good held for the services it renders.
- The demand of money depends on volume of total demand, and relative returns on the different forms of assets.
- Assets can be held in form of: money, bonds, equities, physical goods & human capital.

Money Demand Equation:
- $M_d = f (Y_p)$
- Demand for money is a function of permanent income (resources available to individuals, and expected returns on other assets).
- $Y_p$ is affected by yield of securities and wealth holdings.
VALUE OF MONEY

- Irving Fischer
  \[ PT = MV + M_1V_1 \]
  Quantity Theory of Money

- Cambridge Economists: Keynes, Marshall
  \[ M = KP \]
  Cash Balance Approach to Money

- Milton Friedman
  \[ M_d = f(Y_p) \]
  Modern Theory of value of money

ORIGIN OF MONEY

Money has evolved through five different stages during history:

1. Commodity money
2. Metallic money
3. Paper money
4. Credit money
5. Electronic money
Definition:-

Banking has been defined as “Accepting for the purpose of lending & investment, of deposit of money from the public, repayable on demand order or otherwise and withdraw able by cheque, draft or otherwise.”

Meaning:-

Banking means transacting business with a bank; depositing or withdrawing funds or requesting a loan etc.
PRIMARY FUNCTIONS

The main functions of banks are accepting deposit and lending loans:

A - accepting deposits

1. Fixed deposits:– These deposits mature after a considerable long period like 1 year or more than that the rate of interest is fixed the amount deposited cannot be withdrawn before maturity date.

2. Current A/C deposit:– These are mainly maintain by business community to facilitate frequent transaction with big amounts. Generally no rate of interest or very low rate of interest is paid on this account.
3. Savings bank A/C:– It is kind of demand deposits which is generally kept by the people for the sake of safety. These facility is given for small saver and normally a small rate of interest is paid.

4. Recurring deposit A/C:– In case of recurring deposit the fixed amount is deposited in a bank every month for a fixed period of time.
SECONDARY FUNCTIONS

Apart from the main functions, the banks also provide financial services to the corporate sector and business and society. They are as follows:

1. Merchant Banking:– Merchant banking is an organization which underwrites securities for companies, advises in various activities. No person is allowed to carry out any activity as a Merchant Banker unless holds a certificate granted by SEBI. Thus, merchant banks are financial institutions which provide specialized services including acceptance of bills of exchange, corporate finance, portfolio management and other services.

2. Leasing:– Banks have started funding the fixed assets through leasing. It refers to the renting out of immovable property by the bank to the businessmen on a specified rent for a specific period on terms which may be mutually agreed upon. A written agreement is made in this respect.

3. Mutual funds:– The main function of mutual fund is to mobilize the savings of the general public and invest them in stock market and money market.
4. Venture Capital (VC): Venture Capital is financial capital provided to early-stage, high-potential, high risk, growth startup companies. The venture capital fund makes money by owning equity in the companies it invests in, which usually have a novel technology or business model in high technology industries, such as biotechnology, IT, software, etc.

5. ATM: An ATM is also known as cash point. The banks nowadays provide ATM facilities. The customers can withdraw money easily and quickly 24 hours a day.

6. Telebanking: Telebanking is a throwback to the days when people would call into a central number at their bank/financial institution in order to get balance, check status and other account-related information. Most financial organizations offer telebanking services today; however, the public representation is known as telephone-based customer service or just customer service.
7. Credit cards:– Credit cards allow a person to buy goods and services up to a certain limit without immediate payment. The amount is paid to the shops, hotel, etc. by the commercial banks.

8. Locker Service:– Under this service, lockers are provided to the public in various sizes on payment of fixed rent. Customers can deposit their valuables, documents, jewellery, securities, etc. in these lockers.

9. Underwriting:– This facility is provided to the joint stock companies and to the government. The banks guarantee the purchase of certain proportion of shares, if not sold in the market.
Banks

- Commercial Banks
- Regional Rural Banks
- Cooperative Banks
  - Scheduled Banks
  - Non Scheduled Banks
    - Indian Banks
    - Foreign Banks
      - Public Sector
      - Private Sector
        - State Bank of India
        - Nationalized bank
Scheduled commercial banks are those included in the second schedule of the Reserve Bank of India Act, 1934.

For this, they have to satisfy three conditions:
- It must have paid-up capital and reserves of an aggregate value of at least Rs. 5 lakhs.
- It is carrying on the business of banking in India.
- It must be a corporation or cooperative society and not a partnership or sole proprietorship firm.
**SCHEDULED BANKS**

**INDIAN BANKS**
- Registered or incorporated in India.
- They have their headquarter in India and can have branches all over India.
- They can also operate in foreign countries.

**FOREIGN BANKS**
- Registered or incorporated in their home country, not in India.
- They have their office and/or branches in India.
- They play an important role in shaping the attitude and policies of foreign govt., companies and their clients towards India.
PUBLIC SECTOR BANKS

- Public sector banks are banks in which the government has a major holding.
- At least 51% ownership is vested with the government.
- The shares of these banks are listed on stock exchanges.
NATIONALIZED BANKS

- In 1969, 14 banks with deposit base of Rs. 50 Crores or more were nationalized. In 1980, 6 more banks were nationalized.
- This step brought more than 90% of commercial banking in the public sector.
- The main function of nationalised bank is provide finance for the housing projects, health facilities and increase the chance to providing the products and services to the people of rural areas.
- Andhra Bank
- Punjab National Bank
- Indian Overseas Bank
- IDBI
- Allahabad Bank
- Syndicate Bank
- UCO Bank
- Dena Bank
PRIVATE BANKS

- All those banks in which majority of stake are held by private individuals
- The banks, which came in operation after 1991, with the introduction of economic reforms and financial sector reforms are called "new private-sector banks"
- New banks are strategic in their thinking and operations.
They were set up on the recommendation of Narasimham Committee in 1975.

The objective was to provide credit and other facilities to small and marginal farmers, agricultural labours and artisans.

RRBs are working in all states except GOA and Sikkim.

They are governed by Regional Rural Bank act, 1976

50% capital is provided by central govt., 15% by state govt., 35% by sponsoring public sector bank.

Features of RRB:

- The area of RRB is limited to only a region, comprising of some district of a state
- These banks grant loan only to the rural agriculture sector and small artisans.
- The lending rates would be some what lower than the commercial banks.
- These are intended to eliminate money lenders.
- These banks are to supplement the effort of cooperative banks.
Liberalization

Liberalization is a very broad term that usually refers to fewer government regulations and restrictions in the economy.

Liberalization refers to the relaxation of the previous government restriction usually in the area of social and economic policies. When government liberalized trade, it means it has removed the tariff, subsidies and other restriction on the flow of goods and services between the countries.
The Path of liberalization

- Relief for foreign investors
- Devaluation of Indian rupees
- New industrial Policy
- New trade policy
- Removal of import Restrictions
- Liberalization of NRI remittances
- Freedom to import technology
- Encouraging foreign tie-ups
- MRTP relaxation
- Privatization of public sector
Advantages of liberalization

- Industrial licensing
- Increase the foreign investment.
- Increase the foreign exchange reserve.
- Increase in consumption and Control over price.
- Check on corruption.
- Reduction in dependence on external commercial borrowings
Privatization means transfer of ownership and/or management of an enterprise from the public sector to the private sector. It also means the withdrawal of the state from an industry or sector partially or fully.

Privatization is opening up of an industry that has been reserved for public sector to the private sector.

Privatization means replacing government monopolies with the competitive pressures of the marketplace to encourage efficiency, quality and innovation in the delivery of goods and services.
Need for Privatisation.

Though the PSUs have contributed heavily to develop the industrial base of the country, they continue, even today, to suffer from a number of shortcomings which are identified below very briefly :-

• A sizable number of PSUs have been incurring and reporting losses on a continual basis. Consequently, a large number of PSUs have already been referred of loss giving units;

• Multiplicity of authorities to whom the PSUs are accountable;

• Delay in implementation of projects leading to cost escalation and other consequences;
Different Ways in privatization

- Liberalization Approach
- Relative Share Enlargement Approach
- Association of Private Sector Management Approach
- Transfer of Minority Equity Ownership Approach
- Transfer of Complete Ownership Approach
Advantages of Privatization

- Privatization helps to reduce the burden on Govt.
- It will help profit making public sector unit to modernize and diversify their business.
- It will help in making public sector unit more competitive.
- It will help to improving the quality of decision making, because the decisions are free from any political interference.
- Privatization may help in reviving sick units which are the liability of the public sector.
- Industrial growth.
- Increase the foreign investment.
- Increase in efficiency.
Globalization implies integration of the economy of the country with the rest of the world economy and opening up of the economy for foreign direct investment by liberalizing the rules and regulations and by creating favorable socio-economic and political climate for global business.
Features of Globalization

- Opening and planning to expand business throughout the world.
- Erasing the difference between domestic market and foreign market.
- Buying and selling goods and services from/to any countries in the world.
- Locating the production and other physical facilities on a consideration of the global business dynamics, irrespective of national consideration.
Pros and Cons of Globalisation

Globalisation have several benefits, these are:

- Free flow of capital and increase in the total capital employed.
- Free flow of technology.
- Increase in industrialization.
- Spread of production facilities throughout the globe.
- Balanced development of world economies.
- Increase in production and consumption.
- Commodities at lower price with high quality.
- Increase in jobs and income.
- Higher Standard of living.
- Balanced human development.
UNIT- IV
CONCEPTS OF FINANCIAL MANAGEMENT

Financial management – Scope – Objectives –
Time value of money – Methods of appraising
project profitability – Sources of finance –
Working capital and management of working
capital
**Introduction**

- ‘FM’ may be defined as the art & science of managing money. FM is concerned with the duties of the financial managers in the business firm.
- Relationship of financial management and other supportive disciplines is:

  **Financial Decision Areas**
  1. Investment analysis
  2. Working Capital Management
  3. Sources and cost of funds
  4. Determination of capital structure
  5. Dividend Policy
  6. Analysis of risk and returns

  **Primary Disciplines**
  1. Accounting
  2. Macroeconomics
  3. Microeconomics

  **Other Related Disciplines**
  1. Marketing
  2. Production
  3. Quantitative methods

Resulting in 
**Shareholder wealth maximization**
Scope of Financial Management

Scope of FM is divided for the purpose of exposition into two broad categories:

- The Traditional Approach
- The Modern Approach
THE TRADITIONAL APPROACH

Evolved during the 1920’s and 1930’s known as ‘Corporation Finance’. The field of study dealing with finance as encompassing three related aspects of raising and administering resources from outside.

- The institutional arrangement in the form of financial institutions which comprise the organisation of the capital market.
- The financial instruments through which funds are raised from the Capital markets and the related aspects of practices and the procedural aspects of capital markets.
- The legal and accounting relationship between a firm and its sources of funds.
Limitations of Traditional Approach:

- The traditional approach was, in other words, the outsider-looking approach. The limitation was that internal decision making (i.e. insider-looking-out) was completely ignored.

- Related to procurement of funds and financing problems by corporate enterprise, i.e. confined only to a segment of the industrial enterprise as the non-corporate organisation lay outside its scope.

- The treatment in traditional approach was built too closely around episodic events such as incorporation, promotion, merger, consolidation, reorganisation and so on on which hampered day-to-day financial problems of the company did not receive much attention.

- The traditional treatment was found to have a lacuna to the extent that the focus was only on long term financing and ignored that issues involved in the working capital management.

- It ignored the central issues of financial management such as the cost of capital funds to the enterprise, financial standards of performance, and so on.
THE MODERN APPROACH

The modern approach views FM in a broad sense and provides a analytical and conceptual framework for financial decision making. The principal contents of modern approach are

- How large should an enterprise be, how fast it should grow.
- In what form should it hold assets.
- What should be the composition of its liabilities.
OBJECTIVES OF FINANCIAL MANAGEMENT

The objective provide a framework for optimum financial decision making. They are concerned with designing a method of operating the internal investment and financing of a firm. there are two widely discussed approaches under this, these are:

- Profit Maximisation
- Wealth Maximisation
Profit maximisation should be undertaken and those that decrease profits or EPS are to be avoided. Profit is the test of economic efficiency. It leads to efficient allocation of resources, as resources tend to be directed to uses which in terms of profitability are the most desirable. Financial management is mainly concerned with the efficient economic resources namely capital. The main technical flaws of this criteria are:

- Ambiguity
- Timing of benefits
- Quality of benefits.
Wealth maximisation is also known as *Value or Net present worth maximisation*. Its operational features satisfy all the three requirements of the operational of the financial course of action namely, exactness, quality of benefits, and the time value of money. Two important issues related to the value/share price maximisation are:

- **Focus on stakeholders**, stakeholders include groups such as employees, customers, suppliers, creditors, owners and others who have a direct link to the firm.

- **EVA (Economic Value Added)** — EVA is equal to the after-tax operating profits of a firm less the cost of the firm to finance investments.
Concept of Time Value of Money

• The cost & benefits of a project occur at different points of time depending upon the life of the project.

• The value of money changes over time, as such value of costs & benefits would depend upon the time of their occurrence.

• To compare the value of resources at different points of time, apply the compounding and discounting techniques.
Time Preference for Money

- **Time preference for money** is an individual’s preference for possession of a given amount of money *now*, rather than the same amount at some future time.

- Three reasons may be attributed to the individual’s time preference for money:
  - risk
  - preference for consumption
  - investment opportunities
Required Rate of Return

- The time preference for money is generally expressed by an interest rate. This rate will be positive even in the absence of any risk. It may be therefore called the risk-free rate.
- An investor requires compensation for assuming risk, which is called risk premium.
- The investor’s required rate of return is: Risk-free rate + Risk premium.
Time Value Adjustment

- Two most common methods of adjusting cash flows for time value of money:
  - **Compounding**—the process of calculating future values of cash flows and
  - **Discounting**—the process of calculating present values of cash flows.

Future Value

- **Compounding** is the process of finding the future values of cash flows by applying the concept of compound interest.
- **Compound interest** is the interest that is received on the original amount (principal) as well as on any interest earned but not withdrawn during earlier periods.
- **Simple interest** is the interest that is calculated only on the original amount (principal), and thus, no compounding of interest takes place.


**Meaning of Project Appraisal:**

Project Appraisal is the analysis of costs and benefits of a proposed project with a goal of assuring a rational allocation of limited financial resources amongst alternate Investment opportunities with the objective of achieving specific goals.

Project Appraisal is mainly the process of transmitting information accumulated through feasibility studies into a comprehensive form in order to enable the decision maker undertake a comprehensive appraisal of various projects and embark on a specific project or projects by allocating resources.

The various Factors considered by Financial Institutions while appraising a project are:

PROJECT APPRAISAL METHOD

- Pay Back Period
- Internal Rate of Returns
- Project Appraisal Method
- Average Rate of Return
- Profitability Index
- Net Present Value
ASPECTS OF PROJECT APPRAISAL

- Social Aspects
- Economic Aspects
- Environmental Aspects
- Financial Aspects
- Administrative/Management Aspects
- Commercial Aspects
- Technical Aspects
Preliminary Steps

- Read the document thoroughly
- Check the completeness of the document
- Are the PC-I & PC-II prepared on prescribed format
- Cost estimates are attached?
- Accompanied by drawings, maps etc.
- Are the PC-I/PC-II provided in sufficient numbers
- Check Signatures of concerned officers
- Determine the sector to which the scheme will contribute
- Determine the project’s contribution to the sector objectives
- Mark problems mentioned in the document
- Mark objectives mentioned in the document
- Compare marked problems with the objectives for establishing cause and effect relationship
LIMITATIONS OF THE PROJECT APPRAISAL

- Quality of project analysis depends on the quality of data and forecast made about costs and benefits. Over-estimation of benefits and underestimation of costs is quite common to get the project approved.

- In view of the uncertainty about the future it is impossible to quantify completely the risks.

- Project analysis is a partial analysis where it is assumed that project will not change the macro economic variables.

- It is a useful device where benefits can be quantified.

- Project analysis is useful when there is a definite starting and finishing points.
Long Term Source of Finance

• Long term sources of finance are those that are needed over a longer period of time - generally over a year.

• Long term finance may be needed to fund expansion projects

• It's Types Are:- Share, Debenture, Venture Capital, Government Grant, Bank Loan, Mortgage, Owner Capital, Internal Accrual.
Nature of Working Capital

- Working capital management is concerned with the problems that arise in attempting to manage the current assets, the current liabilities and the interrelations that exist between them.
- Current assets refer to those assets which in the ordinary course of business can be, or will be, converted into cash within one year without undergoing a diminution in value and without disrupting the operations of the firm.
  Examples- cash, marketable securities, accounts receivable and inventory.
- Current liabilities are those liabilities which are intended, at their inception, to be paid in the ordinary course of business, within a year, out of the current assets or the earnings of the concern.
  Examples- accounts payable, bills payable, bank overdraft and outstanding expenses.
Objective of Working Capital Management

- The goal of working capital management is to manage the firm’s current assets and liabilities in such a way that a satisfactory level of working capital is maintained.
- The interaction between current assets and current liabilities is, therefore, the main theme of the theory of the working capital management.
Concepts and Definitions of Working Capital

There are two concepts of working capital: Gross and Net.

- **Gross working capital**—means the total current assets.
- **Net working capital**—can be defined in two ways:
  - The difference between current assets and current liabilities.
  - The portion of current assets which is financed with long term funds.
The Operating-cycle and Working Capital Needs

- The working capital requirements of a firm depends, to a great extent upon the operating cycle of the firm. The operating cycle may be defined as the time duration starting from the procurement of goods or raw materials and ending with the sales realization.
- The length and nature of the operating cycle may differ from one firm to another depending upon the size and nature of the firm.
- The operating cycle of a firm consists of the time required for the completion of the chronological sequence of some or all of the following:
  - Procurement of raw materials and services.
  - Conversion of raw materials into work-in-progress.
  - Conversion of work-in-progress into finished goods.
  - Sale of finished goods.
  - Conversion of receivables into cash.
Determinants of Working capital Requirement

- General nature of business
- Production cycle
- Business cycle fluctuations
- Production policy
- Credit policy
- Growth and expansion
- Profit level
- Level of taxes
- Dividend policy
- Depreciation policy
- Price level changes
- Operating efficiency
Working capital: Policy and Management

- The working capital management includes and refers to the procedures and policies required to manage the working capital.

  There are three types of working capital policies which a firm may adopt i.e.
  - Moderate working capital policy
  - Conservative working capital policy
  - Aggressive working capital policy.

  These policies describe the relationship between the sales level and the level of current assets.
Types of working capital needs

- The working capital need can be bifurcated into permanent working capital and temporary working capital.

- **Permanent working capital** - There is always a minimum level of working capital which is continuously required by a firm in order to maintain its activities like cash, stock and other current assets in order to meet its business requirements irrespective of the level of operations.

- **Temporary working capital** - Over and above the permanent working capital, the firm may also require additional working capital in order to meet the requirements arising out of fluctuations in sales volume. This extra working capital needed to support the increased volume of sales is known as temporary or fluctuating working capital.
UNIT- V
ACCOUNTING SYSTEM, STATEMENT AND FINANCIAL ANALYSIS

ACCOUNTING PROCESS

Collection of Transaction

Record in Journal

Post to Ledger

Preparation of Trail Balance

Preparation of Balance Sheet
Accounting Quotes

“The globalization of the economy, the explosion of technology, the complexity of business transactions and other forces have thrust the financial system into a new age. As the pace of economic change accelerates, so does the need for reliable and relevant information…”

“To stay the best, our financial reporting system must be as dynamic as the financial markets themselves…”

“Financial reporting is without value if the user does not perceive it to be sound.”

—American Institute of Certified Public Accountants (AICPA)
NEED

Describe how organizations create value for their customers

Describe the historical relationship between accounting and IT professionals

Identify the justifications / reasons for changing the nature of accounting and how the use of information technology (IT) can enable such change

Describe the ways that accounting professionals can increase their value
The accounting information system has traditionally captured and stored data about a selected subset of business events, namely activities that meet the definition of an accounting transaction—events that change the composition of the company's assets, liabilities, or owner's equity.

Could we modify the set of business events and capture data about a broader set of business events than "accounting transactions?" Sure!

Do we want to broaden the set of business events? Maybe, depending on the type of information our information customers need to make good decisions.
Accounting Information Systems

- Fixed Asset System (FAS)
- General Ledger/ Financial Reporting System (GL/FRS)
- Transaction Processing System (TPS)
  - Expenditure Cycle
  - Conversion Cycle
  - Revenue Cycle
- Management Reporting System (MRS)
Method of book-keeping

1. Single entry system of book-keeping
2. Double entry system of book-keeping

Method of Accounting

1. Cash basis
2. Accrual basis
The single entry system is an "informal" accounting/bookkeeping system where a user of this system makes only one aspect (Dr/Cr) to enter a business financial transaction.

- A cheque book, for example, is a single entry bookkeeping system where one entry is made for each deposit or cheque written.
  - Receipts are entered as a deposit
  - Checks and withdrawals are entered as expenses
The Journal

• All business transactions are first recorded in a journal. The *journal* is a chronological record of the business’s business transactions.

• The process of recording transactions in a journal (making journal entries) is called *journalizing*. 
The Journal

• Page 110 of your text shows you a sample general journal.

• Notice:
  – how the date is set up
  – how the debit is listed first and is flush with the left-hand margin
  – how the credit it listed second and is indented several spaces
  – the explanation following the entry - don’t leave anything up to your memory
  – how we skip a space between journal entries: this lends itself to readability
  – the reference column. We will refer to this later.
The General Ledger contains all of the balance sheet accounts of an accounting system. The balance sheet accounts are the assets, liabilities, and fund balance accounts of the school district. Values in General Ledger are expressed as debits or credits.
The ledger page is actually a T-account in a more detailed format. It has the account title and its corresponding account number on top. It also has two sides, namely, the debit side and the credit side. Each T-account or ledger account has the following columns.

- **Date** (debit side) - the date of the debit entry is entered in this column.
- **Explanation** (debit side) - A brief explanation of the debit entry is entered in this column.
- **“F” or folio** (debit side) - The journal page number from where the debit entry was taken is entered in this column.
- **Debit** - The amount of the debit entry is entered in this column.
- **Date** (credit side) - the date of the credit entry is entered in this column.
- **Explanation** (credit side) - A brief explanation of the credit entry is entered in this column.
- **“F” or folio** (credit side) - The journal page number from where the credit entry was taken is entered in this column.
- **Credit** - The amount of the credit entry is entered in this column.
An example of a page from a ledger is as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Explanation</th>
<th>F</th>
<th>Debit</th>
<th>Date</th>
<th>Explanation</th>
<th>F</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td></td>
<td></td>
<td></td>
<td>2008</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept-29</td>
<td>Service on credit</td>
<td>1</td>
<td>50,000.00</td>
<td>Sept. 30</td>
<td>Collection</td>
<td>1</td>
<td>20,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td>Collection</td>
<td>1</td>
<td>30,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50,000.00</td>
</tr>
<tr>
<td></td>
<td>Balance</td>
<td></td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Selected transaction for Tina Cordero company during its first month in business are presented below:

1. Invested $10,000 in cash in the business.
2. Purchased equipment for $12,000 paying $5,000 in cash and the balance on account.
3. Paid $3,000 cash on balance owed for equipment.
4. Withdrew $500 cash for personal use.

<table>
<thead>
<tr>
<th>General Journal</th>
<th>General Ledger &gt;&gt; Equipment</th>
<th>General Ledger &gt;&gt; Account Payable</th>
<th>General Ledger &gt;&gt; Tina Cordero, capital</th>
<th>General Ledger &gt;&gt; cash</th>
<th>General Ledger &gt;&gt; Tina Cordero, drawing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Account Title &amp; Description</td>
<td>Ref</td>
<td>Debit</td>
<td>Credit</td>
<td>Date</td>
</tr>
<tr>
<td>Sept-1</td>
<td>Cash Tina Cordero, capital</td>
<td></td>
<td>10,000</td>
<td>10,000</td>
<td>Sept-5</td>
</tr>
<tr>
<td>5</td>
<td>Equipment</td>
<td></td>
<td>12,000</td>
<td>7,000</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Account Payable</td>
<td></td>
<td>3,000</td>
<td>3,000</td>
<td>25</td>
</tr>
<tr>
<td>30</td>
<td>Drawings</td>
<td></td>
<td>500</td>
<td>500</td>
<td>30</td>
</tr>
</tbody>
</table>

| Date | Explanation | Ref | Debit | Credit | Balance |
| Sept-1 |   | J1 | 10,000 | 10,000 | 10,000 |
| 5 |   | J1 | 5,000 | 5,000 |
| 25 |   | J1 | 3,000 | 2,000 |
| 30 |   | J1 | 500 | 1,500 |

| Date | Explanation | Ref | Debit | Credit | Balance |
| Sept-30 |   | J1 | 500 | 500 | 500 |
Trial Balance

- A basic rule of double-entry accounting is that for every credit there must be an equal debit amount. From this concept, one can say that the sum of all debits must equal the sum of all credits in the accounting system. If debits do not equal credits, then an error has been made. The **trial balance** is a tool for detecting such errors.

- The trial balance is calculated by summing the balances of all the ledger accounts. The account balances are used because the balance summarizes the net effect of all of the debits and credits in an account. To calculate the trial balance, construct a table in the following format:

<table>
<thead>
<tr>
<th>Account</th>
<th>Debits</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account 1</td>
<td>xxxx.xx</td>
<td></td>
</tr>
<tr>
<td>Account 2</td>
<td>xxxx.xx</td>
<td></td>
</tr>
<tr>
<td>Account 3</td>
<td>xxxx.xx</td>
<td></td>
</tr>
<tr>
<td>Account 4</td>
<td>xxxx.xx</td>
<td></td>
</tr>
<tr>
<td>Account 5</td>
<td>xxxx.xx</td>
<td></td>
</tr>
<tr>
<td>Account 6</td>
<td>xxxx.xx</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>xxxx.xx</td>
<td></td>
</tr>
</tbody>
</table>
Steps to Prepare the Trial Balance

- For each ledger account — Cash, Accounts Payable, etc. — total your credits and debits.
  - If the credit total is larger, subtract the debit total from the credit total to get your ledger account total which goes in the credit column of the trial balance.
  - If the debit total is larger, subtract the credit total from the debit total to get your ledger account total which goes in the debit column of the trial balance.
  - Put the ledger account total in the credit or debit column of your trial balance (as identified above).

- When you have debit or credit totals for each ledger account, add all of your credit totals to get a credit grand total.

- Add all of your debit totals to get a debit grand total. This is your trial balance.
Unbalanced Trial Balance

If you have an unbalanced trial balance, then you have an error somewhere in the accounting process. Examples of problems that can unbalance a trial balance include:

- Adding the debits and credits for the trial balance incorrectly;
- Forgetting to include a ledger account balance on the trial balance;
- Putting the ledger account balances in the wrong debit/credit column in the trial balance;
- Writing the wrong ledger account balances in the trial balance columns;
- Miscalculating the ledger account totals;
- Posting a journal entry incorrectly to the general ledger, whether using the wrong number or getting your debits/credits mixed up;
- Making an error in your journal entry, whether using the wrong number or forgetting part of a compound journal entry.
Balanced Trial Balance

- If all of your journal entries were posted properly (and error-free) in the general ledger, your debit grand total and credit grand total should balance, and you can move on in the accounting cycle. If the debit and credit grand totals do not balance, then you have an error to find somewhere in your transaction posting process (journal to general ledger to trial balance).

- It's possible to have a posting error even if the debits and credits do balance, but that will get found and solved later in the accounting cycle. Examples of problems that would not show up in the trial balance include:
  * Putting the credit amount in the debit column and the debit amount in the credit column for a particular transaction;
  * Recording a transaction in an incorrect account;
  * Forgetting to record a journal entry as a general ledger transaction;
  * Neglecting to make a journal entry at all.
LIMITATIONS OF A TRIAL BALANCE

- A trial balance does not prove that all transactions have been recorded or that the ledger is correct.
- Numerous errors may exist even though the trial balance columns agree.
- The trial balance may balance even when:
  * a transaction is not journalized,
  * a correct journal entry is not posted,
  * a journal entry is posted twice,
  * incorrect accounts are used in journalizing or posting,
  * offsetting errors are made in recording the amount of the transaction.
Financial Statement Analysis

• Financial Statement Analysis will help business owners and other interested people to analyse the data in financial statements to provide them with better information about such key factors for decision making and ultimate business survival.

• Financial Statement Analysis is the collective name for the tools and techniques that are intended to provide relevant information to the decision makers. The purpose of the FSA is to assess the financial health and performance of the company.

• FSA consist of the comparisons for the same company over the period of time and comparisons of different companies either in the same industry or in different industries.
Financial Statement Analysis

Purpose:
- To use financial statements to evaluate an organisation's
  - Financial performance
  - Financial position
  - Prediction of future performance
- To have a means of comparative analysis across time in terms of:
  - Intracompany basis (within the company itself)
  - Intercompany basis (between companies)
  - Industry Averages (against that particular industry’s averages)
- To apply analytical tools and techniques to financial statements to obtain useful information to aid decision making.
Financial Statement Analysis

Financial statement analysis involves analysing the information provided in the financial statements to:

- Provide information about the organisation’s:
  • Past performance
  • Present condition
  • Future performance
- Assess the organisation’s:
  • Earnings in terms of power, persistence, quality and growth
  • Solvency
Financial Statements...

• 1. The Income Statement
• 2. The Balance Sheet
• 3. The Statement of Retained Earnings
• 4. The Statement of Changes in Financial Position
  ▪ Changes in Working Capital Position
  ▪ Changes in Cash Position
  ▪ Changes in Overall Financial Position
Effective Financial Statement Analysis

• To perform an effective financial statement analysis, you need to be aware of the organisation’s:
  – business strategy
  – objectives
  – annual report and other documents like articles about the organisation in newspapers and business reviews. These are called individual organisational factors.

Effective Financial Statement Analysis

Requires that you:
• Understand the nature of the industry in which the organisation works. This is an industry factor.
• Understand that the overall state of the economy may also have an impact on the performance of the organisation.

→ Financial statement analysis is more than just “crunching numbers”; it involves obtaining a broader picture of the organisation in order to evaluate appropriately how that organisation is performing.
Financial Ratio Analysis

- Financial ratio analysis involves calculating and analysing ratios that use data from one, two or more financial statements.
- Ratio analysis also expresses relationships between different financial statements.
- Financial Ratios can be classified into 5 main categories:
  - Profitability Ratios
  - Liquidity or Short-Term Solvency ratios
  - Asset Management or Activity Ratios
  - Financial Structure or Capitalisation Ratios
  - Market Test Ratios
Profitability Ratios

3 elements of the profitability analysis:

• Analysing on sales and trading margin
  – focus on gross profit

• Analysing on the control of expenses
  – focus on net profit

• Assessing the return on assets and return on equity
Profitability Ratios

- Gross Profit % = \( \frac{\text{Gross Profit}}{\text{Net Sales}} \times 100 \)

- Net Profit % = \( \frac{\text{Net Profit after tax}}{\text{Net Sales}} \times 100 \)

Or in some cases, firms use the net profit before tax figure. Firms have no control over tax expense as they would have over other expenses.

\[ \Rightarrow \text{Net Profit %} = \frac{\text{Net Profit before tax}}{\text{Net Sales}} \times 100 \]

- Return on Assets = \( \frac{\text{Net Profit}}{\text{Average Total Assets}} \times 100 \)

- Return on Equity = \( \frac{\text{Net Profit}}{\text{Average Total Equity}} \times 100 \)
Liquidity or Short-Term Solvency ratios

Short-term funds management
• Working capital management is important as it signals the firm’s ability to meet short term debt obligations.

For example: Current ratio

• The ideal benchmark for the current ratio is $2:$1 where there are two dollars of current assets (CA) to cover $1 of current liabilities (CL). The acceptable benchmark is $1: $1 but a ratio below $1CA:$1CL represents liquidity riskiness as there is insufficient current assets to cover $1 of current liabilities.
Liquidity or Short-Term Solvency ratios

- Working Capital = Current assets – Current Liabilities

- Current Ratio = \( \frac{\text{Current Assets}}{\text{Current Liabilities}} \)

- Quick Ratio = \( \frac{\text{Current Assets} - \text{Inventory} - \text{Prepayments}}{\text{Current Liabilities} - \text{Bank Overdraft}} \)

Asset Management or Activity Ratios

- Efficiency of asset usage
  - How well assets are used to generate revenues (income) will impact on the overall profitability of the business.

For example: Asset Turnover

- This ratio represents the efficiency of asset usage to generate sales revenue
Asset Management or Activity Ratios

- Asset Turnover = \( \frac{\text{Net Sales}}{\text{Average Total Assets}} \)

- Inventory Turnover = \( \frac{\text{Cost of Goods Sold}}{\text{Average Ending Inventory}} \)

- Average Collection Period = \( \frac{\text{Average accounts Receivable}}{\text{Average daily net credit sales}} \)

* Average daily net credit sales = net credit sales / 365
Financial Structure or Capitalisation Ratios

Long term funds management
• Measures the riskiness of business in terms of debt gearing.

For example: Debt/Equity
• This ratio measures the relationship between debt and equity. A ratio of 1 indicates that debt and equity funding are equal (i.e. there is $1 of debt to $1 of equity) whereas a ratio of 1.5 indicates that there is higher debt gearing in the business (i.e. there is $1.5 of debt to $1 of equity). This higher debt gearing is usually interpreted as bringing in more financial risk for the business particularly if the business has profitability or cash flow problems.
Financial Structure or Capitalisation Ratios

- Debt/Equity ratio = Debt / Equity

- Debt/Total Assets ratio = Debt * 100
  Total Assets

- Equity ratio = Equity * 100
  Total Assets

- Times Interest Earned = Earnings before Interest and Tax
  Interest
Market Test Ratios

• Based on the share market's perception of the company.

For example: Price/Earnings ratio

• The higher the ratio, the higher the perceived quality of the earnings by the share market.
Market Test Ratios

- Earnings per share = \( \frac{\text{Net Profit after tax}}{\text{Number of issued ordinary shares}} \)

- Dividends per share = \( \frac{\text{Dividends}}{\text{Number of issued ordinary shares}} \)

- Dividend payout ratio = \( \frac{\text{Dividends per share}}{\text{Earnings per share}} \times 100 \)

- Price Earnings ratio = \( \frac{\text{Market price per share}}{\text{Earnings per share}} \)
Advantages of Management Accounting

1. It helps to increase the efficiency of all functions of management.
2. It helps in target-fixing, decision-making, price-fixing, selection of product-mix and so on.
3. Forecasting and Budgeting help the concern to plan the future and financial activities.
4. Various tools and techniques provide reliability and authenticity to carry out the business functions.
5. It is useful in controlling wastage and defects.
6. It helps in complete communication between all levels of management.
7. It helps in controlling the cost of production thus increasing the profit percentage.
8. It is proactive-analyses the governmental policies and socio-economic scenario which helps to assess the external environmental impacts on the organization.
Limitations of Management Accounting

1. It is concerned with financial and **cost accounting**. If these records are not reliable, it will affect the effectiveness of management accounting.
2. Decisions taken by the management accountant may or may not be executed by the management.
3. It is very expensive. Only big concerns can adopt this method of accounting.
4. New **rules** and regulations are to be **framed**, hence there is a possibility of opposition from the employees.
5. It is only in the developing stage.
6. It provides only data and not decisions.
7. It is a tool to the management and not an alternative of management.