PERIYAR UNIVERSITY

NAAC 'A++' Grade with CGPA 3.61 (Cycle - 3)
State University - NIRF Rank 56 - State Public University Rank 25
Salem - 636011, Tamil Nadu, India.

CENTRE FOR DISTANCE AND ONLINE EDUCATION (CDOE)

MASTER OF BUSINESS ADMINISTRATION (MBA)

SEMESTER – I

CORE : MANAGERIAL ECONOMICS

(Candidates admitted from 2024 onwards)

PERIYAR UNIIVERSITY

CENTRE FOR DISTANCE AND ONLINE EDUCATION (CDOE)

2024 admission onwards

Core: Managerial Economics

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SELF-LEARNING MATERIALDEVELOPMENT – STAGE 1

MANAGERIAL ECONOMICS	
SYLLABUS	
UNIT	**DETAILS**
I	Introduction: Definition of Managerial Economics - Decision making and the Fundamental Concepts Affecting Business Decisions – the Incremental Concept, Marginalism, Equi-Marginal concept, The Time Perspective, discounting Principle, Opportunity cost Principle – Micro and Macro Economics.
II	Utility analysis and Demand Curve - Elasticity of Demand – Demand analysis - Basic concept - Tools of analysis for Demand forecasting. - Use of business Indicators -Demand Forecasting for consumer - consumer durable and Capital goods - Input and Output analysis – consumer Behaviour- Consumer Equilibrium.
III	The production function: Production with one variable Input – Law of variable proportions – Production – Production with two variable inputs- Production Isoquants - Is cost Lines Estimating Production function – Return to scale – Economics Vs Diseconomies of Scale – Cost concept –Analysis of cost – short and Long run cost . Market Structure: Perfect and Imperfect competition – Monopoly – Duopoly, Monopolistic competition – Pricing Methods.
IV	Macro-Economic Variables - National Income – Concepts – Gross Domestic Product, Gross National Product, Net National Product – Measurement of National Income, Savings, Investment – Business Cycle and Contra cyclical policies – role of Economic policy – Indian Economic planning.
V	Commodity and Money Market: Demand and supply of Money – Money Marek Equilibrium – Monetary policy – Inflation – Deflation – Stagflation –Role of Fiscal Policies – Indian fiscal policies – Government policy towards foreign capital and foreign collaboration – globalization and its impact. Cashless Economy and digitalized cash transfer; Economic models and its steps; FEMA – GST- Industrial policy in India and its effects on growth.

MANAGERIAL ECONOMICS

UNIT - I : Introduction to Managerial Economics

Introduction: Definition of Managerial Economics - Decision making and the Fundamental Concepts Affecting Business Decisions – the Incremental Concept, Marginalism, Equi-Marginal concept, The Time Perspective, discounting Principle, Opportunity cost Principle – Micro and Macro Economics.

Unit Module structuring

1. Introduction to Managerial Economics
2. Decision making

Self-LearningMaterial Development – Stage 1

Table of content for the unit 1

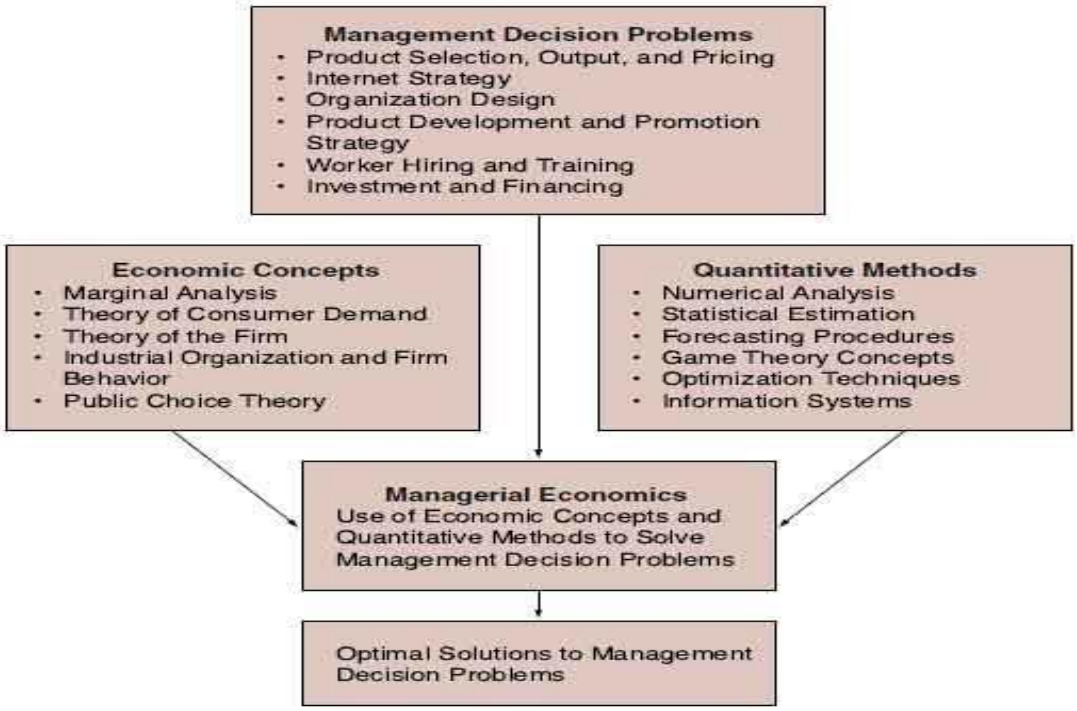
UNIT OBJECTIVES:

- To Understand the conceptual framework Managerial economics.
- To analyze the Fundamental concepts affecting the business decisions.

MANAGERIALECONOMICS

1.INTRODUCTIONOFMANAGERIALECONOMICS

Managerial Economics (also called Business Economics) a subject first introduced by Joel Dean in 1951, is essentially concerned with the economic decisions of business managers. It is a branch of Economics that applies microeconomic analysis to specific business decisions (i.e. Economics applied in business decision-making). Managerial Economics may be viewed as Economics applied to problem solving at the level of the firm. The problems of course relate to choices and allocation of resources, which are basically economic in nature and are faced by managers all the time. It is that branch of Economics, which serves as a link between abstract theory and managerial practice. It is based on economic analysis for identifying problems, organizing information and evaluating alternatives .In other words, Managerial Economics involves analysis of allocation of the resources available to a firm or a unit of management among the activities of that unit. It is thus concerned with choice or selection among alternatives. Managerial Economics is by nature goal- oriented and prescriptive, and it aims at maximum achievement of objectives.



1.1 MEANINGOFMANAGERIALECONOMICS

Managerial Economic is combination of two words **Managerial & Economics.** Managerial means management & relating to Management & Managers. Economics means Economic growth & relating to trade, industry, money.

Managerial Economics is a combination of Economic Theory & Managerial Theory. Managerial economics is a discipline which deals with the application of economic theory to business management. It deals with the use of economic concepts and principles of business decision making. Formerly it was known as **"Business Economics"** but the term

has now been discarded in favor of Managerial Economics.

Managerial Economics may be defined as the study of economic theories, logic and methodology which are generally applied to seek solution to the practical. problems of business. Managerial Economics is thus constituted of that part of economic knowledge or economic theories which is used as a tool of analysing business problems for rational business decisions. Managerial Economics is often called as Business Economics or Economic for Firms.

1.2 Definition of Managerial Economics: -

"Managerial Economics is economics applied in decision making. It is a special branch of economics bridging the gap between abstract theory and managerial practice." – ***Haynes, Mote* and *Paul*.**

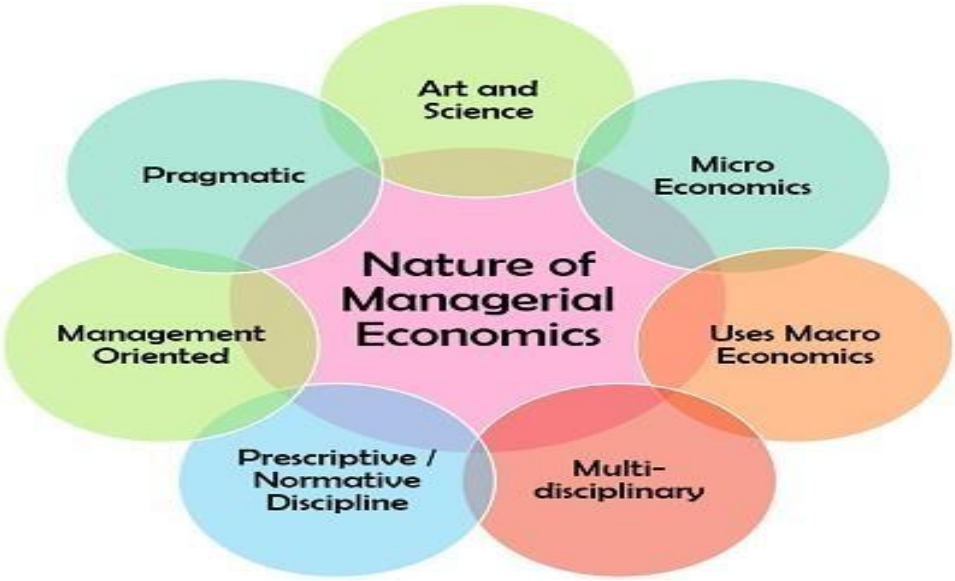
"Business Economics consists of the use of economic modes of thought to analyse business situations." - ***McNair* and *Meriam***

"Business Economics (Managerial Economics) is the integration of economic theory with business practice for the purpose of facilitating decision making and forward planning by management." - ***Spencer*and *Seegelman.***

"Managerial economics is concerned with application of economic concepts and economic analysis to the problems of formulating rational managerial decision." – ***Mansfield***

1.3 NATURE OF MANAGERIAL ECONOMICS

To know more about managerial economics, we must know about its various characteristics. Let us read about the nature of this concept in the following points:



1] Art and Science: Managerial economics requires a lot of logical thinking and creative skills for decision making or problem-solving. It is also considered to be a stream of science by some economist claiming that it involves the application of different economic principles, techniques and methods to solve business problems.

2] Micro Economics: In managerial economics, managers generally deal with the problems related to a particular organization instead of the whole economy. Therefore, it is considered to be a part of microeconomics.

3] Uses Macro Economics :A business functions in an external environment, i.e. it serves the market which is apart of the economy as a whole.Therefore,it is essential for managers to analyze the different factors of macroeconomics such as market conditions, economic reforms, government policies, etc. and their impact on the organization.

4] Multi-disciplinary: It uses many tools and principles belonging to various disciplines such as accounting, finance, statistics, mathematics, production, operation research, human resource, marketing, etc.

5] Prescriptive/Normative Discipline: It aims at goal achievement and deals with practical situations or problems by implementing corrective measures. Management Oriented: It acts as a tool in the hands of managers to deal with business-related problems and uncertainties appropriately. It also provides for goal establishment, policy formulation and effective decision making.

6] Pragmatic: It is a practical and logical approach towards the day to day business problems.

1.3 SCOPE OF MANAGERIAL ECONOMICS

The scope of managerial economics is not yet clearly laid out because it is a developing science. Even then the following fields may be said to generally fall under Managerial Economics: **-**

1. **Analysis and Forecasting:** A business firm is an economic organization which is engaged in transforming productive resources into goods that are to be sold in the market.A major part of managerial decision making depends on accurate estimates of demand.A forecast of future sales serves as a guide to management. For preparing production schedules and employing resources. It will help management to maintain or strengthen its market position and profit base. Demand analysis also identifies a number of other factors influencing the demand for a product. Demand analysis and forecasting occupies a strategic place in Managerial Economics.

2. **Cost and production analysis**: A firm's profitability depends much on its cost of production. A wise manager would prepare cost estimates of a range of output, identify the factors causing are cause variations in cost estimates and choose the cost-minimizing output level, taking also into consideration the degree of uncertainty in production and cost calculations. Production processes are under the charge of engineers but the business

manager is supposed to carry out the production function analysis in order to avoid wastages of materials and time. Sound pricing practices depend much on cost control. Them a in topics discussed under cost and production analysis are:Cost concepts, cost-output relationships, Economics and Diseconomies of scale and cost control.

3. Pricing decisions, policies and practices: Pricing is a very important area of Managerial Economics. In fact, price is the genesis of the revenue of a firm and as such the success of a business firm largely depends on the correctness of the price decision staken by it. The important aspects deal with this area are: Price determination in various market forms, pricing methods, differential pricing, product-line pricing and price forecasting.

4. Profit management: Business firms are generally organized for earning profit and in the long period, it is profit which provides the chief measure of success of a firm. Economics tells us that profits are the reward for uncertainty bearing and risk taking. A successful business manager is one who can form more or less correct estimates of costs and revenues likely to accrue to the firm at different levels of output. The more successful a manager is in reducing uncertainty, the higher are the profits earned by him. In fact, profit-planning and profit measurement constitute the most challenging area of Managerial Economics.

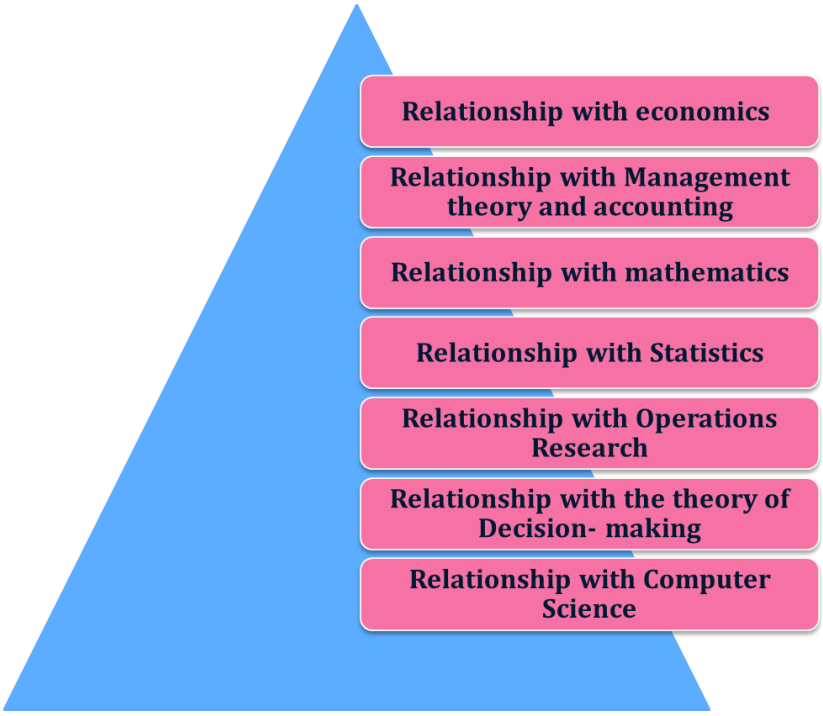
5. Capital management : The problems relating to firm's capital investments are perhaps the most complex and troublesome. Capital management implies planning and control of capital expenditure because it involves alargesum and more over the problems in disposing the capital assets off are so complex that they require considerable time and labour. The main topics dealt with under capital management are cost of capital ,rate of return and selection of projects.

6. Government Regulation: There are endless implications of government regulations on the business firm and at times the legal environment of business is as important as the economic environment. So, it is necessary to examine law- related applications of economic principles.

7. Management of Public Sector Enterprises: -Managerial economics can also be applied to the decision making process of non-profit seeking and public sector enterprises. Economists in various government departments and public sector organizations are also concerned with project evaluation and cost- benefit analysis.

1.4 MANAGERIALECONOMICSINRELATIONWITHOTHERDISCIPLINES

Managerial economics has a close linkage with other disciplines and fields of study. Thesubject has gained by the interaction with Economics, Mathematics and Statistics and has drawn upon Management theory and Accounting concepts. Managerial economics integrates concepts and methods from these disciplines and brings them to bear on managerial problems.



1. Managerial Economics and Economics :

Managerial Economics is economics applied to decision making. It is a special branch of economics, bridging the gap between pure economic theory and managerial practice. Economics has two main branches—micro-economics and macro-economics.

Micro-economics: - 'Micro' means small. It studies the behaviour of the individual units and small groups of units. It is a study of particular firms, particular households ,individual prices, wages ,incomes, individual industries and particular commodities. Thus micro-economics gives a microscopic view of the economy.

The roots of managerial economics spring from micro-economic theory. In price theory, demand concepts, elasticity of demand, marginal cost marginal revenue, the short and long runs and theories of market structure are sources of the elements of micro-economics which managerial economics draws upon. It makes use of well-known models in price theory such as the model for monopoly price, the kinked demand theory and the model of price discrimination.

Macro-economics:-'Macro' means large. It deals with the behaviour of the large aggregates in the economy. The large aggregates are total saving, total consumption, total income, total employment, general price level, wage level, cost structure, etc. Thus macro-economics is aggregative economics.

It examines the interrelations among the various aggregates, and causes of fluctuations in them. Problems of determination of total income, total employment and general price level are the central problems in macro- economics.

Macro-economies are also related to managerial economics. The environment, in which a business operates, fluctuations in national income, changes in fiscal and monetary measures and variations in the level of business activity have relevance to business decisions. The understanding of the overall operation of the economic system is very useful to the managerial economist in the formulation of his policies.

Macro-economic contributes to business forecasting. The most widely used model in modern forecasting is the gross national product model.

2. Managerial Economics and Theory of Decision Making:

The theory of decision making is relatively a new subject that has a significance for managerial economics. In the process of management such as planning, organising, leading and controlling, decision making is always essential. Decision making is an integral part of today's business management. A manager faces a number of problems connected with his/her business such as production, inventory, cost, marketing, pricing, investment and personnel.

Economist are interested in the efficient use of scarce resources hence they are naturally interested in business decision problems and they apply economics in management of business problems. Hence managerial economics is economics applied in decision making.

3. Managerial Economics and Operations Research:

Mathematicians, statisticians, engineers and others join together and developed models and analytical tools which have grown into a specialized subject known as operation research. The basic purpose of the approach is to develop a scientific model of the system which may be utilized for policy making.

The development of techniques and concepts such as Linear Programming, Dynamic Programming, Input-output Analysis, Inventory Theory, Information Theory, Probability Theory, Queuing Theory, Game Theory, Decision Theory and Symbolic Logic.

4. Managerial Economics and Statistics:

Statistics is important to managerial economics. It provides the basis for the empirical testing of theory. It provides the individual firm with measures of appropriate functional relationship involved in decision making. Statistics is a very useful science for business executives because a business runs on estimates and probabilities.

Statistics supplies many tools to managerial economics. Suppose forecasting has to be done. For this purpose, trend projections are used. Similarly, multiple regression technique is used. In managerial economics, measures of central tendency like the mean, median, mode, and measures of dispersion, correlation, regression, least square, estimators are widely used.

Statistical tools are widely used in the solution of managerial problems.

For example: Sampling is very useful in data collection. Managerial economics makes use of correlation and multiple regression in business problems involving some kind of cause and effect relationship.

5. Managerial Economics and Accounting:

Managerial economics is closely related to accounting. It is recording the financial operation of a business firm. A business is started with the main aim of earning profit. Capital is invested/employed for purchasing properties such as building, furniture, etc and for meeting the current expenses of the business.

Goods are bought and sold for cash as well as credit. Cash is paid to credit sellers. It is received from credit buyers. Expenses are met and incomes derived. This goes on the daily routine work of the business.The buying of goods, sale of goods, payment of cash, receipt of cash and similar dealings are called business transactions.

The business transactions are varied and multifarious .This has given rise to the necessity of recording business transaction in books. They are written in a set of books in as Systematic manner so as to facilitate proper study of their results.

- **There are three classes of accounts:**

(i) Personal account,

(ii) Property accounts, and

(iii) Nominal accounts.

Management accounting provides the accounting data for taking business decisions. The accounting techniques are very essential for the success of the firm because profit maximization is the major objective of the firm.

6. Managerial Economics and Mathematics:

Mathematics is another important subject closely related to managerial economics. For the derivation and exposition of economic analysis, we require a set of mathematical tools. Mathematics has helped in the development of economic theories and now mathematical economics has become a very important branch of economics.

Mathematical approach to economic theories makes them more precise and logical. For the estimation and prediction of economic factors for decision making and forward planning, mathematical method is very helpful. The important branches of mathematics generally used by a managerial economist are geometry, algebra and calculus.

The mathematical concepts used by the managerial economists are the logarithms and exponential, vectors and determinants, input-out tables. Operations research which is closely related to managerial economics is mathematical in character.

Let's sum -up

Dear Learners , In this Module We learn about Introduction to Managerial Economics, Meaning, Definition, Nature and scope and Relations with other disciplines.

Self – Assessment Questions

1. The subject matter of economics is concerned with

a. Prodcution b. Distribution

c.Consumption d. All of the above

2. The economic problem arises since

a. Wants are unlimited b. Resources are limited

c. Resources are capable d. All of the above

3. The wants of the people are;

a. Limited b. Unlimited

c. Satiable d. None of the above

4. which one of the following is an example of economic goods

a. Sunlight b. Petrol

c. Air d. None of the above

5. The problem of allocation of resources is concerned with

a. what to produce b. How to produce

c. For whom to produce d. All of the above

Module - 1 completed

Module 2 – Decision Making

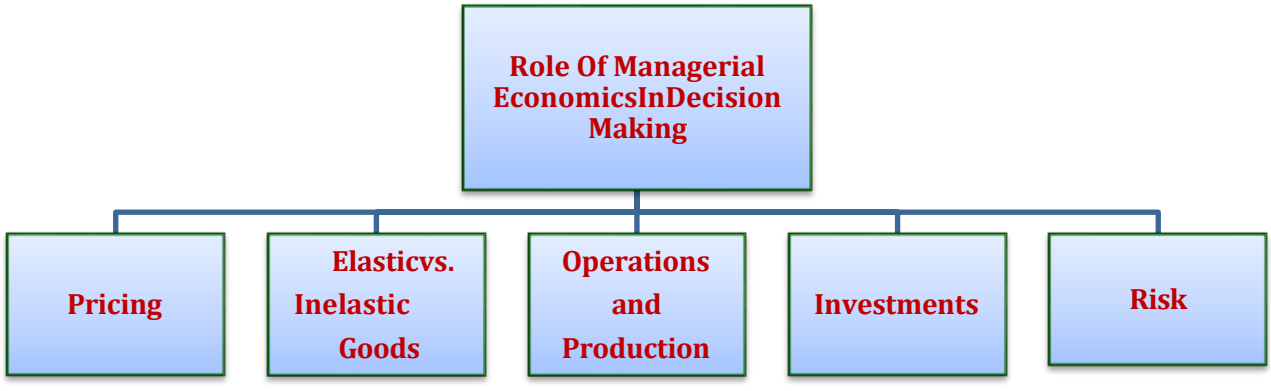
2.1 *MANAGERIAL ECONOMICS IN DECISION MAKING.*

Managerial economics uses a wide variety of economic concepts, tools, and techniques in the decision-making process. These concepts can be placed in three broad categories:-

1. The theory of the firm, which describes how businesses make a variety of decisions.
2. The theory of consumer behavior, which describes decision making by consumers.
3. The theory of market structure and pricing, which describes the structure and characteristics of different market forms under which business firms operate.

❖ *ROLE OF MANAGERIAL ECONOMICS IN DECISIONMAKING*

Managerial economics, or business economics, is adivision of microeconomics that focuses on applying economic theory directly to businesses. The application of economic theory through statistical methods helps businesses make decisions and determine strategy on pricing, operations, risk, investments and production. The overall role of managerial economics is to increase the efficiency of decision making in businesses to increase profit



1) Pricing: - Managerial economics assists businesses in determining pricing strategies and appropriate pricing levels for the ir products and services. Some common analysis methods are price discrimination, value-based pricing and cost-plus pricing.

2) Elastic vs. Inelastic Goods: - Economists can determine price sensitivity of products through a price elasticity analysis. Some products, such as milk, are consideranecessityratherthanaluxuryandwillpurchaseatmostpricepoints. This type of product is considered inelastic. When a business knows they are selling an inelastic good, they can make marketing and pricing decisions easier

3) Operations and Production:- Managerial economics uses quantitative methods to analyze production and operational efficiency through schedule optimization, economies of scale and resource analyses. Additional analysis methods include marginal cost, marginal revenue and operating leverage. Through tweaking the operations and production of a company, profits rise as costs decline.

4) Investments:- Many managerial economic tools and analysis models are used to help make investing decisions both for corporations and savvy individual investors. These tools are use to make stock market investing decisions and decisions on capital investments for a business. For example, managerial economic theory can be used to help a company decide between purchasing, building or leasing operational equipment.

5) Risk:- Uncertainty exits in every business and managerial economics can help reduce risk through uncertainty model analysis and decision-theory analysis. Heavy use of statistical probability theory helps provide potential scenarios for businesses to use when making decisions.

2.2 *MANAGERIAL DECISION MAKING PROCESS(5STEPS)*

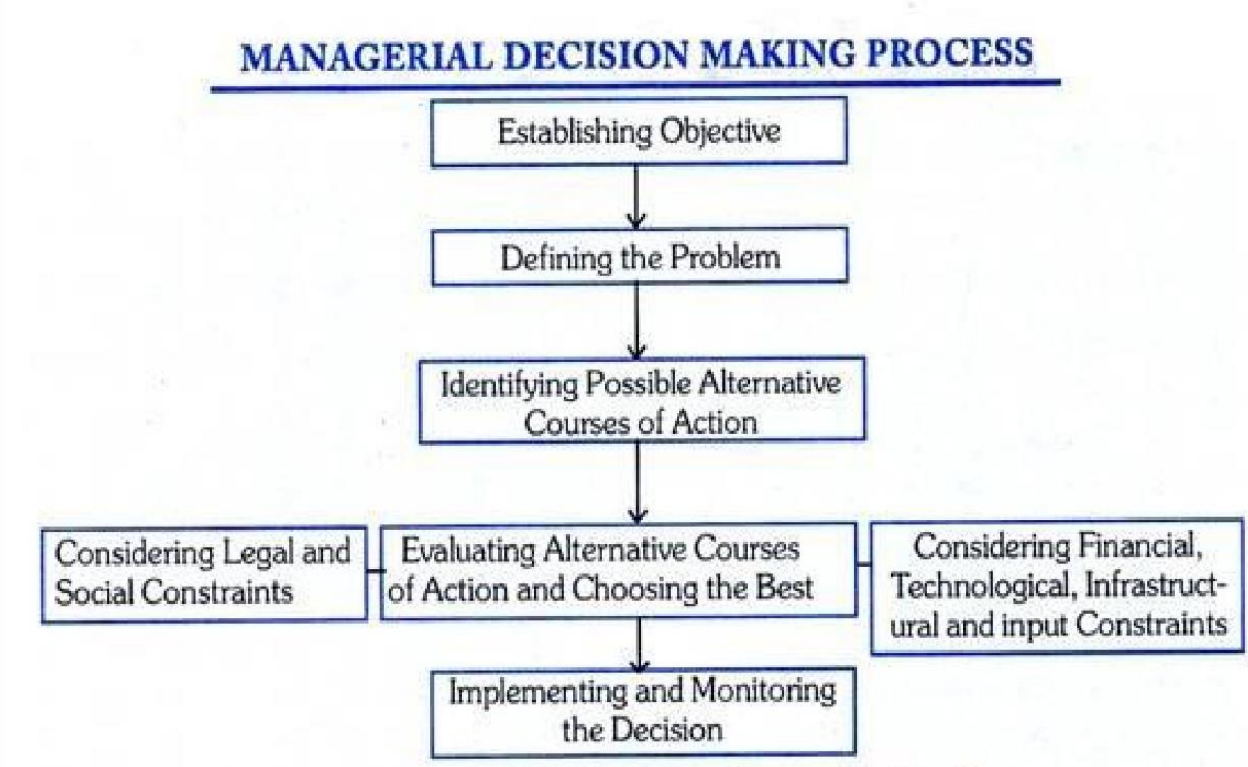


Fig. 1.2. *Managerial Decision Making Process : Various Steps*

Decision making is crucial for running a business enterprise which faces a large number of problems requiring decisions.

Which product to be produced, what price to be charged, what quantity of the product to be produced,what and how much advertisement expenditure to be made to promote the sales, how much investment expenditure to be incurred are some of the problems which require decisions to be made by managers.

The five steps involved in managerial decision making process are explained below:-

1. Establishing the Objective:-The first step in the decision making process is to establish the objective of the business enterprise. The important objective of a private business enterprise is to maximize profits. However, a business firm may have some other objectives such as maximization of sales or growth of the firm.

But the objective of a public enterprise is normally not of maximization of profits but to follow benefit-cost criterion. According to this criterion, a public enterprise should evaluate all social costs and benefits when making a decision whether to build an airport, a power plant, a steel plant, etc.

2. Defining the Problem:-The second step in decision making process is one of defining or identifying the problem. Defining the nature of the problem is important because decision making is after all meant for solution of the problem. For instance, a cotton textile firm may find that its profits are declining.

It needs to be investigated what are the causes of the problem of decreasing profits. Whether it is the wrong pricing policy, bad labour-management relations or the use of outdated technology which is causing the problem of declining profits. Once the source or reason for falling profits has been found, the problem has been identified and defined.

3. Identifying Possible Alternative Solutions (i.e. Alternative Courses of Action):- Once the problem has been identified, the next step is to find out alternative solutions to the problem.This will require considering the variables that have an impact on the problem. In this way, relationship among the variables and with the problems has to be established.

In regard to this, various hypotheses can be developed which will become alternative courses for the solution of the problem. For example, in case of the problem mentioned above,If it is identified that the problem of declining profits is due to be use of technologically inefficient and outdated machinery in production.

- **The two possible solutions of the problem are:**

(1) Updating and replacing only the old machinery.

(2) Building entirely a new plant equipped with latest machinery.

The choice between these alternative courses of action depends on which will bring about larger increase in profits.

4. Evaluating Alternative Courses of Action:-The next step in business decision making is to evaluate the alternative courses of action. This requires, the collection and analysis of the relevant data. Some data will be available within the various departments of the firm itself, the other may be obtained from the industry and government.

The data and information so obtained can be used to evaluate the outcome or results expected from each possible course of action. Methods such as regression analysis, differential calculus, linear programming, cost-benefit.

Analysis are used to arrive at the optimal course. The optimum solution will be one that helps to achieve the established objective of the firm. The course of action which is optimum will be actually chosen. It may be further noted that for the choice of an optimal solution to the problem, a manager works under certain constraints.

The constraints may be legal such as laws regarding pollution and disposal of harmful wastes; they way be financial (i.e. limited financial resources); they may related to the availability of physical infrastructure and raw materials, and they may be technological in nature which set limits to the possible output to be produced per unit of time. The crucial role of a business manager is to determine optimal course of action and he has to make a decision under these constraints.

5. Implementing the Decision:- After the alternative courses of action have been evaluated and optimal course of action selected, the final step is to implement the decision. The implementation of the decision requires constant monitoring so that expected results from the optimal course of action are obtained. Thus, if it is found that expected results are not forthcoming due to the wrong implementation of the decision,then corrective measures should be taken.

However, it should be noted that once a course of action is implemented to achieve the established objective, changes in it may become necessary from time to time in response in changes in conditions or firm's operating environment on the basis of which decisions were taken.

2.3ROLE AND RESPONSIBILITIES OF MANAGERIAL ECONOMIST

To make are as on able profit on capital employed:-

He must have a strong conviction that profits are essential and his main obligation is to assist the management in earning reasonable profits on capital employed in the firm.

1. He must make successful forecasts by making in depth study of the internal and external factors:-This will have influence over the profitability or the working of the firm. He must aim at lessening if not fully eliminating the risks involved in uncertainties. He has a major responsibility to alert management at the earliest possible time in case he discovers any error in his forecast, so that the management can make necessary changes and adjustments in the policies and programmes of the firm.

2. He must inform the management of all the economic trends:-A managerial economist should keep himself in touch with the latest developments of national economy and business environment so that he can keep the management informed with these developments and expected trends of the economy

3. He must establish and maintain contacts with individuals and data sources:

(i) To establish and maintain contacts:- A managerial economist should establish and maintain contacts with individuals and data sources in order to collect relevant and valuable information in the field.

(ii) To developers on alrelations: -To collect information he should develop personal relations with those having specialized knowledge of the field.

(iii) To join professional associations and should take active part in their activities: -

The success of this lies in how quickly he gathers additional information in the best interest of the firm.

4. He must earnfull status in the business and only then he can be helpful to the management in good and successful decision-making:

For this:

(i) He must receive continuous support for himself and his professional ideas by performing his function effectively.

(ii) He should express his ideas in simple and understand able language with the minimum use of technical words, while communicating with his management executives.

❖ *IMPORTANCE OF MANAGERIAL ECONOMICS*

Business and industrial enterprises aim at earning maximum proceeds. In order to achieve this objective, a managerial executive has to take recourse in decision making, which is the process of selecting a specified course of action from a number of alternatives. A sound decision requires fair knowledge of the aspects of economic theory and the tools of economic analysis, which are directly involved in the process of decision-making. Since managerial economics is concerned with such aspects and tools of analysis, it is pertinent to the decision making process.

Spencer and Siegelman have described the importance of managerial economics in a business and industrial enterprise as follows:

(i) Accommodating traditional theoretical concepts to the actual business behavior and conditions:- Managerial economics amalgamates tools, techniques, models and theories of traditional economics with actual business practices and with the environment in which a firm has to operate. According to Edwin Mansfield, “Managerial Economics attempts to bridge the gap between purely analytical problems that intrigue many economic theories and the problems of policies that management must face”.

(ii) Estimating economic relationships: Managerial economics estimates economic relationships between different business factors such as income, elasticity of demand, cost volume, profit analysis etc.

(iii) Predicting relevant economic quantities: Managerial economics assists the management in predicting various economic quantities such as cost,profit, demand, capital, production, price etc.As a business manager has to function in an environment of uncertainty,it is imperative to anticipate the future working environment in terms of the said quantities.

(iv) Understanding significant external forces: The management has to identify all the important factors that influence a firm. These factors can broadly be divided into two categories. Managerial economics plays an important role by assisting management in understanding these factors.

(a) Externalfactors: A firm cannot exercise any control over thesefactors.The plans, policies and programs of the firm should be formulated in the light of these factors. Significant external factors impinging on the decision making process of a firm are economic system of the country, business cycles, fluctuations innation a income and national production,industrial policy of the government, trade and fiscal policy of the government, taxation policy, licensing policy, trends in foreign trade of the country, general industrial relation in the country and so on.

(b) Internal factors: These factors fall under the control of a firm. These factors are associated with business operation. Knowledge of these factors aids the management in making sound business decisions.

(v) Basis of business policies: Managerial economics is the founding principle of business policies. Business policies are prepared based on studies and findings of managerial economics, which cautions the management against potential upheavals in

national as well as international economy. Thus, managerial economics is helpful to the management in its decision-making process.

❖ *LIMITATIONS OF MANAGERIAL ECONOMICS*

The limitations of managerial economics areas follows:-

(a) Managerial economics focus on management analysis based on financial and cost accounting data. Thus, the reliability of this data depends on the accuracy of the financial accounting information.

(b) Such analysis is based on past information. But if a new scheme is to be introduced, the circumstance eschange and the conclusions cannot be predicted using this past information. Managerial economics is subjected to the personal preferences of the individual manager which can influence the final decision of the manager to a certain extent.

(c) It is an expensive process as a business firm generally requires a certain number of managers to ensure proper functioning.

(d) The science of managerial economics is quite recent and is not fully developed. Thus, it is subjected to ambiguity in certain scenarios.

The manager is required to have extensive knowledge in a variety of fields in ordertoensurethathecompletelycomprehendsthesituationtobedealtwith."

2.4 DECISION MAKING AND THE FUNDAMENTAL CONCEPTS AFFECTING BUSINESS DECISIONS

Opportunity Cost Principle

The sacrifice of alternative courses of action for any decision is referred to as opportunity cost. Opportunity cost may be defined as, ‘the revenue foregone or opportunity lost by not using the resources in second best alternative use’. It is also called imputed cost. Measurement of sacrifice is done by opportunity cost. It is shown as the role of managerial

economics in decision making. The sacrifice which is made for taking a decision is measured by opportunity cost. This concept can be explained by following points:

The opportunity cost of the funds employed in one's own business is the interest that could be earned on those funds had they been employed in other ventures.

The opportunity cost is the value of time an entrepreneur devotes to him

- Business is the salary he could earn in any field with other occupations.
- The opportunity cost of using a machine to produce one product is the earnings for gone which would have been possible from other products.
- The opportunity cost of using a machine that is useless for any other purpose is Zero since its use requires no sacrifice of other opportunities.

Thus, it should be remembered that opportunity costs require ascertainment of sacrifices. If a decision involves no sacrifices, its opportunity cost is nil. For decision-making, opportunity costs are the only relevant costs. The opportunity cost principle may be stated as, "The cost involved in any decision consists of the sacrifices of alternatives required by that decision. If there are no sacrifices, there is no cost."

2. **Incremental Principle**

Marginal Cost and marginal revenue of economics theory are related with incremental principle concept. Estimation of the impact of decision alternatives on cost and revenues, emphasizing the changes in the total cost and total revenue resulting in the changes in the prices, costs products, procedures, revenues, Investment on whatever may be at stake in the decision are involved in the incremental cost. It is the role of managerial economics in decision making.

Incremental Cost: The change in total cost resulting from a particular decision may be referred to as the incremental cost.

Incremental Revenue: The change in total revenue resulting from a particular decision is referred to as the incremental revenue.

According to incremental principle, a decision is profitable if:

- It increases revenue more than it increases cost.
- It reduces some cost more than it increases others.
- It increases some resources more than it decreases others.
- It decreases costs more than it decreases revenues.

Some businessman consider that the making an overall pr

Marginal Principle

The application of marginal concepts in economic theory is referred to as the marginal principle or marginalism. Marginalism is associated with arguments concerning changes in the quantity used of a good or a service, as opposed to some notion of the overall significance of that class of good or service, or of some total quantity thereof. If the resources are scare then the manager has to be very careful about the full utilisation of each and every additional unit of resources (inputs).

For taking decision about the use of an additional man-hour or machine-hour, manager is required to know what the additional output is expected there from. Similarly, for taking decision about additional investment, manager required to know role of managerial economics in decision making. Also, what is the additional return from that investment. For all such additional amount of output or return, the term ‘marginal’ is related.

4**. Equi-Marginal Principle**

The allocation of the available resources among the alternative activities is deal with by the Equi-Marginal Principle.

According to this principle, an input should be allocated in a way that the value added by the last unit is the same in all cases. This generalisation is called the equi-marginal principle. Here, we come to know the role of managerial economics in decision making.

Let us consider that a firm is involved in three activities such as A, B and C activity. All the activities require the services of labour and the firm should allocate the available labour in such a way that the value of Marginal Product of labour is equal in all the three activities.

5. Principle of Time Perspective

A business firm should take any decision only after considering the short-run and long-run. The short-run refers to a time period which is long enough to allow using the variable factors of production in different amounts. The long-run refers to a time period which is long enough to allow using all the factors of production in different amounts. It is required that proper balance should be maintained between short-run and long-run effects.

Hence, it is very important to give proper consideration to the time perspective. The principle of time perspective may be stated as: “A decision should take into account both the short-run and long-run effects on revenues and costs and maintain the right balance between the long-run and short-run perspectives”. Therefore, principle of time perspective shows the role of managerial economics in decision making.

6. Discounting Principle

Discounting is a process of reducing the future values to their present values. In this context, a discount rate referred by the interest rate which is used in present value problem. For making investment decisions, it is very important concept in managerial economics. The origin of this principle is valuation of the money received at different point of time.

various transactions which involve making or receiving cash payments at numerous future dates used the discounting principle. When a buyer takes home loan from any bank then he promise to make monthly payments for twenty years. When a person injured in an automobile accident then he accepts a settlement of Rs4,000 per month as compensation for the damage from the insurance company for the life time.

The concept of time value of money explains that the money which is received at different future dates will not be same today. Thus, it is necessary to understand the methods which are used for measuring the present value of money to be received or paid at different future dates. After one year the value of Rs1000 is not equal to Rs1000, but less than that. But it is required to know that how much money today is equal to Rs1000 of one year hence. The rate of interest is required to find out this. So, we will discount Rs1000 at that rate of interest to ascertain the value of 1000 rupees one year hence or two years hence.

2.5 Microeconomics and Macro Economics

Microeconomics is the study of decisions made by people and businesses regarding the allocation of resources and prices of goods and services. The government decides the regulation for taxes. Microeconomics focuses on the supply that determines the price level of the economy.

It uses the bottom-up strategy to analyse the economy. In other words, microeconomics tries to understand human's choices and allocation of resources. It does not decide what are the changes taking place in the market, instead, it explains why there are changes happening in the market.

The key role of microeconomics is to examine how a company could maximise its production and capacity, so that it could lower the prices and compete in its industry. A lot of microeconomics information can be obtained from the financial statements.

The key factors of microeconomics are as follows:
Demand, supply, and equilibrium
Production theory
Costs of production
Labour economics

Examples: Individual demand, and price of a product.

What is Macroeconomics?

Macroeconomics is a branch of economics that depicts a substantial picture. It scrutinizes itself with the economy at a massive scale, and several issues of an economy are considered. The issues confronted by an economy and the headway that it makes are measured and apprehended as a part and parcel of macroeconomics.

Macroeconomics studies the association between various countries regarding how the policies of one nation have an upshot on the other. It circumscribes within its scope, analysing the success and failure of the government strategies.

In macroeconomics, we normally survey the association of the nation's total manufacture and the degree of employment with certain features like cost prices, wage rates, rates of interest, profits, etc., by concentrating on a single imaginary good and what happens to it.

The important concepts covered under macroeconomics are as follows:

Capitalist nation
Investment expenditure
Revenue
Examples: Aggregate demand, and national income.

Differences Between Microeconomics and Macroeconomics

Meaning

Microeconomics is the branch of Economics that is related to the study of individual, household and firm's Behaviour in decision making and allocation of the resources. It comprises markets of goods and services and deals with economic issues. Macroeconomics is the branch of

Economics that deals with the study of the behaviour and performance of the economy in total. The most important factors studied in macroeconomics involve gross domestic product (GDP), unemployment, inflation and growth rate etc.

Area of study

Microeconomics studies the particular market segment of the economy Macroeconomics studies the whole economy, that covers several market segments.

Deals with

Microeconomics deals with various issues like demand, supply, factor pricing, product pricing, economic welfare, production, consumption, and more. Macroeconomics deals with various issues like national income, distribution, employment, general price level, money, and more.

Business Application

It is applied to internal issues. It is applied to environmental and external issues.

Scope

It covers several issues like demand, supply, factor pricing, product pricing, economic welfare, production, consumption, and more. It covers several issues like distribution, national income, employment, money, general price level, and more.

Significance

It is useful in regulating the prices of a product alongside the prices of factors of production (labour, land, entrepreneur, capital, and more) within the economy.

It perpetuates firmness in the broad price level, and solves the major issues of the economy like deflation, inflation, rising prices (reflation), unemployment, and poverty as a whole.

Limitations

It is based on impractical presuppositions, i.e., in microeconomics, it is presumed that there is full employment in the community, which is not at all feasible

It has been scrutinized that the misconception of composition' incorporates, which sometimes fails to prove accurate because it is feasible that what is true for aggregate (comprehensive) may not be true for individuals as well.

Let's sum-up

Dear Learners, In this module we learn about Decision making introduction, Process, role of Managerial Economics in Decision making, fundamental concepts affecting business decisions.

Self-Assessment questions

1. Decsion making helps in the smooth function of the ----------
   a. Business b. staffing
   c.organisation d. staffing
2. the transmission of the thoughts from person to another is ----------
   a. Communication b. controlling
   c. Consultative d. Organizing
3. The study relating to the movement of a machine operator and this machine while performing the job is called
   a. time study b. Work study
   c. Motion study d. Fatigue study
4. Selecting the best a course of action among the alternatives is called as ----------
   a. decision making b. planning
   c.organizing d. controlling
5. the decisions which are frequent and repetitive in nature are called as ----------
   a. non programmed decisions b. Programmed decisions
   c. Major decisions d. operative decisions

UNIT SUMMARY :

Dear Learners, In this Unit this We learn about Introduction to Managerial Economics, Meaning, Definition, Nature and scope and Relations with other disciplines, Decision making introduction, Process, role of Managerial Economics in Decision making, fundamental concepts affecting business decisions.

WEB RESOURCES :

1.https://kstatelibraries.pressbooks.pub/economicsoffoodandag/chapter/__unknown__/

2.https://www.pearsoned.ca/highered/divisions/virtual_tours/jones-fa/jones_finac_ce_ch02.pdf

Case study:

HLL BASKET

Call it the mega mahine ka deal or extreme measures to check th dropping topline. The Hindustan Level limited(HLL) has devised a marketing initiatives to push the concept ofmonthly household basket' at superstores and conveniences outlet in mall across the country. The move, being tried out for first time, is likely to trigger off similar schemes by other fast moving consumer goods companies too.

The consumer can take his pick from HLL's 20-odd FMCG product baskets and at a sizeable discount. Say, a sample basket would contains a bar of soap, a pack of shampoo, a toothpaste, a pack of tea, a pack of Atta ad a pact of detergent, all based on specific gramages-typically items that would find in place in the shopping basket of an average household. The value of the two baskets need to be Rs.560 and Rs.250, for which HLL is offering discount of Rs.60 and Rs.50 respectively.

The idea takes birth from the realization that companies need to increase family share instead of market share alone. This is probably being overlooked by most of the fast moving consumer goods companies. The family of brands and the brand family complement each other. Any company having a set of complementary productsshould target not the individual but the family as its unit consumer. For multinational as well as domestic fast moving consumer goods majors alike, the concept promises to work well across countries in Asia, were the family isat the heart of the household consumption. For example, Reckitt & coleman, Piilite, Dabur ad telecom service providers stand to gain form a similar offering.

Perhaps, it as boils down to ensuring consumering loyalty across a product range. Apart from a specific discount, the companies would also like to reward a regular customer to build on the value of relationship over time. To hard sell the concept, HLL Is mainly targeting modern trade like superstores and malls, where its products are ensured higher visibility and thus promise better activation. For the retail stores, this perhaps could not have been better. Each store can use the local context to promote the offer.

Answer the Questions:

For the market structure that the aforesaid products of HLL have, comment on the type of pricing policy that the company is now trying to bring in with the monthly household basket scheme. How is this strategy going to save the dripping top line?

Reference Books:

1. D.N. Dwivedi, “Managerial Economics” Vikas Publishing House PVT Ltd., Delhi , Reprint-2011.
2. Yogesh Maheswari, “Managerial economics” Prentice Hall of India Pvt Ltd., Second delhi , 2011.New edition,

MANAGERIAL ECONOMICS

Unit – II –DEMAND ANALYSIS

Objectives : To assess the Utility and demand analysis.

Utility analysis and Demand Curve - Elasticity of Demand – Demand analysis - Basic concept - Tools of analysis for Demand forecasting. - Use of business Indicators -Demand Forecasting for consumer - consumer durable and Capital goods - Input and Output analysis – consumer Behaviour- Consumer Equilibrium.

Unit Module Structuring

1 Demand Analysis
2 Elasticity of Demand
3 Demand forecasting techniques

Self-Learning Material Development – Stage 1

Table of content for the unit 2

3.2 Factors affecting Demand forecasting 3.3 Objectives of Demand forecasting 3.4 Methods of demand forecasting		

Unit Objectives :

- To assess the Utility and Demand analysis
- To analyze the Demand forecasting techniques.

DEMANDANALYSIS

1.1 MEANINGOFDEMAND

Demand interms of economics may be explained as the consumers' willingness and ability to purchase or consume a given item/good. Furthermore, the determinants of demand go along way in explaining the demand for a particular good.

For instance, an increase in the price of a good will lead to a decrease in the quantity that may be demanded by consumers.Similarly,a decrease in the cost or selling price of a good will most likely lead to an increase in the demanded quantity of the goods.

This indicates the existence of an inverse relationship between the price of the article and the quantity demanded by consumers.This is commonly known asthe law of demand and can be graphically represented by a line with a downward slope.

The graphical representation is known as the demand curve.The determinants of demand are factors that cause fluctuations in the economic demand for a product or a service.

Demand in economics means a desire to possess a good supported by willingness and ability to pay for it. If your have a desire to buy a certain commodity, say a car, but you do not have the adequate means to pay for it, it will simply be a wish,a desire or a want and not demand.Demand is an effective desire ,i.e., a desire which is backed by willingness and ability to pay for a commodity in order to obtain it.

In the words of **Prof. Hibdon** "Demand means the various quantities of goods that would be purchased per time period at different prices in a given market".

1.2 CHARACTERISTICSOFDEMAND

There are thus **three main characteristics of demand in** economics.

(i) Willingness and ability to pay. Demand is the amount of acommodity for which a consumer has the willingness and also the ability to buy.

(ii) Demand is always at a price. If we talk of demand without reference to price, it will be meaningless. The consumer must know both the price and the commodity. He will then be able to tell the quantity demanded by him.

(iii) Demand is always per unit of time. The time may be a day, a week, a month, or a year.

❖ 1.3 TYPESOFDEMAND

The demand can be classifiedonthefollowingbasis:

1. **Individual Demand and Market Demand:** The individual demand refers to the demand for goods and services by the single consumer, whereas the market demand is the demand for a product by all the consumers who buy that product. Thus, the market demand is the aggregate of the individual demand.
2. **Total Market Demand and Market Segment Demand:** The total market demand refers to the aggregate demand for a product by all the consumers in the market who purchase a specific kind of a product. Further, this aggregate demand can be sub-divided into the segments on the basis of geographical areas, price sensitivity, customer size, age, sex, etc. are called as the market segment demand.
3. **Derived Demand and Direct Demand:** When the demand for a product/ outcome is associated with the demand for an other product/outcome is called as the derived demand or induced demand. Such as the demand for cotton yarn is derived from the demand for cotton cloth. Whereas, when the demand for the products/outcomes is independent of the demand for another product/outcome is called as the direct demand or autonomous demand. Such as, in the above example the demand for a cotton cloth is autonomous.
4. **Industry Demand and Company Demand:** The industry demand refers to the total aggregate demand for the products of a particular industry, such as demand force mention the construction industry. While the company demand is a demand for the product which is

particular to the company and is a part of that industry. Such as demand for tyres manufactured by the Goodyear. Thus, the company demand can be expressed as the percentage of the industry demand.

5. **Short-Run Demand and Long-Run Demand:**The short term demand is more elastic which means that the changes in price or income are reflected immediately on the quantity demanded. Whereas, the long run demand is inelastic, which shows that demand for commodity exists as a result of adjustments following changes in pricing ,promotional strategies,consumption patterns, etc.
6. **Price Demand:** The demand is often studied in parlance to price, and is therefore called as a price demand. The price demand means the amount of commodity a person is willing to purchase at a given price. While studying the demand, we often assume that the other factors such as income of the consumer, their tastes, and preferences, the prices of other related goods remain unchanged. There is a negative relationship between the price and demand Viz. As the price increases the demand decreases and as the price decreases the demand increases.
7. **Income Demand:**The income demand refers to the willingness of an individual to buy a certain quantity at a given income level. Here the price of the product, customer's tastes and preferences and the price of the related goods are expected to remain unchanged. There is a positive relationship between the income and demand. As the income increases the demand for the commodity also increases and vice-versa.
8. **Cross Demand:**It is one of the important types of demand where in the demand for a commodity depends not on its own price, but on the price of other related products is called as the cross demand. Such as with the increase in the priceof coffee the consumption of tea increases, since tea and coffee are **substitutes** to each other. Also, when the price of cars increases the demand for petrol decreases, as the car and petrol are **complimentary** to each other.

❖ DEMANDSCHEDULE:

The demand schedule in economics is a table of quantity demanded of a good at different price levels. Given the price level, it is easy to determine the expected quantity demanded. This demand schedule can be graphed as a continuous demand curve on a chart where the Y-axis represents price and the X-axis represents the quantity.

According to **PROF. ALFRED MARSHALL**, "Demand schedule is a list of prices and quantities". In other words, a tabular statement of price-quantity relationship between two variables is known as the demand schedule.

The demand schedule in the table represents different quantities of commodities that are purchased at different prices during a certain specified period (it can be a day or a week or a month).

- **The demand schedule can be classified into twocategories:**

1. Individual demand schedule;

2. Market demand schedule.

1. Individual Demand Schedule:- It represents the demand of an individual' for a commodity at different prices at a particular time period. The adjoining table 7.1 shows a demand schedule for oranges on 7th July, 2009.

Table 7·1 : Individual Demand Schedule

Price of Oranges (₹ per kg.)	Quantity of Oranges Demanded (kg.)
15	2
12	3
9	4
6	5
3	6

2. Market Demand Schedule:- Market Demand Schedule is defined as the quantities of a given commodity which all consumers will buy at all possible prices at given moment of time. In a market, there are several consumers, and each has a different liking, taste, preference and income. Every consumer has a different demand.

The market demand actually represents the demand of all the consumers combined together. When a particular commodity has several brands or types of commodities, the market demand schedule becomes very complicated because of various factors. However, for a single item, the market demand schedule is rather simple. Study the market demand schedule for milk in table 7.2

Table 7·2 : Market Demand Schedule

Price of Milk per litre (in ₹)	Demand of Mr. X. (in Litres)	Demand of Mr. Y. (in Litres)	Market Demand (in Litres)
5	1	2	1 + 2 = 3
4	2	3	2 + 3 = 5
3	3	4	3 + 4 = 7
2	4	5	4 + 5 = 9
1	5	6	5 + 6 = 11

❖ DEMAND CURVES(DIAGRAM)

The demand curve is a graphic statement or presentation of the relationship between product price and the quantity of the product demanded. It is drawn with price on the vertical axis of the graph and quantity demanded on the horizontal axis.

Demand curve does not tell us the price. It only tells us how much quantity of goods would be purchased by the consumer at various possible prices.

Depending upon the demand schedule, the demand curve can be as follows:

1. Individual Demand Curve
2. Market Demand Curve

1. Individual Demand Curve:- An Individual Demand Curve is a graphical representation of the quantities of a commodity that an individual (a particular consumer) stands ready to take off the market ata given instant of time against different prices. In Fig. 7.1, an Individual Demand Curve is drawn on the basis of Individual Demand Schedule given above in table 7.1.

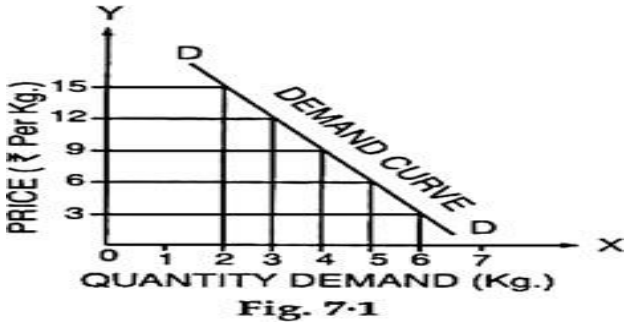


Fig. 7-1

2. Market Demand Curve:- A Market Demand Curve is a graphical representation of the quantities of a commodity which all the buyers in the market stand ready to takeoff at all possible prices at a given moment of time. InFigure7.2a Market Demand Curve is drawn on the basis of Market Demand Schedule given in Table 7.2.

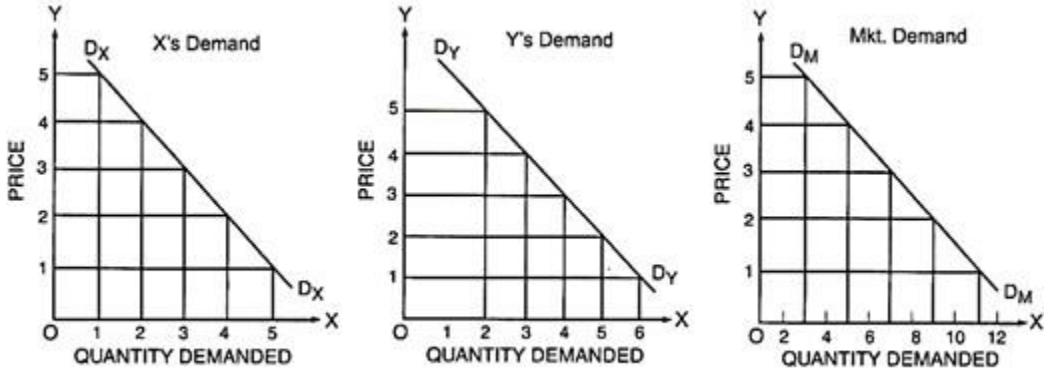


Fig. 7·2 Market Demand Curve

Both, the individual consumer's demand curve is a straight line. A demand curve will slope downward to the right.

It is not necessary, that the demand curve is a straight line. A demand curve may bea convex curve or a concave curve. It may take any shape provided it is negatively sloped.

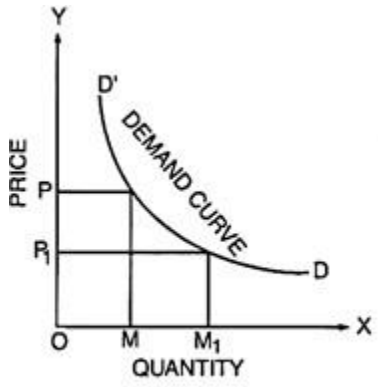


Fig. 7·3

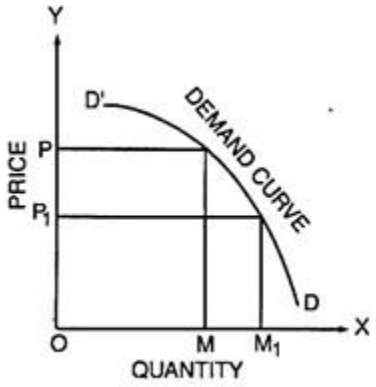


Fig. 7·4

❖ 1.4 DETERMINANTSOFDEMAND

Some of the important determinants of demand areas follows,

1] Price of the Product:- People use price as a parameter to make decisions if allotherfactorsremainconstantorequal.Accordingtothelawofdemand,this implies an increase in demand follows a reduction in price and a decrease in demand follows an increase in the price of similar goods.

The demand curve and the demand schedule help determine the demand quantity at a price level. An elastic demand implies a robust change quantity accompanied by a change in price. Similarly, an inelastic demand implies that volume does not change much even when there is a change in price.

2] Income of the Consumers:- Rising incomes lead to arise in the number of goods demanded by consumers. Similarly, a drop in income is accompanied by reduced consumption levels. This relationship between income and demand is not linear in nature.Marginal utility determines the proportion of change in the demand levels.

3] Prices of related goods or services

1. ***Complementary products–*** An increase in the price of one product will cause a decrease in the quantity demanded of a complementary product. Example: Rise in the price of bread will reduce the demand for butter. This arises because the products are complementary in nature.
2. ***Substitute Product–*** An increase in the price of one product will cause an increase in the demand for a substitute product. Example: Rise in price of tea will increase the demand for coffee and decrease the demand for tea.

4] Consumer Expectations:- Expectations of a higher income or expecting an increase in prices of goods will lead to an increase the quantity demanded. Similarly, expectations of a reduced income or a lowering in prices of goods will decrease the quantity demanded.

5] NumberofBuyersintheMarket:-Thenumberofbuyershasamajoreffect on the total or net demand. As the number increases, the demand rises. Furthermore,thisistrueirrespectiveofchangesinthepriceofcommodities.

1.5 LAW OF DEMAND

There is an inverse relationship between quantity demanded and its price. The people know that when price of a commodity goes up its demand comes down. When there is decrease in price the demand for a commodity goes up. There is inverse relation between price and demand . The law refers to the direction in which quantity demanded changes due to change in price.

A consumer may demand one dozen orange sat $5per dozen. He may demand two dozen when the price is $4 per dozen. A person generally buys more at a lower price. He buys less at higher price. It is not the case with one person but all people liken to buy more due to fall in price and vice versa. This is true for all commodities and under all conditions. The economists call it as **law of demand**. In simple words the law of demand states that other things being equal more will be demanded at lower price and lower will be demanded at higher price.

❖ Definition

Alfred Marshal says that the amount demanded increase with a fall in price, diminishes with a rise in price.

C.E. Ferguson says that according to law of demand, the quantity demanded varies

inversely with price.

Paul A. Samuelson says that law of demand states that people will buy more at lower prices andbuyless at higher prices, other things remaining thesame.

❖ ASSUMPTIONSOFTHELAW

1. There is no change in income of consumers.
2. There is no change in the price of product.
3. There is no change in quality of product.
4. There is no substitute of the commodity.
5. The prices of related commodities remain the same.
6. There is no change in customs.
7. There is no change in taste and preference of consumers.
8. The size of population remains the same.
9. The climate and weather conditions are same.
10. The tax rates and other fiscal measures remain the same.

EXPLANATION OF THE LAW

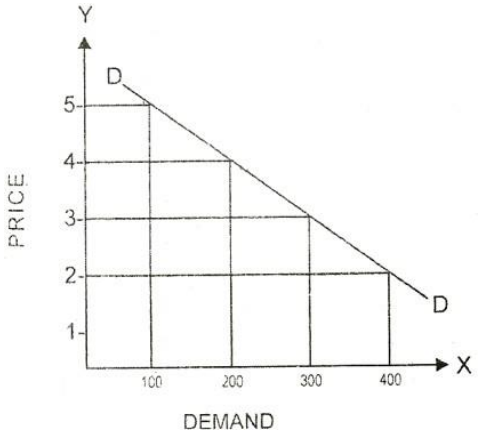
The relationship between price of a commodity and its demand depends upon many factors. The most important factor is nature of commodity. The demand schedule shows response of quantity demanded to change in price of that commodity. This is the table that shows prices per unit of commodity ands amount demanded per period of time. The demand of one person is called individual demand. The demand of many persons is known as market demand. The experts are concerned with market demand schedule. The market demand schedule means 'quantities of given commodity which all consumers want to buy at all possible prices at a given moment of time'. The demand schedules of all individuals can be added up to find out market demand schedule.

❖ DEMANDSCHEDULE

Price in dollars.	Demand in Kg.
5	100
4	200
3	300
2	400

The table shows the demand of all the consumers in a market. When the price decreases there is increase in demand for goods and vice versa.When price is$5 demand is 100 kilograms. When the price is $4 demand is 200 kilograms. Thus the table shows the total amount demanded by all consumers various price levels.

- **DIAGRAM**



There is same price in the market. All consumers purchase commodity according to their needs. The market demand curve is the total amount demanded by all consumers at different prices. The market demand curve slopes from left down to the right.

- **TYPESOFDEMANDFUNCTION**

Based on whether the demand function is in relation to an individual consumer or to all consumers in the market, the demand function cab be categorized as

1. Individual Demand Function
2. Market Demand Function

1. Individual Demand Function

Individual demand function refers to the functional relationship between demand made by an individual consumer and the factors affecting the individual demand. Its how show demand made by an individual in the market is related to its determinants.

Mathematically, individual demand function can be expressedas,

Dx=f(Px,Pr,Y,T,F)
Where,
Dx=Demand for commodity x;.
Px=Price of the given commodity x; Pr= Price of related goods;
Y=Income of the individual consumer; T= Tastes and preferences;
F=Expectation of change in price in the future.

1] Price of the given commodity:- Other things remaining constant, the rise in price of the commodity, the demand for the commodity contracts, and with the fall in price, its demand increases.

2] Price of related goods:- Demand for the given commodity is affected by price of the related goods, which is called cross price demand.

3] Income of the individual consumer:-Change in consumer's level of income also influences the demand for different commodities. Normally, the demand for certain goods increase with the increasing level of income and vice versa.

4] Tastes and preferences:- The taste and preferences of individuals also determine the demand made for certain goods and services. Factors such as climate,fashion,advertisement,innovation,etc.affect the taste and preference of the consumers.

5] Expectation of change in price in the future:-If the price of the commodity is expected to rise in the future, the consumer will be willing to purchase more of the commodity at the existing price. However, if the future price is expected to fall, the demand for that commodity decreases at present.

6] Size and composition of population:- The market demand for a commodity increases with the increase in the size and composition of the total population. For instance, with the increase in total population size, there is an increase in the number of buyers.Likewise,with an increase in the male composition of the population, the demand for goods meant for male increases.

7] Season and weather:- The market demand for a certain commodity is also affected by the current weather conditions. For instance, the demand fo r cold beverages increase during summer season.

8] Distribution of income:- In case of equal distribution of income in the economy, the market demand for a commodity remains less. With an increase intheunequaldistributionofincome,thedemandforcertaingoodsincreaseas most people will have the ability to buy certain goods and commodities, especially luxury goods.

2. Market Demand Function

Market demand function refers to the functional relationship between market demand and the factors affecting market demand. Market demand is affected by all the factors that affect an individual demand. In addition to this, it is also affected by size and composition of population, season and weather conditions, and distribution of income.

Mathematically, market demand function can be expressedas,

Dx=f(Px,Pr,Y,T,F,Po,S,D)

Where,
Dx=Demand for commodity x;
Px=Price of the given commodity x; Pr= Price of related goods;
Y=Income of the individual consumer; T= Tastes and preferences;
F=Expectation of change in price in the future; Po= Size and composition of population;
S= Season and weather; D=Distribution of income.

1. Pattern of Income Distribution:- If National income is equitably distributed, there will be more demand and vice-versa. If income distribution moves in favour of downtrodden people, then demand for such commodities, which are used by common people would increase. On the other hand, if the major part of National income is concentrated in the hands of only some rich people, the demand for luxury goods will increase.

2. Demographic Structure:- Market demand is influenced by change in size and composition of population. Increase in population leads to more demand for all types of goods and decrease in population means less demand for them. Composition of population also affects its demand. Composition refers to the number of children, adults, males, females etc., in the population.

When the composition changes, for example, when the number of females exceeds to that of the males, then the will be more demand for goods required by women folk.

3. Government Policy:- Government policy of a country can also affect the demand for a particular commodity or commodities through taxation. Reduction in the taxes and duties will allow more persons to enter a particular market and thus raising the demand for a particular product.

4. Season and Weather:- Demands for commodities also depend upon the climate of an area and weather. In cold hilly areas woolens are demanded. During summer and rainy season demand for umbrellas may rise. In win te rice is not so much demanded.

5. State of Business:- The levels of demand in a market for different goods depend upon the business condition of the country. If the country is passing through boom, the trade is active and brisk. The demand for all commodities tends to rise.But in the days of depression, when trade is dull and slow,demand tends to fall.

❖ WHYDEMANDCURVEFALLS

1] Marginal utility decreases:- When a consumer buys more units of a commodity, the marginal utility of such commodity continue to decline. The consumer can buy more units of commodity when its price falls and viceversa. The demand curve falls because demand is more at lower price.

2] Price effect:- When there is increase in price of commodity, the consumers reducetheconsumptionofsuchcommodity.Theresultisthatthereisdecrease in demand for that commodity. The consumers consume mo0re or less of a commodity due to price effect. The demand curve slopes downward.

3] Income effect:- Real income of consumer rises due to fall in prices. The consumer can buy more quantity of same commodity. When there is increase in price, real income of consumer falls. This is income effect that the consumer can spend increased income on other commodities. The demand curve slopes downward due to positive income effect.

4] Same price of substitutes:-When the price of a commodity falls, the prices of substitutes remaining the same, consumer can buy more of the commodity and vice versa. The demand curve slopes down ward due to substitution effect.

5] Demand of poor people:- The income of people is not the same, The rich people have money to buy same commodity at high prices. Large majority of people are poor, They buy more when price fall and vice versa. The demand curve slopes due to poor people.

6] Different uses of goods:- There are different uses of many goods. When prices of such goods increase these goods are put into uses that are more important and their demand falls. The demand curve slopes downward due to such goods.

- **EXCEPTIONSTOTHELAW**

1] Inferior goods:-The law of demand does not apply incase of inferior goods. When price of inferior commodity decreases and its demand also decrease and amount so saved in spent on superior commodity. The wheat and rice are superior food grains while maize is inferior food grain.

2] Demonstration effect:- The law of demand does not apply in case of diamondandjewelry.Thereismoredemandwhenpricesarehigh.Thereisless demand due to low prices. The rich people like to demonstrate such items that only they have such commodities.

3] Ignorance of consumers: - The consumer usually judge the quality of a commodity from its price. Allow priced commodity is considered as inferior and less quantity is purchased. A high priced commodity is treated as superior and more quantity is purchased. The law of demand does not apply in this case.

4] Less supply:- The law of demand does not work when there is less supply of commodity. The people buy more for stock purpose even at high price. They think that commodity will become short.

5] Depression:-The law of demand does not work during period of depression. The prices of commodities are low but there is increase in demand. it is due to low purchasing power of people.

6] Speculation:-Thelawdoesnotapplyincaseofspeculation.Thespeculators start buying share just to raise the price. Then they start selling large quantity of shares to avoid losses.

7] Out of fashion:-The law of demand is not applicable incase of goods out of fashion. The decrease in prices cannot raise the demand of such goods. The quantity purchased is less even though there is falls in prices.

❖ **IMPORTANCEOFTHELAW**

1] Price determination:- A monopolist can determine price of a commodity on the basis of such law. He can know the effect on demand due to increase or decrease in price. The demand schedule can help him to determine the most suitable price level.

2] Tax on commodities:- The law of demand is important for tax authorities. The effect of tax on different commodities is checked. The commodity must be taxed if its demand is relatively inelastic. A commodity cannot be taxed if its sales fall to great extent.

3] Agricultural prices

The law of demand is useful to determine agricultural prices. When there are good crops, the prices come down due to change in demand. In case of bad crops,the prices goup if demand remains the same.The poverty off armerscan be determined.

4] Planning:- Individual demand schedule is used in planning for individual goodsandindustries.Thereisneedtoknowtheeffectofchangeinpriceonthe demand of commodity at national and world level. The nature of demand schedule helps to know such effect.

Let's sum -up

Dear Learners , In this Module We learn about Introduction to Demand analysis, Meaning, Definition, Characteristics, types of Demand, Determinants of Demand and Law of Deamnd.

Self-Assessmentquestions:

1. Normally the demand cure will have a ----------shape.
   a. Upward shaping b. Downward shaping
   c.Vertical d. Horizontal
2. the elasticity of demand of durable goods is ----------
   a. Zero b. Equal to unity
   c.greater than unity d. less than unity
3. Which of the following is not a causes of the shift in demand for a product.-----
   a. change in the price of substitutes b. change in the income of a consumer
   c. Change in the price of a product d. None of the above
4. When the demand for a product is perfectly inelastic, a price increase will result in ---

a. decrease in quantity demanded of the product
b. No change in the total income from a product
c. an increase in the total income from a product
d. a reduction in the total income form a product.

5. if the elasticity of supply is greater than one, the supply curve would be -----
a. touching y-axis
b. passing through the origin
c. vertical
d.horizontal.

Module 1 completed

Module 2

ELASTICITYOFDEMAND

The law of demand indicates the direction of change in quantity demanded to a change in price.

It states that when price falls, demand rises. But how much the quantity demanded rises (or falls) following a certain fall (or rise) in prices cannot be known from the law of demand. That is to say, how much quantity demanded changes following a change in the price of a commodity can be known from the concept of elasticity of demand?

❖ MEANINGOFELASTICITYOFDEMAND

The term 'elasticity' of demand indicates responsiveness of quantity demanded due to change in any of its determinants. This is a measure of how sensitive the quantity demanded is to the change in any of the factors affecting demand.

➢ **There are three main types of elasticity of demand:**

I. Price elasticity of demand.
II. Income elasticity of demand.
III. Cross elasticity of demand.

1.1. Price Elasticity of demand.

Price elasticity of demand measure the degree of responsiveness of demand for a commodity due to change in its price.

$$Ed = \frac{\text{Percentage Change in quantity demanded.}}{\text{PercentageChangeinPrice}}$$

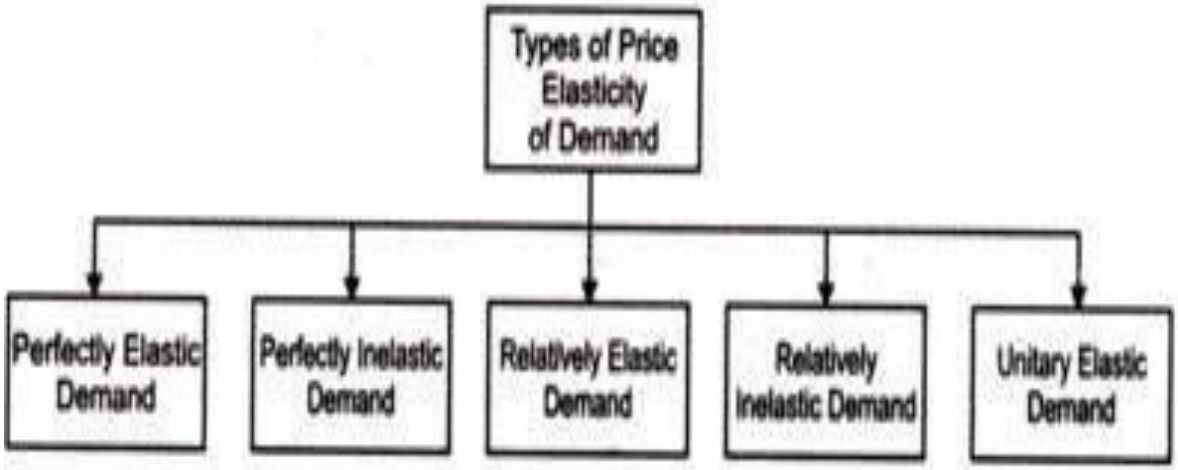


Figure-1: Different Types of Price Elasticity of Demand

1. Perfectly Elastic Demand:- When a small change in price of a product causes a major change in its demand, it is said to be perfectly elastic demand. In perfectly elastic demand, a small rise in price results in fall in demand to zero, while a small fall in price causes increase in demand to infinity. In such a case, the demand is perfectly elastic or $e_p = 00$.

The degree of elasticity of demand helps in defining the shape and slope of a demand curve. Therefore, the elasticity of demand can be determined by the slope of the demand curve. Flatter the slope of the demand curve, higher the elasticity of demand.

In perfectly elastic demand, the demand curve is represented as a horizontal straight line, which is shown in Figure-2:

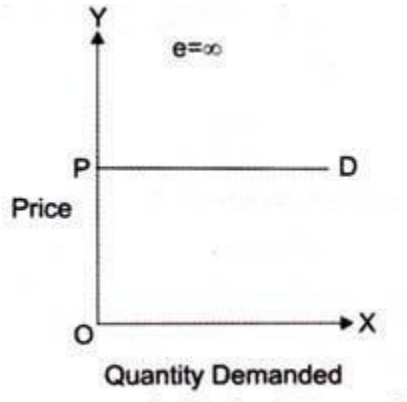


Figure-2: Perfectly Elastic Demand

From Figure-2 it can be interpreted that at price OP, demand is infinite; however, av slight rise in price would result in falling demand to zero. It can also be interpreted from Figure-2 that at price P consumers are ready to buy as much quantity of the product as they want. However, as mall rise in price would resist consumers to buy the product.

Though, perfectly elastic demand is at theoretical concept and cannot be applied in the real situation. However, it can be applied in cases, such as perfectly competitive market and homogeneity products. In such cases, the demand for a product of an organization is assumed to be perfectly elastic.

From an organization's point of view, in a perfectly elastic demand situation, the organization can sell as much as much as it wants as consumers are ready to purchase a large quantity of product. However, a slight increase in price would stop the demand.

2. Perfectly Inelastic Demand:-A perfectly inelastic demand is one when there is no change produced in the demand of a product with change in its price. The numerical value for perfectly inelastic demand is zero ($e_p=0$).

In case of perfectly inelastic demand, demand curve is represented as a straight vertical line, which is shown in Figure-3:

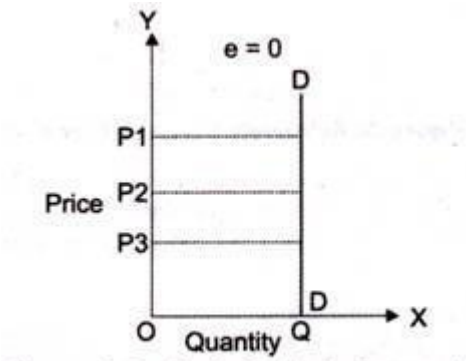


Figure-3: Perfectly Inelastic Demand

It can be interpreted from Figure-3 that the movement in price from OP1 to OP2 and OP2 to OP3 does not show any change in the demand of a product (OQ). The demand remains constant for any value of price. Perfectly in elastic demand is a theoretical concept and cannot be applied in a practical situation.However, in case of essential goods, such as salt, the demand does not change with change in price. Therefore, the demand for essential goods is perfectly inelastic.

3. Relatively Elastic Demand:-Relatively elastic demand refers to the demand when the proportionate change produced in demand is greater than the proportionate change in price of a product. The numerical value of relatively elastic demand ranges between one to infinity.

Mathematically, relatively elastic demand is known as more than unit elastic demand(ep>1).For example ,if the price of a product increases by 20% and the demand of the product decreases by 25%,then the demand would be relatively elastic.

The demand curve of relatively elastic demand is gradually sloping, as shown in Figure-4:

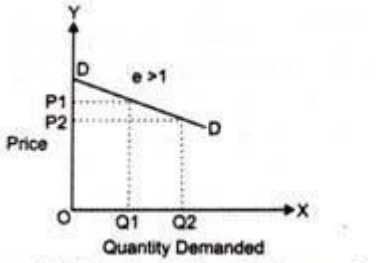


Figure-4: Relatively Elastic Demand

It can be interpreted from Figure-4 that the proportionate change in demand from OQ1 to OQ2 is relatively larger than the proportionate change in price from OP1 to OP2. Relatively elastic demand has a practical application as demand for many of products respond in the same manner with respect to change in their prices.

For example, the price of a particular brand of cold drink increases from Rs.15 to Rs.20.In such a case, consumers may switch to another brand of cold drink. However, some of the consumers still consume the same brand. Therefore, a small change in price produces a larger change in demand of the product.

4. Relatively Inelastic Demand:-Relatively in elastic demand is one when the percentage change produced in demand is less than the percentage change in the price of a product. For example, if the price of a product increases by 30% and the demand for the product decreases only by 10%,then the demand would be called relatively inelastic. The numerical value of relatively elastic demand ranges between zero to one (ep<1). Marshall has termed relatively inelastic demand as elasticity being less than unity.

The demand curve of relatively inelastic demand is rapidly sloping,as shown in Figure-5:

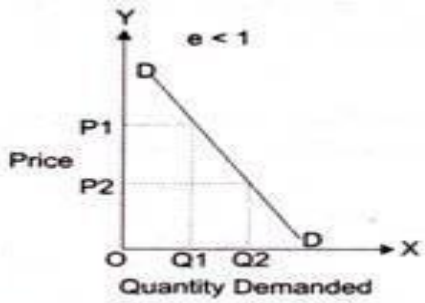


Figure-5: Relatively Inelastic Demand

Example-3:-ThedemandscheduleformilkisgiveninTable-3:

Table-3: Demand Schedule for Milk

Price of Milk(per litre)	Quantity Demanded(litres)
15	100
20	90

Calculate the price elasticity of demand and determine the type of price elasticity.

Solution:-
P= 15
Q=100
P1=20
Q1=90
Therefore,change in the price of milk is:
ΔP=P1 –P
ΔP=20–15
ΔP=5
Similarly,change in quantity demand ed of milkis:
ΔQ=Q1–Q
ΔQ=90–100
ΔQ=-10

The change in demand shows a negative sign, which can be ignored. This is because of the reason that the relationship between price and demand is inverse that can yield a negative value of price or demand.

- **Price elasticity of demand for milk is:**

ep= ∆Q/∆P * P/Q ep=10/5*15/100 ep= 0.3

The price elasticity of demand form ilk is 0.3,which is less than one.Therefore, in such a case, the demand for milk is relatively inelastic.

5. Unitary Elastic Demand:- When the proportionate change in demand produces the same change in the price of the product, the demand is referred as unitary elastic demand. The numerical value for unitary elastic demand is equal to one (ep=1).

The demand curve for unitary elastic demand is represented as a rectangular hyperbola, as shown in Figure-6:

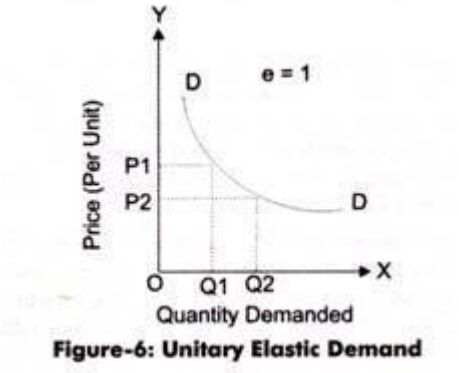


Figure-6: Unitary Elastic Demand

From Figure-6, it can be interpreted that change in price OP1 to OP2 produces the same change indemand from OQ1toOQ2.Therefore,the demand is unitary elastic.

The different types of price elasticity of demand are summarized inTable-4

Table-4: Price Elasticity of Demand

Numerical Value	Type of Price Elasticity	Description
$e_p = \infty$	Perfectly elastic demand	There is a greater change in demand in response to percentage or smaller change in the price. For example, the demand for a product decreases or completely stops, with a little change in its price and vice versa.
$e_p = 0$	Perfectly inelastic demand	Consumers do not respond to the demand for a product with increase or decreases in its price. This implies that the demand remains the same with change in the price.
$e_p > 1$	Relatively elastic demand	The percentage change in the quantity demanded of a product is greater than percentage change in its price. In such a case, consumers generally switch to new brands when the price of a particular brand increases. However, some consumers are loyal to the same brand.
$e_p < 1$	Relatively inelastic demand	The change in the demand of a product is less than that of change in its price.
$e_p = 1$	Unitary elastic demand	The change in the demand and change in the price of a product is same.

2.2 Income Elasticity of Demand:

The income elasticity is defined as the proportionate change in the quantity demanded resulting from a proportionate change in income. Symbolically we may write

$$e_Y = \frac{dQ}{Q} \Big/ \frac{dY}{Y} = \frac{dQ}{dY} \cdot \frac{Y}{Q} \qquad (2.6)$$

The income elasticity is positive for normal goods. Some writers have used income elasticity in order to classify goods into ‘luxuries’ and ‘necessities’. A commodity is considered to be a ‘luxury’ if its income elasticity is greater than unity. A commodity is a ‘necessity’ if its income elasticity is small (less than unity, usually).

The main determinants of income elasticity are:

1. The nature of the need that the commodity covers the percentage of income spent on food declines as income increases (this is known as Engel’s Law and has sometimes been used a same a sure of welfare and of the development stage of an economy).

2. The initial level of income of a country. For example, a TV set is a lux uryinan underdeveloped, poor country while It is a ‘necessity’ in a country with high per capita income.

3. The time period, because consumption patterns adjust with a time-lag to changes in income.

- **Types of Income Elasticity of demand**

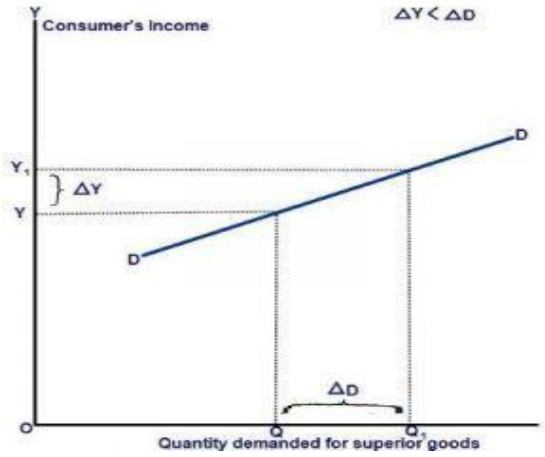
1. Positive income elasticity of demand(EY>0)

If there is direct relationship between income of the consumer and demand for the commodity, then income elasticity will be positive. That is, if the quantity demanded for a commodity increases with the rise in income of the consumer and vice versa,It is said to be positive income elasticity of demand. For example: as the income of consumer increases, they consume more of superior (luxurious)goods. On the contrary, as the income of consumer decreases, they consume less of luxurious goods.

Positive income elasticity can be further classified into three types:

a) Income elasticity greater than unity(EY>1)

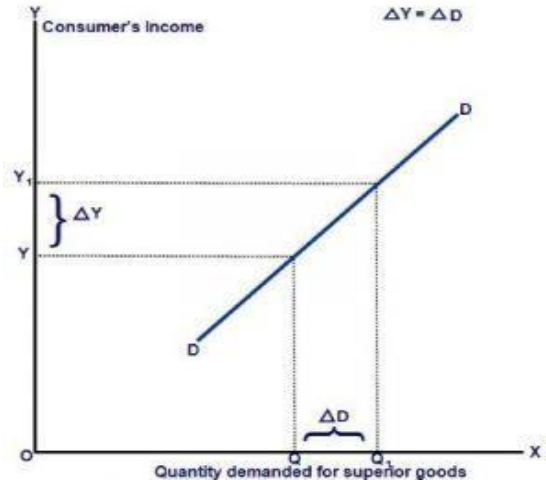
If the percentage change in quantity demanded for a commodity is greater than percentage change in income of the consumer, it is said to be income greater than unity. For example: When the consumer's income rises by 3% and the demand rises by 7%, it is the case of income elasticity greater than unity.



In the given figure, quantity demanded and consumer's income is measured along X-axis and Y-axis respectively.The small rise in income from **OY** to **OY1** has caused greater rise in the quantity demanded from **OQ** to **OQ1**and vice versa. Thus, the demand curve **DD** shows income elasticity greater than unity.

b) Income elasticity equal to unity(EY=1)

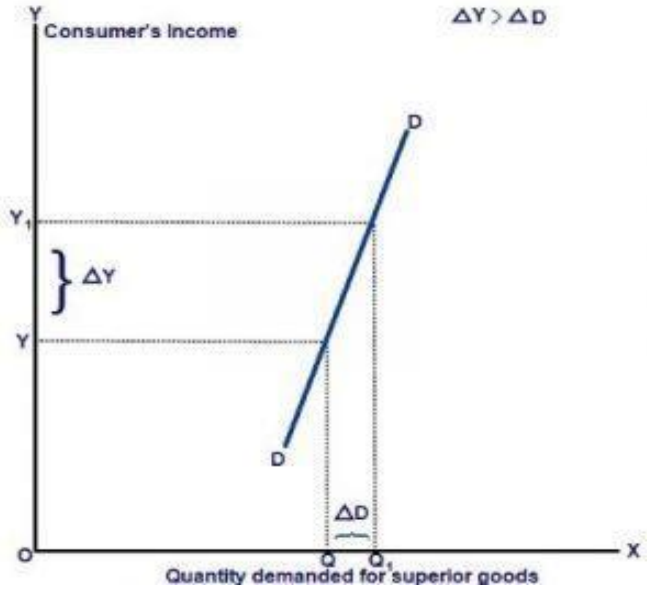
If the percentage change in quantity demanded for a commodity is equal to percentage change in income of the consumer, it is said to be income elasticity equal to unity.For example: When the consumer's incomerisesby5% and the demand rises by 5%, it is the case of income elasticity equal to unity.



In the given figure, quantity demanded and consumer's income is measured along X-axis and Y-axis respectively. The small rise in income from **OY** to **OY1** has cause dequalrise in the quantity demanded from **OQ** to**OQ1** and vice versa. Thus, the demand curve **DD** shows income elasticity equal to unity.

c) Income elasticity less than unity(EY<1)

If the percentage change in quantity demanded for a commodity is less than percentage change in income of the consumer, it is said to be income greater than unity. For example: When the consumer's income rises by 5% and the demand rises by 3%, it is the case of income elasticity less than unity.



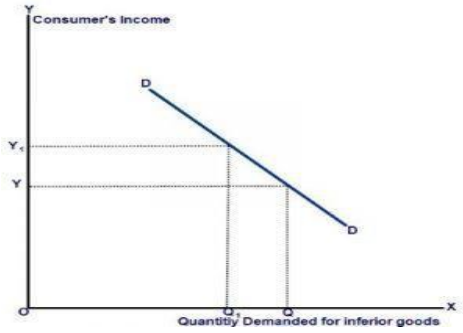
In the given figure, quantity demanded and consumer's income is measured along X-axis and Y-axis respectively. The greater rise in income from **OY** to

OY1 has caused small rise in the quantity demanded from **OQ** to **OQ1** and vice versa. Thus, the demand curve **DD** shows income elasticity less than unity.

2. Negative income elasticity of demand(EY<0)

If there is inverse relationship between income of the consumer and demand for the commodity, then income elasticity will be negative. That is, if the quantity demanded for a commodity decreases with the rise in income of the consumer and vice versa, it is said to benegative income elasticity of demand. For example:

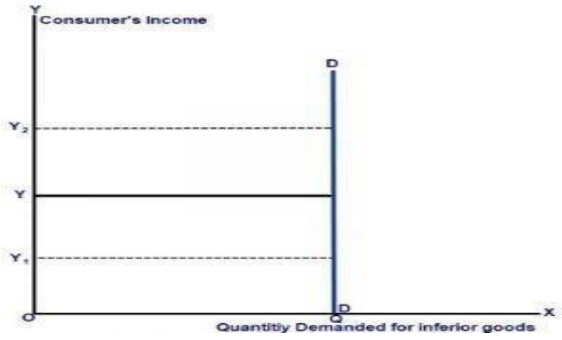
As the income of consumer increases, they either stop or consume less of inferior goods.



In the given figure, quantity demanded and consumer's income is measured along X-axis and Y-axis respectively. When the consumer's income rises from **OY** to **OY1**the quantity demanded of inferior goods falls from **OQ** to **OQ1** and vice versa. Thus, the demand curve **DD** shows negative income elasticity of demand.

3. Zero income elasticity of demand(EY=0)

If the quantity demanded for a commodity remains constant with any rise or fall in income of the consumer and, it is said to be zero income elasticity of demand. For example: In case of basic necessary goods such as salt, kerosene, electricity, etc. there is zero income elasticity of demand.



In the given figure, quantity demanded and consumer's income is measured along X- axis and Y-axis respectively. The consumer's income may fall to **OY1**

or riseto **OY2** from **OY**,the quantity demanded remains the sameat **OQ**. Thus, the demand curve **DD**, which is vertical straight line parallel to Y-axis shows zero income elasticity of demand.

2.3 Cross Elasticity of Demand

t is the ratio of proportionate change in the quantity demanded of Y to a given proportionate change in the price of the related commodity X.

It is a measure of relative change in the quantity demanded of a commodity due to a change in the price of its substitute/complement. It can be expressed as:

$$Ce = \frac{\text{Proportionate change in the quantity demanded of Y}}{\text{Proportionate change in the price of X}}$$

Cross elasticity may be infinite or zero if the slightest change in the price of X causes a substantial change in the quantity demanded of Y. It is always the case with goods which have perfect substitutes for one another. Cross elasticity is zero, if a change in the price of one commodity will not affect the quantity demanded of the other. In the case of goods which are not related to each other, cross elasticity of demand is zero.

- **Definition:**

"The cross elasticity of demand is the proportional change in the quantity of X good demanded resulting from a given relative change in the price of a related good Y" Ferguson

"The cross elasticity of demand is a measure of the responsiveness of purchases of Y to change in the price of X" Leibafsky

Types of Cross Elasticity of Demand:

1. Positive: When goods are substitute of each other then cross elasticity of demand is positive. In other words, when an increase in the price of Y leads to an increase in the demand of X. For instance, with the increase in price of tea, demand of coffee will increase.

Infig.21quantityhasbeenmeasuredonOX-axisandpriceonOY-axis.Atprice OP of Y-commodity, demand of X-commodity is OM. Now as price of Y commodity increases to OP1demand of X-commodity increases to OM1Thus, cross elasticity of demand is positive.

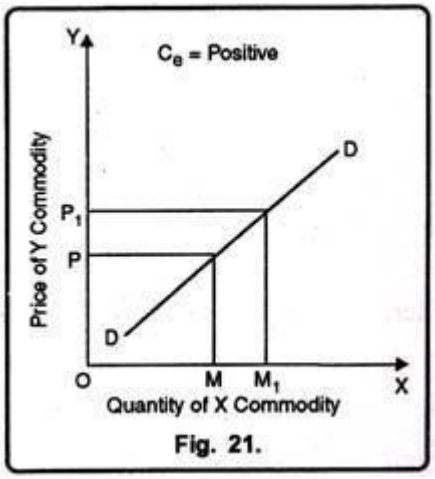


Fig. 21.

2. Negative: In case of complementary goods, cross elasticity of demand is negative. A proportionate increase in price of one commodity leads to a proportionate fall in the demand of an other commodity because both are demandedjointly.Infig.22 quantity has been measured onOX-axiswhileprice has been measured on OY-axis. When the price of commodity increases from OP to OP_1quantity demanded falls from OM to OM_1. Thus, cross elasticity of demand is negative.

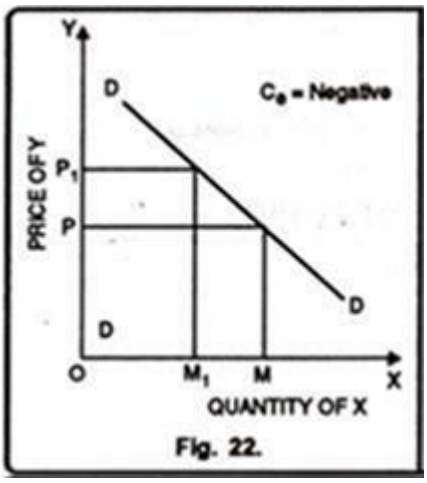


Fig. 22.

3. Zero: Cross elasticity of demand is zero when two goods are not related to each other. For instance, increase in price of car does not effect the demand of cloth. Thus, cross elasticity of demand is zero. It has been shown in fig. 23.

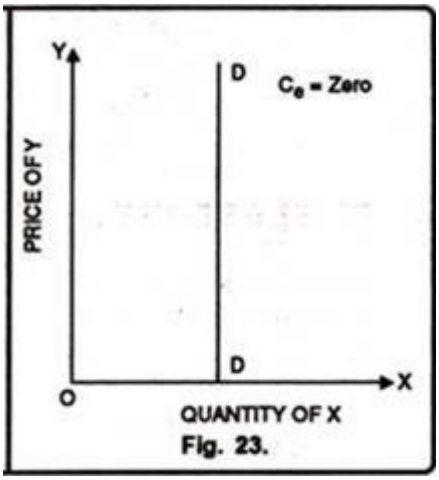


Fig. 23.

Therefore, it depends upon substitutability of goods. If substitutability is perfect, cross elasticity is infinite; if on the other hand, substitutability does not exist, cross elasticity is zero. In the case of complementary goods like jointly demanded goods cross elasticity is negative. A rise in the price of one commodity X will mean no to only decrease in the quantity of X butal so decrease in the quantity demanded of Y because both are demanded together.

- **Measurement of Cross Elasticity of Demand:**

Cross elasticity of demand can be measured by the following formula

$$EC = \frac{\text{Percentage change in quantity demanded of Good} - X}{\text{Percentage change in the price of Good} - Y}$$

$$= \frac{\dfrac{\text{Change in quantity demanded of X}}{\text{Original Quantity of X}}}{\dfrac{\text{Change in Price of Y}}{\text{Original Price of Y}} \times 100} \times 100$$

$$= \frac{\dfrac{\Delta Q_x}{Q_x}}{\dfrac{\Delta Q_y}{Q_y}} = \frac{\Delta Q_x}{Q_x} \times \frac{P_y}{\Delta P_y}$$

$$EC = \frac{P_y}{\Delta_n} \times \frac{\Delta Q_n}{\Delta P_y}$$

Where

Py = Original price of good-Y

ΔPy = Change in price of good-Y

Q_x = Original quantity demanded of X

ΔQ_x = Change in the quantity demanded of X

MARGINALUTILITY ANALYSIS

❖ MARGINALUTILITY ANALYSIS

Before we begin, let's understand the meaning of two important terms – total utility and marginal utility

- **Total Utility or Full Satiety**–is the sumo futility derived from different units of a commodity consumed by a consumer.

  Therefore, Total Utility=the sum to talofall margin alutility.

- **Marginal Utility or Marginal Satiety**–is the addition alutility derived from the consumption of an additional unit of a commodity. Therefore, **Marginal Utility =the addition made to the Total Utility by consuming one more unit of a commodity**.

❖ ASSUMPTIONS OF MARGINALUTILITY ANALYSIS

1] The Cardinal Measurability of Utility:- This theory states that utility is a cardinal concept. In other words, it is measurable and quantifiable. Hence, you can say that you derive autility of 10unitsfromconsuming1unitofcommodity A and 5 from consuming 1 unit of commodity B. This can help you compare different commodities and analyze which commodity offers better utility or satisfaction.

The theory further states that money is the measuring rodofutility.So, the amount of money that you are willing to spend for a unit of commodity rather than going without it is the measure of utility that you derive from the said commodity.

2] The constancy of the Marginal Utility of Money:- These condassumption is that when you are spending money on a commodity, the marginal utility of money remains constant throughout. This facilitates the measurement of the utility of commodities in terms of money.

3] The Hypothesis of Independent Utility:- This theory ignores the complementarilybetweengoods.Itstatesthatthetotalutilitythatyougetfrom acollectionofgoodsisasimplesumtotaloftheseparateutilitiesofeachgood.

❖ THE LAW OF DIMINISHING MARGINALUTILITY

This is an important law under Marginal Utility Analysis. Al fred Marshall, British Economist defines the law of diminishing marginal utility as follows:

"The additional benefit which a person derives from a given increase in the stock of a thing diminishes with every increase in the stock that heal ready has."

This law is based on the fundamental tendency of human nature. Human wants are virtually unlimited. However, every single want is satiable. Hence,as we

consume more and more units o fa good the intensity of our want forth good decreases. Eventually, itreachesa point where we no longer want it.In other words,aswe consume more un its of a good, the extra satisfaction that we derive from the extraun it keeps falling. However, it is importanttorememberthatthe marginal utilitydeclines NOTthetotal utility.

An Illustration: Let us see an example. The table below presents the total and marginal utility derived by Peter from consuming cups of tea perday.

Quantityof Teas	Total Utility	Marginal Utility
1	30	30
2	50	20
3	65	15
4	75	10
5	83	8
6	89	6
7	93	4
8	96	3
9	98	2
10	99	0
11	95	-4

As seen in the table above, when Peter consumes one cup of tea in a day, he derives a total utility of 30 utils (unitofutility) and a marginal utility of 30 utils. When he takes two cups perday,the total utility rises to 50 utils but the marginal utility falls to20. This trend continues until the last row where the marginal utility is negative. This means that if Peter consumes 11 or more cups of tea per day, then he might fall sick.Here is a graph representing the table:

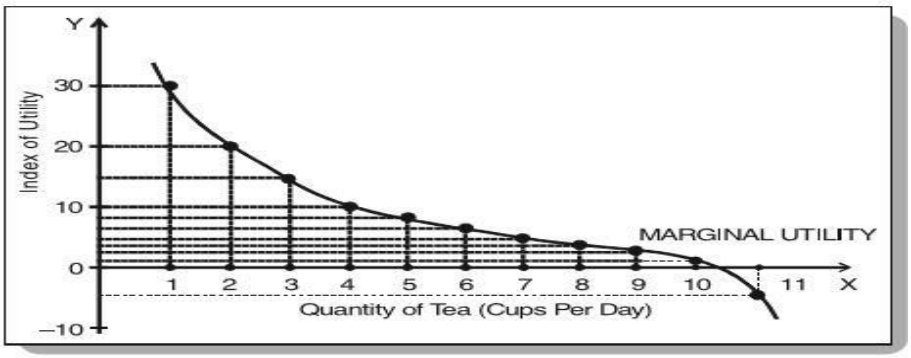


Fig. 1 : Marginal utility of tea consumed

❖ RELATIONSHIPBETWEENTOTALANDMARGINALUTILITY

1. As the total utility rises,the marginal utility diminishes
2. When the total utility is maximum, the marginal utility is zero.

3. As the total utility starts diminishing,the margin alutility becomes negative.

This law helps us understand how a consumer reach esequilibrium in case of a single commodity.Typically, a consumer utilizes a commodity untilits marginal utility becomes equal to the market price.This ensures that he derives maximum satisfaction by being inequilibrium inrespect of the quantity of the commodity.

Incase of a fall in the price of the commodity,the equality between marginal utility and price gets disturbed. Therefore, the consumer will consume more units of the good leading to a fallin the marginal utility.He continues consuming until the equilibrium is achieved. On the other hand, incase of arise in the price of the commodity, he will consumeless and achieve equilibrium too.

❖ LIMITATIONSOFTHELAW

The law of diminishing marginal utility applies only under certain assumptions:

1. ***Homogeneous units–***The different units of a commodity are identical in all respects. The income, taste, temperament, habit, etc. of the consumer also remains unchanged.

2. ***Standard units of consumption –*** The units of consumption consist of standard units. If a man is thirsty, then water should be given in units of a glass. If you give him a spoonful of water, then the second spoon would conceivably have higher utility than the first.

3. ***Continuous consumption–***There is a continuous consumption of units. That is, there is no gap between the consumption of two units.

4. ***Not applicable to prestigious goods –*** The law does not apply to prestigious goods like gold,cash,etc.where a greater quantity can increase the lust for it.

5. ***Related goods –*** If you don't have sugar, then you will consume less tea. Hence, the utility of goods can be affected by the absence of related goods.

Let's sum-up

Dear learners, In this module we learn about Price Elasticity of demand, Income Elasticity of Demand, Cross elasticity of Demand.

Self-Assessment questions :

1.More elastic means ----------

a. Less desirable b. Less desirable

c. Less response d. More responsive

2. If a 5%, increase in price leads to an 8% decrease in quantity demanded,

demand is

a. perfectly elastic b.Elastic

c. unit elastic d. inelastic

3. If a price reduction leads to greater total revenue, demand is

a. Perfectly inelastic b. inelastic

c. Unit elastic d. elastic

4. a linear, downward slopping demand curve has

a. constant slop and constant elasticity

b. constant slop and varying elasticity

c. varying slop and constant elasticity

d. varying slope and varying elasticity

5. A perfectly elasticity demand curve is

a. a vertical straight line

b. a hrozontal straight line

c. a downward sloping straight line

MODULE 2 COMPLETED

MODULE3

DEMANDFORECASTING

3.1 MEANINGOFDEMANDFORCASTING

Demandforecastingreferstoascientificandcreativeapproachforanticipating the demand of a particular commodity in the market based on past behaviour, experience, data and pattern of related events.It Is not based on mere guessing or prediction but is backed up by evidence and past trends.

Example: A printing press owner forecasts high demand for note books in June and July due to the new session.Therefore, he plans for a large-scale production during this time and arranges for the raw material, workforce, finance and machinery accordingly.

3.2 FACTORS AFFECTING DEMAND FORECASTING

Demand is never constant and fluctuates with the change in certain factors related to the commodity and the market in which the business operates. With the changing demand, it's forecasting also varies.

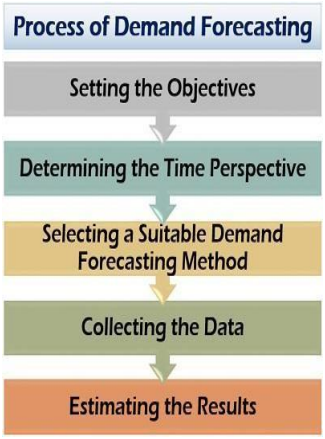
Following are some of the factors which influence the demand forecasting of a commodity: -

1. **Price of Goods**: Demand estimation is highly dependant on the price of goods or services. The pricing policy and fluctuation in the present price can give an idea of change in demand for that particular commodity.
2. **Type of Goods**: The type of commodity, its features and usability determines the customer base It is going to cater. The demand for existing. goods can be easily estimated by following the previous sales trend, competitors' analysis and substitutes available. Whereas, the demand for a new product on the market is difficult to predict.
3. **Competition**: The level of competition in the market supports the process of demand forecasting. It is easy to predict sales in a less competitive market whereas the same becomes difficult in a market where the new firms can freely enter.
4. **Technology**: The demand for any product or service changes drastically with the advancement in technology. Therefore, it is essential for an organization to be aware of technological development while forecasting the demand for any commodity.
5. **Economic Perspective**: Being updated with economic changes and growth is necessary for demand forecasting. It assists the organization in preparing for future possibilities and analysing the impact of economic development on sales.

❖ PROCESSOFDEMANDFORECASTING

Demand forecasting is not based on assumptions but is a systematic and scientific process of estimating future sales and performance as well as directing the resources accordingly.

The steps involved in a standard demand forecasting process are as follows:

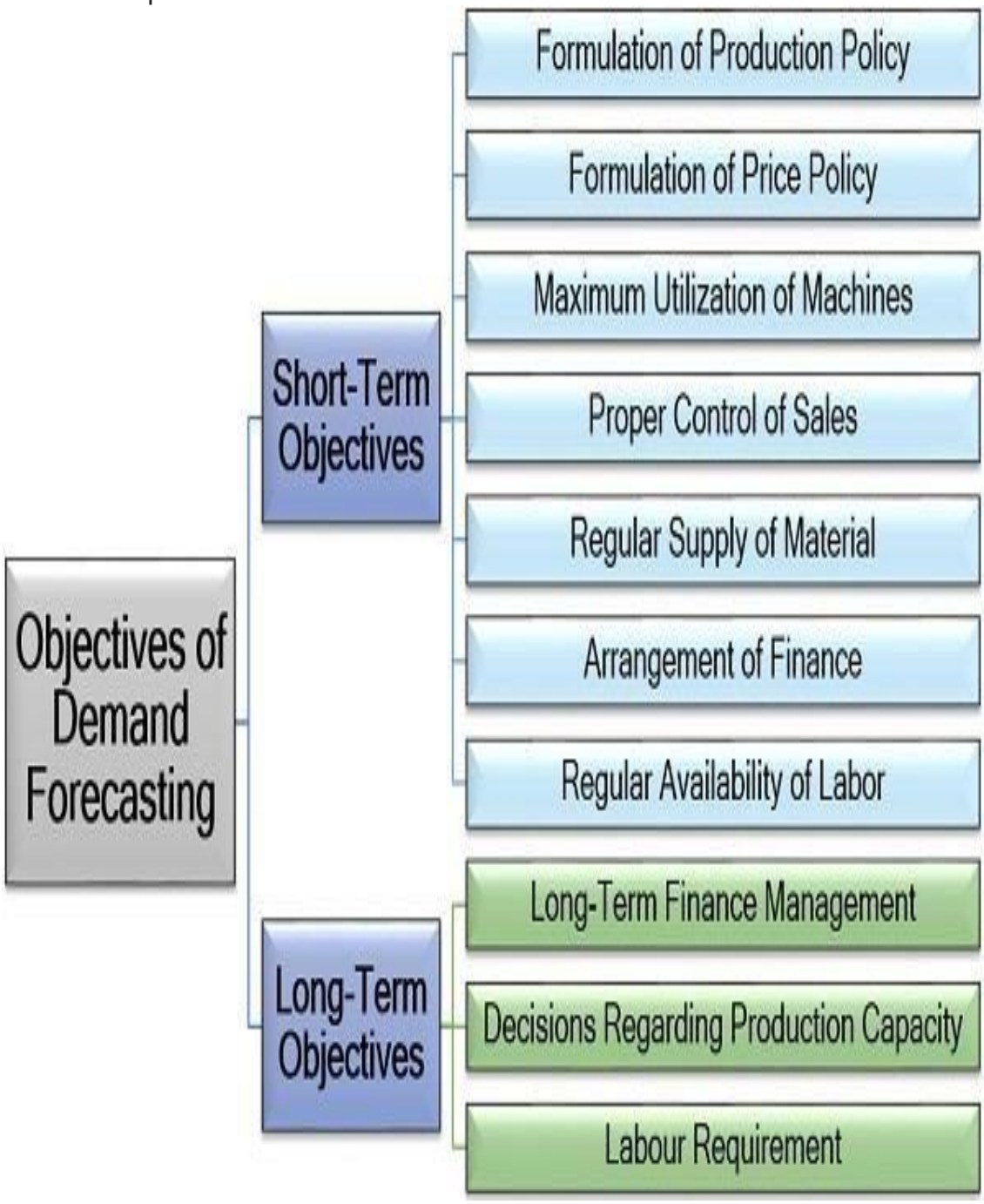


1. **Setting the Objectives**: The purpose for which the demand forecasting is being done, must be clear. Whether it is for short-term or long-term, the market share of the product, the market share of the organization, competitors share, etc. By all these aspects, the objectives for forecasting are framed.
2. **Determining the Time Perspective**: The defined objectives are supported by the period for which the forecasting is being done. The demand for a commodity varies with the change in its determinants over the period.
   There is a negligible change in price, income or other factors in the short run. But, the organization may notice a considerable difference in these determinants over a long-term, affecting the demand of a commodity.
3. **Selecting a Suitable Demand Forecasting Method**: Demand forecasting is based on specific evidence and is determined using a particular technique or method. The method of prediction must be selected wisely. It is dependent on the information available, the purpose of predicting and the period it is done for.
4. **Collecting the Data**: Forecasting is based on past experiences and data. This data or information can be primary or secondary. Primary data comprises of the information directly collected by the analysts and researchers; whereas secondary data includes the physical evidence of the past performance, sales trend in the past years, financial reports, etc.
5. **Estimating the Results**: The data so collected is arranged in a systematic and meaningful manner. The past performance of a product in the market is analyzed on this basis. Accordingly, future sales prediction and demand estimation are done. The results so drew must be in a format which is easy to understand and apply by the management.

3.3 OBJECTIVES OF DEMAND FORECASTING

Demand forecasting is one of the major components in the success of any business. All organizational activities, whether they are short-term business operations or long-term strategic decisions are dependent on it.

These objectives are illustrated under the following categories further sub-divided into points:-



1] Short-Term Objectives: To ensure the effective working of the organisation, estimation of sales for the past six months is done. Letus now go through the following purpose of demand forecasting in the short run:

a) **Formulation of Production Policy**: Demand for ecasting aims at meeting the demand by ensuring uninterrupted production and supply of goods and services.

b) **Formulation of Price Policy**: It helps in formulating an effective price

mechanism to deal with the market fluctuations and conditions like inflation.

c) **Maximum Utilization of Machines**: It streamlines the production process and operations such that there is the optimum utilisation of machines.

d) **Proper Control of Sales**: Forecasting the regional sales of a particular product or service provides a base for setting a sales target and evaluating the performance.

e) **Regular Supply of Material**: Sales forecast determines the level of production leading to the estimation of raw material.Thus, a continuous supply of raw material and inventory management can be done.

f) **Arrangement of Finance**: To maintain short-term cash in the organization it is essential to forecast the sales as well as liquidity requirement accordingly.

g) **Regular Availability of Labor**: Estimation of the production capacity provides for the acquisition of suitable skilled and unskilled labour.

2] **Long-Term Objectives**: Demand forecasting is inevitable for the long-term existence of an organization. Following objectives justify the statement:

a. **Long-Term Finance Management**: Forecasting sales for the long-term contributes to long-term financial planning and acquisition of funds at reasonable rates and suitable terms and conditions.

b. **Decisions Regarding Production Capacity**: Demand forecast determines the production level which provides a base for decisions related to the expansion of the production unit or size of the plant.

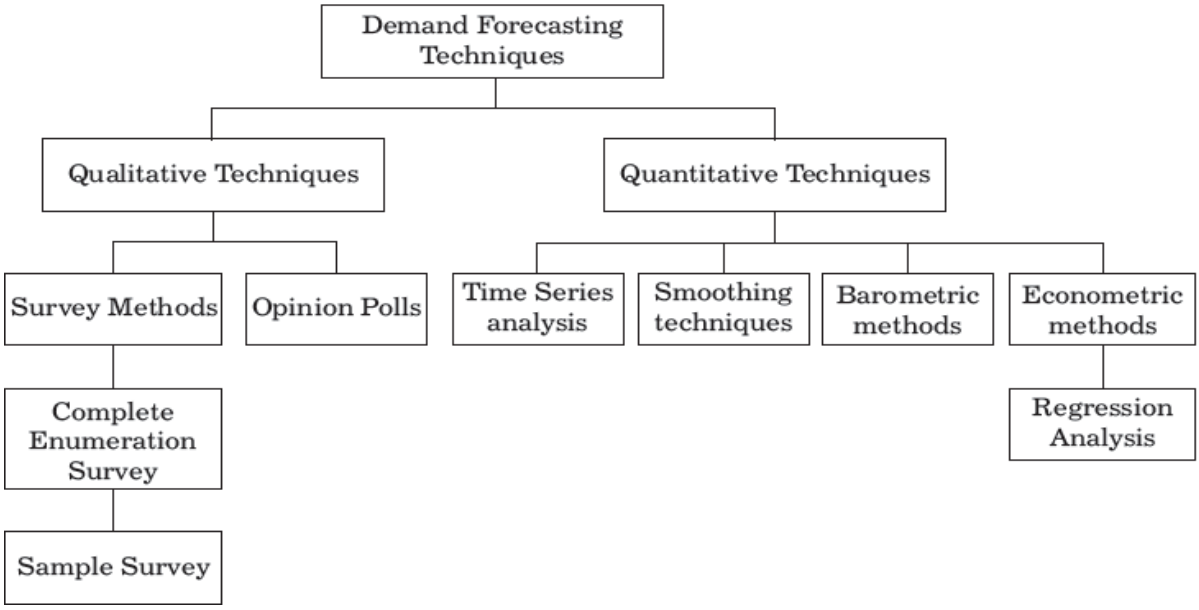
c. **Labour Requirement**: Demand forecasting initiates expansion of business thus leading to the estimation of required human resource to accomplish business goals and objectives.

Estimating demand with accuracy requires a lot of expertise and knowledge. Therefore experts are hired by the business organizations to ensure better results and proper utilization of resources.

3.4 TECHNIQUES & METHODS OF DEMAND FORECASTING

Different organizations rely on different techniques to forecast demand for their products or services for a future time period depending on their requirements and budget.

Methods of demand forecasting are broadly categorized into two types. Let us discuss these techniques & methods of demand forecasting in detail:



1. Qualitative Techniques

Qualitative techniques rely on collecting data on the buying behavior of consumers from experts or through conducting surveys in order to forecast demand. These techniques are generally used to make short term forecasts of demand.

Qualitative techniques are especially useful in situations when historical data is not available; for example, introduction of a new product or service. These techniques are based on experience, judgment, intuition, conjecture, etc.

1. Survey Methods:-Survey methods are the most commonly used methods of forecasting demand in the short run. This method relies on the future purchase plans of consumers and their intentions to anticipate demand.

Thus, in this method, an organization conducts surveys with consumers to determine the demand for their existing products and services and anticipate the future demand accordingly. The two types of survey methods are explained as follows:

I. Complete enumeration survey: This method is also referred to as the census method of demand forecasting. In this method, almost all potential users of the product are contacted and surveyed about their purchasing plans.

Based on these surveys, demand forecasts are made. The aggregate demand forecasts are attained by totaling the probable demands of all individual consumers in the market.

II. Sample survey: In this method, only a few potential consumers (called sample) are selected from the market and surveyed. In this method, the average demand is calculated based on the information gathered from the sample.

2. Opinion Poll Method:- Opinion poll methods involve taking the opinion of those who possess knowledge of market trends, such as sales representatives, marketing experts, and consultants. The most commonly used opinion polls methods are explained as follows:

I. Expert opinion method: In this method, sales representatives of different organizations get in touch with consumers in specific areas. They gather information related to consumers' buying behaviour, their reactions and responses to market changes, their opinion about new products, etc.

II. Delphi method: In this method, market experts are provided with the estimates and assumptions of forecasts made by other experts in the industry. Expertsmayreconsiderandrevisetheirownestimatesandassumptionsbased on the information provided by other experts.

III. Market studies and experiments: This method is also referred to as market experiment method. In this method, organisations initially select certain aspects of a market such as population, income levels, cultural and social background, occupational distribution, and consumers' tastes and preferences.

Among all these aspects, one aspect is selected and its effect on demand is determined while keeping all other aspects constant.

2.QuantitativeTechniques

Quantitative techniques for demand forecasting usually make use of statistical tools. In these techniques, demand is forecasted based on historical data.

These methods are generally used to make long-term forecasts of demand. Unlike survey methods, statistical methods are cost effective and reliable as the element of subjectivity is minimum in these methods. Let us discuss different types of quantitative methods:-

1. Time Series Analysis:- Time series analysis or trend projection method is one of the most popular methods used by organizations' for the prediction of demand in the long run. The term time series refers to a sequential order of values of a variable (called trend) at equal time intervals.

Using trends, an organization can predict the demand for its products and services for the projected time. There are four main components of time series analysis that an organization must take into consideration while forecasting the demand for its products and services. These components are:

I. Trend component:- The trend component in time series analysis accounts for the gradual shift in the time series to a relatively higher or lower value over a long period of time.

II. Cyclical component: The cyclical component in time series analysis accounts for the regular pattern of sequences of values above and below the trend line lasting more than one year.

III. Seasonal component: The seasonal component in time series analysis accounts for regular patterns of variability within certain time periods, such as a year.

IV. Irregular component: The irregular component in time series analysis accounts for a short term, unanticipated and non-recurring factors that affect the values of the time series.

2. Smoothing Techniques:- In cases where the time series lacks significant trends, smoothing techniques can be used for demand forecasting. Smoothing techniques are used to eliminate a random variation from the historical demand.

This helps in identifying demand patterns and demand levels that can be used to estimate future demand. The most common methods used in smoothing techniques of demand forecasting are simple moving average method and weighted moving average method.

The simple moving average method is used to calculate the mean of average prices over a period of time and plot these mean prices on a graph which acts as a scale.

For example, a five-day simple moving average is the sum of values of all five days divided by five.

The weighted moving average method uses a predefined number of time periods to calculate the average, all of which have the same importance.

For example, in a four-month moving average, each month represents 25% of the moving average.

3. Barometric Methods:-Barometric methods are used to speculate the future trends based on current developments. This methods are also referred to as the leading indicators approach to demand forecasting.

Many economists use barometric methods to forecast trends in business activities. The basic approach followed in barometric methods of demand analysis is to prepare an index of relevant economic indicators and forecast future trends based on the movements shown in the index.

- **The barometric methods make use of the following indicators:**

a) Leading indicators: When an event that has already occurred is considered to predict the future event, the past event would act as a leading indicator.

For example, the data relating to working women would act as a leading indicator for the demand of working women hostels.

b) Coincident indicators: These indicators move simultaneously with the current event.

For example, a number of employees in the non-agricultural sector, rate of unemployment, percapita income, etc., act as indicators for the current state of a nation's economy.

c) Lagging indicators: These indicators include events that follow a change. Lagging indicators are critical to interpret how the economy would shape up in the future. These indicators are useful in predicting the future economic events.

For example, inflation, unemployment levels, etc. are the indicators of the performance of a country's economy.

4. Econometric Methods:- Econometric methods make use of statistical tools combined with economic theories to assess various economic variables (for example, price change, income level of consumers, changes in economic policies, and so on) for forecasting demand.

The forecasts made using econometric methods are much more reliable than any other demand forecasting method. An econometric model for demand forecasting could be single equation regression analysis or a system of simultaneous equations. A detailed explanation of regression analysis is given in the next section.

5. Regression Analysis: The regression analysis method for demand forecasting measures the relationship between two variables. Using regression analysis a relationship is established between the dependent (quantity demanded) and independent variable (income of the consumer, price of related goods, advertisements, etc.).

For example, regression analysis may be used to establish a relationship between the income of consumers and their demand for a luxury product. In other words, regression analysis is a statistical tool to estimate the unknown value of a variable when the value of the other variable is known.

After establishing the relationship, the regression equation is derived assuming the relationship between variables is linear. The formula for a simple linear regression is as follows:

$$Y=a+bX$$

Where Y is the dependent variable for which the demand needs to be forecasted; b is the slope of the regression curve; X is the independent variable; and a is the Y-intercept. The intercept a will be equal to Y if the value of X is zero.

❖ APPLICATIONS OF FORECASTING

1. Supply chain management:- It includes the movement and storage of raw materials, work-in- process inventory, and finished goods from point of origin to point of consumption.

2. Economic forecasting:- It is the process of making predictions about the economy.

3. Earthquake Forecasting:- It defined as the specification of the time, location, and magnitude of a future earthquake within stated limits", and particularly of "the next strong earthquake to occur in a region.

4. E-gain Forecasting:- The process of climate change and increasing energy prices has led to the usage of E-gain Forecasting of buildings.

5. Land Use Forecasting:-It under takes to project the distribution and intensity of trip generating activities in the urban area.

6. Player &Team Performance in Sports:-PECOTA, is as aber metric system for forecasting Major League Baseball player performance.

7. Political Forecasting:-Its aims at predicting the outcome of elections.

8. Transportation Forecasting• the process of estimating the number of vehicles or people that will use a specific transportation facility in the future.

9. Telecommunications Forecasting • Telecommunications service providers perform forecasting calculations to assist them in planning their networks.

10. Product Forecasting • is the science of predicting the degree of success a new product will enjoy in the marketplace.

11. Sales Forecasting:-It is helpful in sale.

12. Technology Forecasting:-It attempts to predict the future characteristics of useful technological machines, procedures or techniques

13. Weather Forecasting:- It is the application of science and technology to predict the state of the atmosphere for a given location.

14. Flood Forecasting:-The use of real-time precipitation and stream flow data in rainfall-runoff and stream flow routing models to forecast flow rates and water levels for periods ranging from a few hours todays ahead,depending on the size of the watershed or river basin.

❖ SIGNIFICANCE OF DEMAND FORECASTING

Significance of demand forecasting is shown in the following points:

i. Fulfilling objectives:- Implies that every business unit starts with certain pre-decided objectives. Demand forecasting helps in fulfilling these objectives. An organization estimates the current demand for its products and services in the market and move forward to achieve the set goals.

For example, an organization has set a target of selling 50, 000 units of its products. In such a case, the organization would perform demand forecasting for its products. If the demand for the organization's products is low, the organization would take corrective actions, so that the set objective can be achieved.

ii. Preparing the budget:-Plays a crucial role in making budget by estimating costs and expected revenues. **For instance**, an organization has fore casted that the demand for its product, which is priced at Rs.10, would be10,00,00 units. In such a case, the total expected revenue would be 10*100000=Rs.10,00, 000. In this way, demand forecasting enables organizations to prepare their budget.

iii. Stabilizing employment and production:- Helps an organization to control its production and recruitment activities. Producing according to the forecasted demand of products helps in avoiding the wastage of the resources of an organization. This further helps an organization to hire human resource according to requirement. For example, if an organization expects a rise in the demand for its products, it may opt for extra labor to fulfill the increased demand.

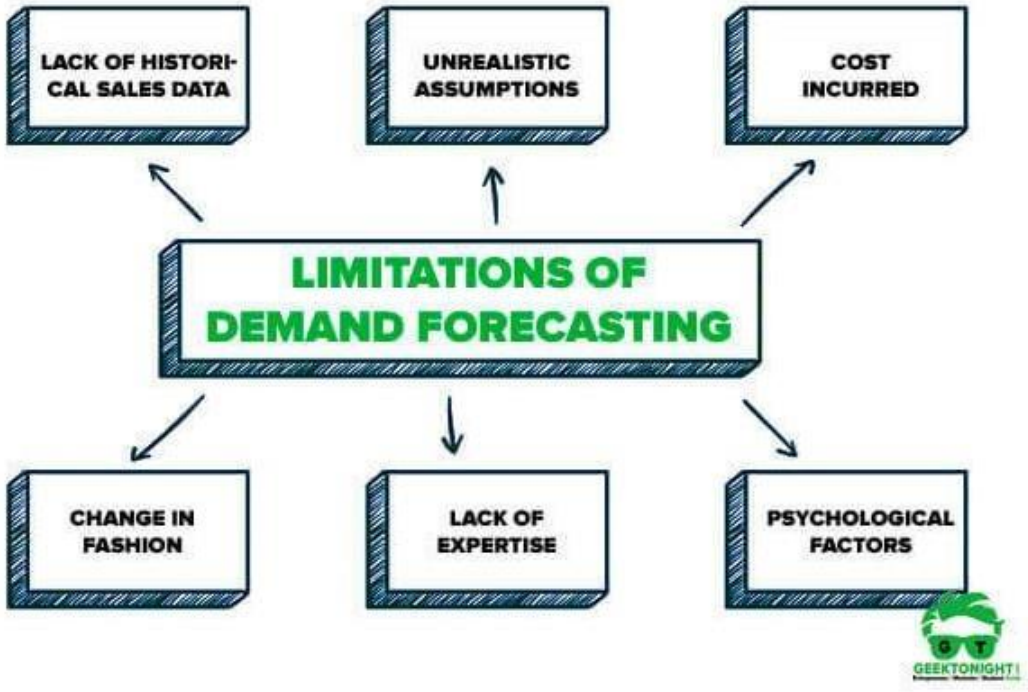
iv. Expanding organizations:- Implies that demand forecasting helps in deciding about the expansion of the business of the organization. If the expected demand for products is higher, then the organization may plan to expand further. On the other hand, if the demand for products is expected to fall, the organization may cut down the investment in the business.

v. Taking Management Decisions:-Helps in making critical decisions, such as deciding the plant capacity, determining the requirement of raw material, and ensuring the availability of labor and capital.

vi. Evaluating Performance:-Helps in making corrections. For example, if the demand for an organization's products is less, it may take corrective actions and improve the level of demand by enhancing the quality of its products or spending more on advertisements.

vii. Helping Government:- Enables the government to coordinate important export activities and plan international trade.

❖ LIMITATIONS OF DEMAND FORECASTING



1. Lack of historical sales data:-Past sales figures may not always be available with an organization. **For example,** in case of a new commodity, there is unavailability of historical sales data. In such cases, new data is required to be collected for demand forecasting, which can be cumbersome and challenging for an organization.

2. Unrealistic assumptions:- Demand forecasting is based on various assumptions, which may not always be consistent with the present market conditions. In such a case, relying on these assumptions may produce incorrect forecasts for the future.

3. Cost incurred:- Demand forecasting incurs different costs for an organization, such as implementation cost, labour cost, and administrative cost. These costs may be very high depending on the complexity of the forecasting method selected and the resources utilized. Owing to limited means, it becomes difficult for new startups and small-scale organizations to perform demand forecasting.

4. Change in fashion:- Consumers' tastes and preferences continue to change with a change in fashion. This limits the use of demand forecasting as it is generally based on historical trend analysis.

5. Lack of expertise: -Demand forecasting requires effective skills, knowledge and experience of personnel making forecasts. In the absence of trained experts, demand forecasting becomes a challenge for an organization. This is

because if the responsibility of demand forecasting is assigned to untrained personnel, it could bring huge losses to the organization.

6. Psychological factors: -Consumers usually prefer a particular type of product over others. However, factors, such as fear of war and changes in economic policy, could affect consumers' psychology. In such cases, the outcomes of forecasting may no longer remain relevant for the time period.

Let's sum-up

Dear Learners, In this module we learn about Demand forecasting Meaning, Factors, Objectives and Methods.

Self – Assessment questions:

1. Accurate forecast can help in reducing the lad time to cater to customer demand an also help in reducing the inventory levels.
   a. True b. False
2. All of the below are qualitative methods of forecasting
   a. Sales forecast estimates b. Executive opinion
   b. Customer survey d. Market research
3. Which of the following is not a time series method of forecasting
   a. Simple moving average b. weighted moving average
   c.Exponential smoothing d. Delphi method

4. According to ----------, forecasting means to know the trend or behavior after

   a period of time

   a. Gopal Krishna b. Adam smith
   c.Evan j douglas d. Cundin still

5. Delphi method is used for ----------
   a. Judgmental forecast b. time series forecast
   c. Assocaitative model d. All of the above

UNIT SUMMARY :

Dear Learners, In this unit we learn about Introduction to Demand analysis, Meaning, Definition, Characteristics, types of Demand, Determinants of Demand and Law of Demand,

Price Elasticity of demand, income elasticity of demand and cross elasticity of

demand and Demand forecasting – meaning, factors, objectives and methods.

Web resources :

1.https://kstatelibraries.pressbooks.pub/economicsoffoodandag/chapter/__unknown__/

2.https://www.shipbob.com/blog/demand-forecasting/

UNIT – III

Production function and cost function

The production function: Production with one variable Input – Law of variable proportions – Production – Production with two variable inputs- Production Isoquants - Is cost Lines Estimating Production function – Return to scale – Economics Vs Diseconomies of Scale – Cost concept –Analysis of cost – short and Long run cost . Market Structure: Perfect and Imperfect competition – Monopoly – Duopoly, Monopolistic competition – Pricing Methods

Unit Module Structuring

1. Production Function
2. Cost Concept
3. Market Structure
4. Pricing Methods

Self-Learning Material Development – Stage 1

Table of content for the unit 5

2.3.2 Long run cost curves.		
3. Market Structure 3.1 Meaning of Market structure 3.2 Types 3.2.1 Perfect competition 3.2.2 Monopoly Market 3.2.3 Monopolistic competition 3.2.4 Oligopoly market	3	
4.Pricing Methods 4.1 Meaning of Pricing 4.2 Objectives of pricing 4.3 Types of pricing 4.4 Pricing methods in practice.	4	

Unit Objectives:

- To understand the Production function analysis.
- To identify the cost concepts theories.
- To analyze the Different types of Market structures.
- To interpret the Pricing methods in practices.

1.1 Introduction to Production Function

Production is a process of using various material and immaterial inputs in order to make output for consumption. Production process creates economic well- being. The satisfaction of needs originates from the output. Production is the result of cooperation of four factors of production (land, labour, capital and organisation). In Economics, production refers to the creation or addition of value. It simply transforms the inputs into output.

Production may be at varying levels. The scale of production influences the cost of production. All manufacturers are aware that when production of a commodity takes place on a larger scale, the average cost of its production is low. This is the reason why the entrepreneurs are interested in enlarging the scale of production of their commodities. They stand to benefit from the resulting economies of scale. There is also the possibility of making their products available in the market at lower prices.

1.2 FEATURESOFTHEFACTORSOFPRODUCTION

Factors of production means resources used in the process of production of commodities.Thereareoffourtypesviz.,land,labour,capitalandorganization or enterprise. Here, land represents natural resources (such as soil, mineral deposits, seas, rivers, natural forests, fisheries etc). Labour represents human resources. Together, these two factors are called the 'primary factors of production'.

These two factors produce some units of goods for the purpose of consumption. And as consumption of these goods takes place, there is the possibility of some of these goods getting left over. Thus, saving is production minus consumption. This saved amount is called as capital, which serves as investment in the production process. Also, organisation or enterprise is a special form of labour. The third and the fourth factors are called 'secondary factors of production'.

These four factors depend on each other. They have a coordinated impact on production of goods and services.

1. Land:- In ordinary sense 'land' refers to the soil or the surface of the earth or ground. But, in Economics, land means all gifts of Nature owned and controlled by human beings which yield an income. Land is the original source of all material wealth. The economic prosperity of a country depends on the richness of her natural resources. The quality and quantity of agricultural wealth are determined by the nature of soil, climate and rainfall.

The agricultural products are the basis of trade and industry. Industry survives on the availability of coal-mines or waterfall for electricity production. Hence, all aspects of economic life like agriculture, trade and industry are generally influenced by natural resources which are called as "Land" in economics.

2. Labour:- Labour is the active factor of production. In common parlance, labour means manual labour or unskilled work. But in Economics the term 'labour' has a wider meaning.

It refers to any work undertaken for securing an income or reward. Such work may be manual or intellectual. For example, the work done by an agricultural worker or a cook or rickshaw puller or a mason Is manual. The work of a doctor or teacher or an engineer is intellectual. In short, labour in economics refers to any type of work performed by a labourer for earning an income.

According to Marshall, labour represents services provided by the factor labour, which helps in yielding an income to the owner of the labour-power.

3. Capital:- Marshall says " capital consists of all kinds of wealth other than free gifts of nature, which yield income". Bohm-Bawerk defines it as 'a produced means of production'. As said earlier, capital is a secondary means of production. It refers to that part of production which represents 'saving used as investment' in the further production process. For example, the entire mango is not eaten; a part of that (its nut) is used to produce more mangoes.

It is a stock concept. All capital is wealth but all wealth is not capital. For example, tractor is a capital asset which can be used in cultivation (production) of farm, but due to some reason the same is kept unused (idle) for some period. It cannot be termed as capital for that period. It is only wealth.

Capital may be tangible or intangible. For example, buildings, plants and machinery, factories, inventories of inputs, warehouses, roads, highways etc are tangible capital. The examples for intangible capital are investment on advertisement, expenses on training programme etc.

Financial Capital means the assets needed by a firm to provide goods and services measured in term of money value . It is normally raised through debt and equity issues .The prime aim of it is to a mass wealth in terms of profit.

4. Organization:- The man behind organizing the business is called as 'Organizer' or 'Entrepreneur'. An organiser is the most important factor of production. Here presents a special type of labour. Joseph Schumpeter says that an entrepreneur innovates, coordinates other factors of production, plans and runs a business. He not only runs the business, but bears the risk of business. His reward is residual. This residual is either positive (profit) or negative (loss) or zero.

➢ Functions of an Organizer (Entrepreneur)

1. **Initiation:** An organizer is the initiator of the business, by considering the situation and availability of resources and planning the entire process of business or production.
2. **Innovation:** A successful entrepreneur is always an innovator. He introduces new methods in the production process.
3. **Coordination:** An organizer applies a particular combination of the factors of production to start and run the business or production.
4. **Control, Direction and Supervision:** An organizer controls so that nothing prevents the organisation from achieving its goal. He directs the factors to get better results and supervises for the efficient functioning of all the factors involved in the process of production.
5. **Risk-taking and Uncertainty-bearing:** There are risk-taking and uncertainty-bearing obstacles. Risks may be insured but uncertainties cannot be insured. They reduce the profit.

❖ PRODUCTION FUNCTION

Production function refers to the relationship among units of the factors of production (inputs) and the resultant quantity of a good produced (output).

According to George J. Stigler, *"Production function is the relationship between inputs of productive services per unit of time and output so product per unit of time."*

Production function may be expressed as:Q=f(N,L,K,T)Where,Q=Quantity ofoutput, N=Land;L= Labour; K= Capital; and T=Technology. Depending on the efficiency of the producer, this production function varies.

The function implies that the level of output (Q) depends on the quantities of different inputs (N, L, K, T) available to the firm.

- **Short-run Production and Longrun Production**

In Microeconomics, the distinction between longrun and shortrun is made on the basis of fixed inputs that inhibit the production.

The short-run is the period where some inputs are variable, while others are fixed. Another feature is that firms do not enter into the industry and existing firms may not leave the industry.

Longrun, on the other hand , is the period featured by the entry of new firms to the industry and the exit of existing firms from the industry.

In general, Production function may be classified into two

a. Short-run Production Function as illustrated by the Law of Variable Proportions.
b. Long-run Production Function as explained by the Laws of Returns to Scale.

- **Law of Variable Proportions**

The law states that if all other factors are fixed and one input is varied in the short run, the total output will increase at an increasing rate at first instance, be constant at a point and then eventually decrease. Marginal product will become negative at last.

According to G.Stigler, *"As equal increment so one inputare added, the inputs of other productive services being held constant, beyond a certain point, the resulting increments of product will decrease, i.e., the marginal product will diminish".*

Assumptions

The Law of Variable Proportions is based on the following assumptions.

I. Only one factor is variable while others are held constant.

II. All units of the variable factor are homogeneous.

III. The product is measured in physical units.

IV. There is no change in the state of technology.

V. There is no change in the price of the product.

1. Total Product (TP):- It refers to the total amount of commodity produced by the combination of all inputs in a given period of time.

„Summation of marginal products,i.e.

TP= ∑MP

where, TP=Total Product, MP= Marginal Product

2. **Average Product (AP):-** It is the result of the total product divided by the total units of the input employed. In other words, it refers to the output per unit of the input.

Mathematically, ***AP=TP/N***

Where,

AP= Average Product TP= Total Product
N= Total units of inputs employed

3. **Marginal Product (MP):-** It is the addition or the increment made to the total product when one more unit of the variable input is employed. Inother words, it is the ratio of the change in the total product to the change in the units of the input. It is expressed as

MP=*∆*TP/*∆*N

where,

MP= Marginal Product

ΔTP = Change in total product ΔN= Change in units of input It is also expressed as

MP=TP(n)–TP(n-1)

Where,

MP= Marginal Product

TP(n)= Total product of employing nth unit of a factor

TP(n-1) = Total product of employing the previous unit of a factor, that is, (n- 1)th unit of a factor.

The Law of Variable Proportions is explained with the help of the following schedule and diagram:

Intable3.1, units of variable factor (labour) are employed along with other fixed factors of

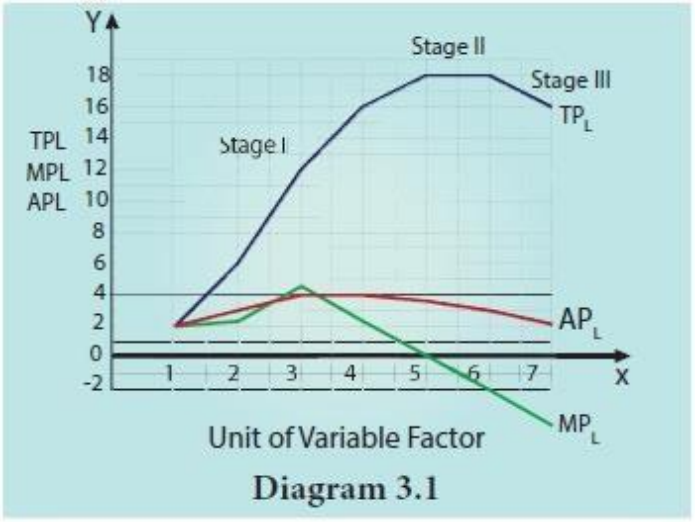


Diagram 3.1

production.

Table 3.1 Stages of Production

Units of variable factor (L)	Total Product (TP_L)	Marginal Product (MP_L)	Average Product (AP_L)	Stages
1	2	2	2	I
2	6	4	3	
3	12	6	4	
4	16	4	4	II
5	18	2	3.6	
6	18	0	3	III
7	16	-2	2.28	

The table illustrates that there are three stages of production. Though total product increases steadily at first instant, constant at the maximum point and then diminishes, it is always positive for ever. While total product increases, marginal product increases up to a point and then decreases. Total product increases up to the point where the marginal product is zero. When total product tends to diminish marginal product becomes negative.

Indiagram3.1, the number of workers is measured on X axis while TPL, APLand MP Larede note don Y axis. The diagram explains the three stages of production as given in the above table.

Stage I:- In the first stage MPL increases up to third labourer and it is higher than the average product, so that total product is increasing at an increasing rate. The tendency of total product to increase at an increasing rates tops at the point A and it begins to increase at a decreas in grate. This point is known as ***'Point of Inflexion'***.

Stage II:- In the second stage, MPL decreases up to sixth unit of labour where MPL curve intersects the X-axis. At fourth unit of labor $MP_L = AP_L$. After this, MP_L curve is lower than the AP_L. TP_L increases at a decreasing rate.

Stage III:- Third stage of production shows that the sixth unit of labour is marked by negative MPL, the AP_L continues to fall but remains positive. After the sixth unit, TP_L declines with the employment of more units of variable factor, labour.

- **RelationshipamongTotal,AverageandMarginalProducts**

Relationship among Total, Average and Marginal Products

Stages	Total Product	Marginal Product	Average Product
Stage I	Initially it increases at an increasing rate and then increases at a deceasing rate	At the beginning it increases, then reaches a maximum and starts to decrease	At the first instant it increases, then attains maximum
Stage II	It continues to increase at a diminishing rate and reaches maximum.	It continues to diminish and becomes equal to zero	It is equal to MP and then begins to diminish
Stage III	It diminishes	It becomes negative	It continues to diminish but always greater than zero (positive)

1.3 LAWSOFRETURNSTOSCALE

In the long- run, there is no fixed factor; all factors are variable. The laws of returns to scale explain the relationship between output and the scale of inputs in the long-run when all the inputs are increased in the same proportion.

- **Assumptions**

Laws of Returns to Scale are based on the following assumptions.

1. All the factors of production (such as land, labour and capital) are variable but organization is fixed.
2. There is no change in technology.
3. There is perfect competition in the market.
4. Outputs or returns are measured in physical quantities.

- **Three Phases of Returns toScale**

1. Increasing Returns to Scale:- In this case if all inputs are increased by one per cent, output increase by more than one per cent.

2. Constant Returns to Scale:- In this case if all inputs are increased by one per cen, output increases exactly by one per cent.

3. Diminishing Returns to Scale: Diminishing Returns to Scale:-In this case If all inputs are increased by one percent, output increases by less than one per cent.

- **Diagrammatic Illustration**

The three laws of returns to scale can be explained with the help of the diagram below.
In the diagram 3.2, the movement from point a to point b represents increasing returns to scale. Because, between these two points output has doubled, but output has tripled.

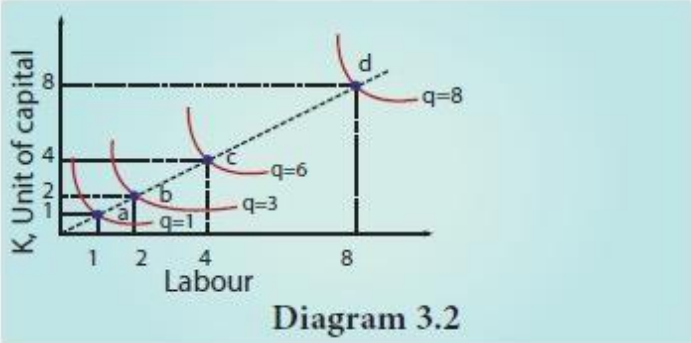


Diagram 3.2

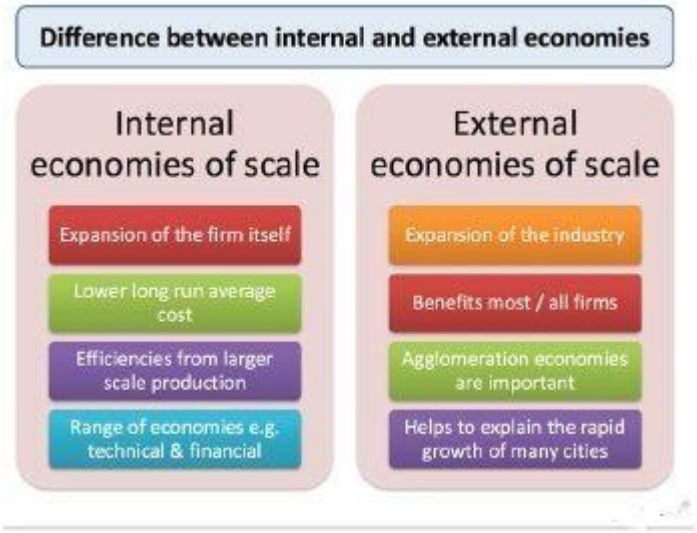
Stages	Input	Output	Returns to Scale
a to b	100% ↑	200% ↑	Increasing
b to c	100% ↑	100% ↑	Constant
c to d	100% ↑	33.33% ↑	Decreasing

The law of constant returns to scale is implied by the movement from the point ***b*** to point ***c***. Because, between these two points inputs have doubled and output also has doubled.

Decreasing returns to scale are denoted by the movement from the point **c** to point **d** since doubling the factors from 4units to 8units produce less than the increase in inputs, that is, by only 33.33%

1.4ECONOMIES OF SCALE

'Scale of Production' refers to the ratio of factors of production. This ratio can change because of availability of factors. The Scale of Production is an important fact or affecting the cost of production. Every producer wishes to reduce the costs of production. Hence he(he includes she as well) uses an advantage of economy of scale. This economy of scale is effected both by the internal and external factors of the firm. Accordingly, Economies are broadly divided into two types by Marshall.



1. Internal Economies and

2. External Economies

Economies of scale reduce the cost of production: and, diseconomies of scale increase the cost of production.

1. Internal Economies of Scale:- The term Internal Economies of Scale› refers to the advantages enjoyed by the production unit which causes a reduction in the cost of production of the commodity. For example, a firm enjoying the advantage of an application of most modern machinery, generation of internal capital, an improvement in managerial skill etc. is sure to reduce the cost of production. They are of various types:

I. ***Technical Economies*** **:** When the size of the firm is large, large amount of capital can be used. There is a possibility to introduce up- to-date technologies; this improves productivity of the firm. Here research and development strategies can be applied easily.

II. ***Financial Economies*****:** Big firms can float shares in the market for capital expansion, while small firms cannot easily float shares in the market.

III. ***Managerial Economies*****:** Large scale production facilitates specialisation and delegation.

IV. ***Labour Economies*:** Large scale production implies greater and minute division of labour. This leads to specialisation which enhances the quality. This increases the productivity of the firm.

V. ***Marketing Economies*:** In the context of large scale production, the producers can both buy raw-materials in bulk at cheaper cost and can take the products to distant markets. They enjoy a huge bargaining power.

VI. ***Economies of Survival*:** Product diversification is possible when there is large scale production. This reduces the risk in production. Even if the market for one product collapses, market for other commodities offsets it.

2. External Economies of Scale:- External Economies of Scale refer to changes in any factor outside the firm causing an improvement in the production process. This can take place in the case of industry also. These are the advantages enjoyed by all the firms in the industry due to the structural growth. Important external economies of scale are listed below.

1. *Increased transport facilities*
2. *Banking facilities*
3. *Development of townships*
4. *Development of information and communication*

1.5DISECONOMIES OF SCALE

The diseconomies of the scale are a disadvantage to a firm or an industry or an organisation. This necessarily increases the cost of production of a commodity or service. Further it delays the speed of the supply of the product to the market. These diseconomies are of two types:

a. *Internal Diseconomies of Scale: and*
b. *External Diseconomies of Scale*

1. Internal Diseconomies of Scale:- When the scale of production increases beyond optimum limit, its efficiency may come down.

2. External Diseconomies of Scale:- The term “External diseconomies of scale” refers to the threat or disturbance to a firm or an industry from factor lying outside it. For example a busstrike prevents the easy and correct entry of the workers in to a firm. Similarly the rent of a firm increases very much if new economic units are established in the locality.

1.6 ISO-QUANTS PRODUCTION FUNCTION

Production function may involve, at a time, the use of more than one variable input. This is presented with the help of iso-quant curves. The two words 'Iso' and'quant'arederivedfromtheGreeklanguage,meaning'equal'and'quantity' respectively. In our presentation only two factors, labour and capital are used.

In Economics, an iso-quant is a curve drawn by joining the combinations of changing the quantities of two or more inputs which give the same level of output. Isoquants are similar to indifference curves.

Table 3.2 Iso-quant

Combination	Units of Labour	Units of Capital	Output of Cloth (meters)
A	2	30	400
B	4	22	400
C	6	16	400
D	8	12	400
E	10	10	400

An iso- quant curve can be defined as the locus of points representing various combinations of two inputs capital and labour yielding the same output. The iso-quantisalsocalledasthe"*EqualProductCurve*"orthe"*ProductIndifference Curve*"

- **Definition ofI so-quant**

According to Ferguson, «*An iso-quant is a curve showing all possible combinations of inputs physically capable of producing a given level of output*"

Itisseenfromthetable3.2thatthefivecombinationsoflabour unitsandunits of capital yield the same level of output, i.e., 400 meters of cloth.

- **Iso-quants are based on the following assumptions.**

1. It is assumed that only two factors are used to produce acommodity.
2. Factors of production can bedividedintosmallparts.
3. Techniqueofproductionisconstant.
4. The substitution between the two factors is technically possible. That is, production function is of 'variable proportion' type rather than fixed proportion.
5. Under the given technique, factors of production can be used with maximum efficiency.

- **Iso-quant Schedule**

Let us suppose that there are two factors namely., labour and capital. An Iso- quant schedule shows the different combinations of these two inputs that yield the same level of output. It is given below.

- **Iso-quantCurve**

An equal product curve represents all those combinations of two inputswhichare capable of producing the same level of output. An iso-product curve can be drawn with the help of isoquant schedule.

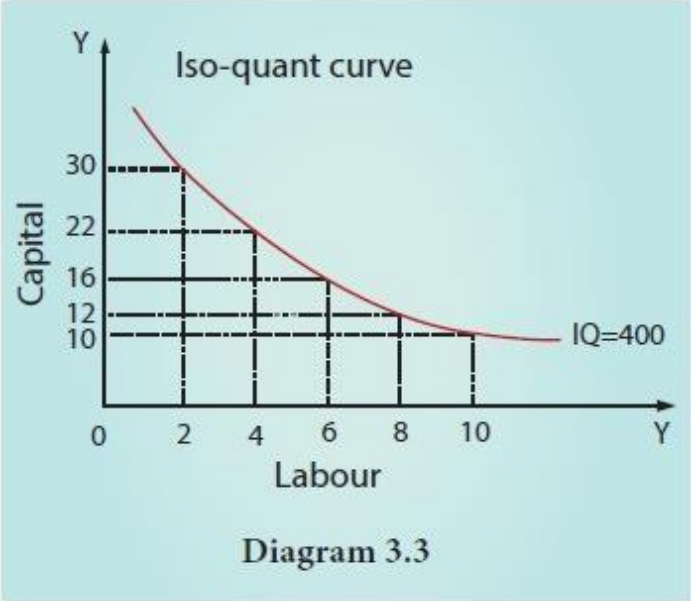


Diagram 3.3

Iso-quant Map

An iso-quant map has different iso-quant curves representing the different combinations of factors of production, yielding the different levels of output. In simpleterm, an iso-quant map is a family of iso-quants. In other words, if more than one iso-quant is drawn in a diagram, it is called iso-quant map.

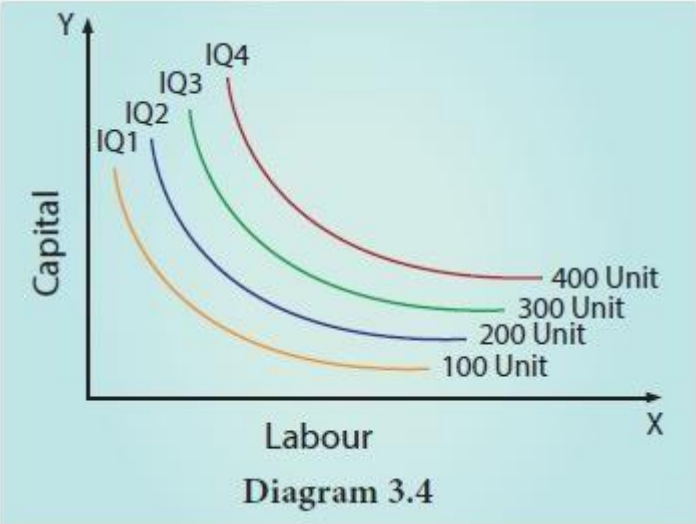


Diagram 3.4

- **Properties of Iso-quant**

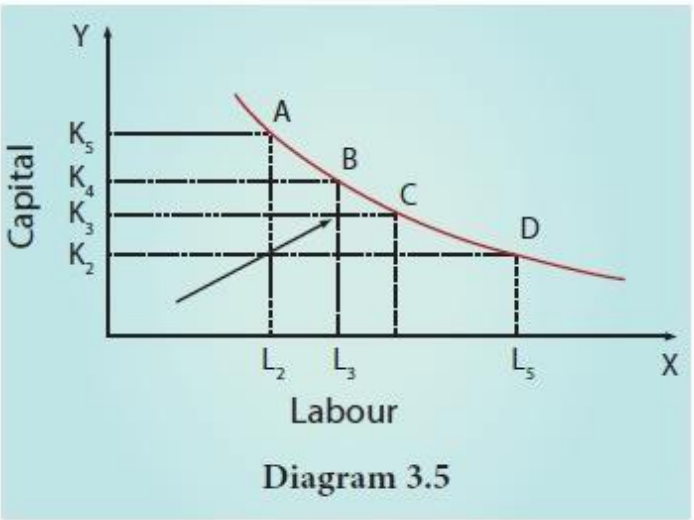


Diagram 3.5

***1. The iso-quant curve has negatives lope*.**

It slopes downwards from left to right indicating that the factors are substitutable.If more of one factoris used, less of the other factoris needed for producing the same level of output.

In the diagram combination Are fersto more of capital K5 and less of labour L2. As the producer moves to B, C, and D, more labour and less capital are used.

2. Convextothe origin.

This explains the concept of diminishing Marginal Rate of Technical Substitution ($MRTS_{LK}$). For example, the capital substituted by 1 unit of labour goes on decreasing when moved from top to bottom. If so, it is called diminishing MRTS. Constant MRTS (straight line) and increasing MRTS (concave) are also possible. It depends on the nature of iso-quant curve.

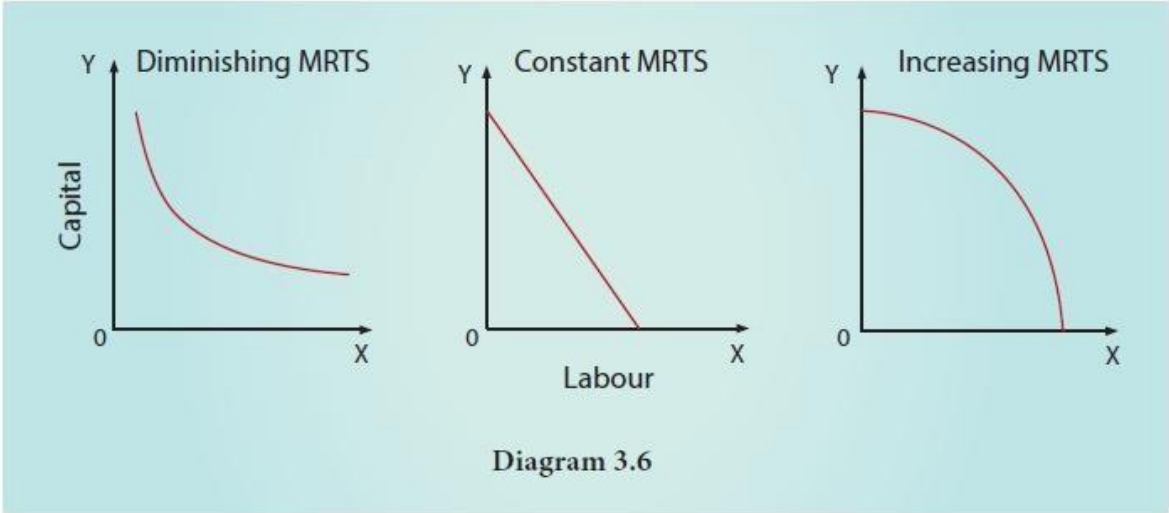


Diagram 3.6

This means that factors of production are substitutable to each other. The capital substituted per unit of labour goes on decreasing when the iso-quantis convex to the origin.

3. Non inter-section of Iso-quant curves.

Forinstance,pointAlieontheiso-quantsIQ1andIQ2. But the point C shows a higher output and the point B shows a lower level of output IQ1. If C=A, B=A, then C=B. But C>B which is illogical.

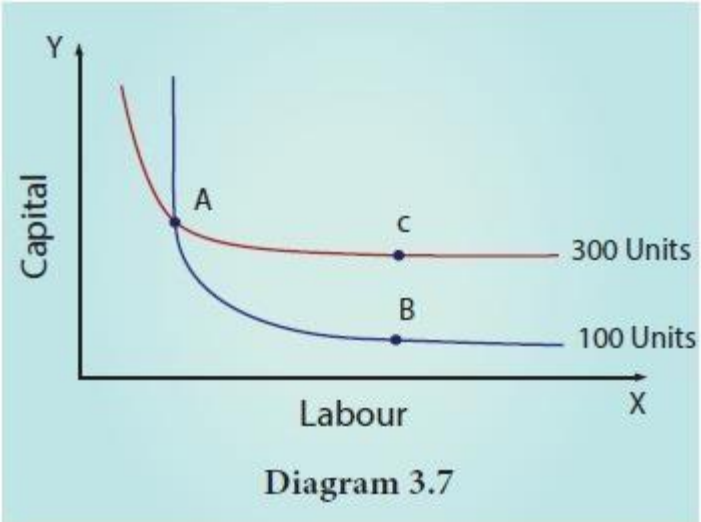


Diagram 3.7

4. An *upper iso-quant curve represents a higher level of output*.

Higher IQs show higher outputs and lower IQs show lower outputs, for upper iso-quant curve implies the use of more factors than the lower iso quant curve.

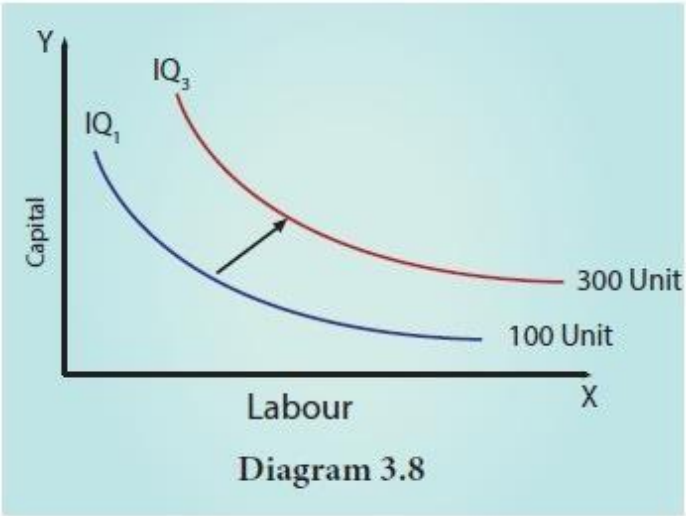


Diagram 3.8

Thearrowinthefigureshowsanincreaseintheoutputwitharightandupward shift of an iso-quant curve.

***5. Iso-quant curve does not touch either X axis orY axis*.**

Noiso-quant curve touches the X axis or axis because in IQ1,only capitalis used, and in IQ2 only labour is used.

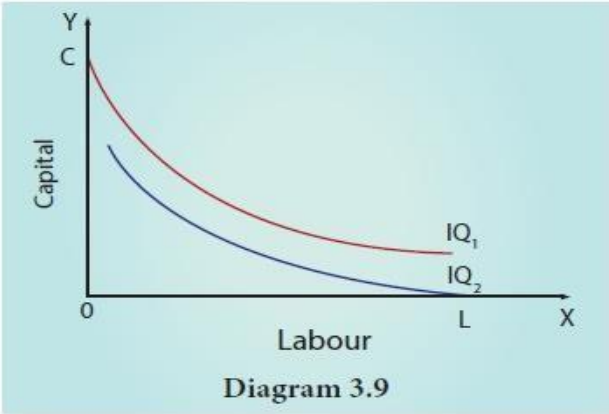


Diagram 3.9

- **TheIso-costLine**

The iso-cost line is an important component in analyzing producer'sbehaviour. The iso-costline illustrates all the possible combination softwofactors that can be used at given costs and for a given producer's budget. Simply stated, aniso- cost line represents different combinations of inputs which shows the same amount of cost. The iso- cost line gives information on factor prices and financial resources of the firm. It is otherwise called as "iso-price line" or "iso-income line" or "iso-expenditure line" or "total outlay curve".

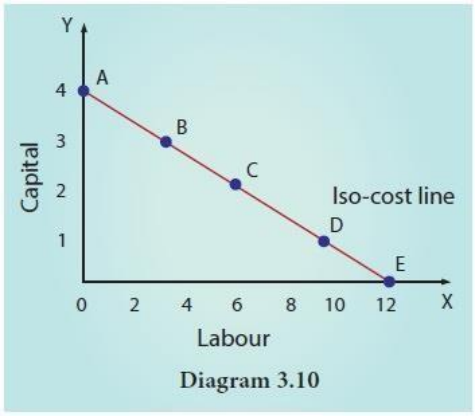


Diagram 3.10

Table 3.3 The Iso-cost

Combinations	Units of Capital Price = ₹30	Units of Labour Price = ₹10	Total Expenditure (in Rupees)
A	4	0	120
B	3	3	120
C	2	6	120
D	1	9	120
E	0	12	120

Suppose that a producer has a total budget ofRs.120 and for producing a certain level of output, he has to spend this amount on two factors Labour (L) and Capital (K). Prices of factors K isRs. 30 and L isRs.10. Iso Cost Curve can be drawn by using the following hypothetical table.

As shown in Table, there are five combinations of capital and labour such as combination A represents 4 units of capital and zero units of labour and this combination costsRs.120. Similarly other combinations (B,C,D and E) cost same amount of rupees (Rs.120).

Symbolically,

4K+0L=Rs..120

3K+3L=Rs..120

2K+6L=Rs..120

1K+9L=Rs..120,and

0K+12L=Rs..120.

Thus,all the combinations A,B,C,D and Ecostthesametotalexpenditure.

From the figure 3.10, it is shown that the costs to be incurred on capital andlabourarerepresentedbythetriangleOAE.ThelineAEiscalledasIso-costline.

- **PRODUCER'SEQUILIBRIUM**

Producer equilibrium implies the situation where producer maximizes his output. It is also known as *optimum combination of the actors of production.* In short, the producer manufactures a given amount of output with *'least cost combination of factors'*, with his given budget.

- **OptimumCombinationofFactorsimplieseither**

a. There is output maximization for given inputs or

b. There is cost minimization for the givenoutput.

- ***Conditions for Producer Equilibrium***

The two conditions that are to be fulfilled for the attainment of producer equilibrium are:

a. Theiso-costline must be tangenttoiso-quantcurve.

b. Atpointoftangency,the iso-quantcurve mustbe convex tothe origin or MRTSLkmust be declining.

Whentheoutlayandpricesoftwofactors,namely,labourandcapitalaregiven, producers attain equilibrium(or least cost combination offactors is attainedby the firm) where the iso-cost line is tangent to an iso-product curve. It is illustrated in the following Diagram 3.11.

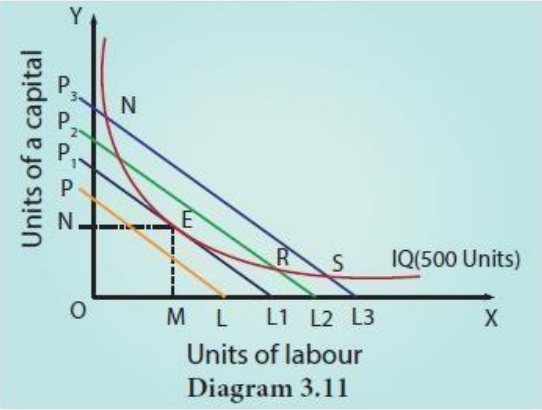


Diagram 3.11

Intheabovefigure,profitofthefirm(ortheproducer)ismaximisedatthepoint of equilibrium E.

At the point of equilibrium, the slope of theiso costlineisequal to the slopeof iso product curve (or the MRTS of labour for capital is equal to the price ratio of the two factors)

Hence, it can best atedas follows.

$$MRTS_{L,K} = \frac{P_L}{P_K} = 10/30 = 1/3 = 0.333$$

AtpointE,thefirmemploysOMunitsoflabourandONunitsofcapital.Inother words, it obtains least cost combination or optimum combination of the two factors to produce the level of output denoted by the iso-quant IQ.

The other points such asH,K,R and Slieon higher Is ocostlines indicating that a larger outlay is required, which exceeds the financial resources of the firm.

1.7 COBB-DOUGLASPRODUCTIONFUNCTION

Cobb -Douglas Production Function is a specific standard equation applied to describe how much output can be made with capital and labour inputs. It is used in empirical studies of manufacturing industries and in inter-industry comparisons. The relative shares of labour and capital in total output can also be determined .It is still used in the analysis of economies of modern, developed and stable nations in the world.

TheCobb-Douglas Production Function was developed by CharlesW.Cobband PaulH.Douglas, based on their empirical study of American manufacturing industry.It is a linear homogeneous production function which impliesthatthe factors of production can be substituted for one another up to a certain extent only.

TheCobb-Douglas production function can beexpress edasfollows.

$$Q=AL^{\alpha}K^{ß}$$

Where, Q = output; A = positive constant; K = capital; L = Labor α and β are positive fractions showing, the elasticity coefficients of outputs for the inputs labor and capital, respectively.

ß=(1-α)sinceα +ß=1.denotingconstantreturnstoscale. Factor intensity can be measured by the ratio ß / α.
Thesumofa +ßshowsthereturnstoscale.

i. (α+ß)=1,const an treturnstoscale.

ii. (α+ß)<1,dimini shingr eturnstoscale.

iii. (α+ß)>1,increasing return stoscale.

a. The production function explains that withtheproportion at eincrease in the factors, the output also increases in the same proportion.

b. Cobb-Douglas production function implies constant return sto scale.

c. Cobb-Douglas production functioncons idered onlytwofactorslike

d. Cobb-Douglas Production Function is a specific standard equation applied to describe how much outpu tcanbemadewithcapital andlabourinputs.It is used in empirical studies of manufacturing industries and in inter- industry comparisons. The relative shares of labour and capital in total outputcanalsobedetermined.Itisstillusedintheanalysisofeconomiesof modern, developed and stable nations in the world.

e. labourandcapital.Production takes place only when both factors are employed.

f. Labour contributes three-fourth of production and capital contributes one- fourth of production.

g. The elasticity of substitution between the factorsis equal toone.

Let's sum -up

Dear Learners , In this Module We learn about Introduction to Production function, Features of Production function, Law of Return to scale, Economics of Scale, Dis-Economics of Scale, Iso-quant Production function, Cobb-Douglas Production Function.

Self-Assessment questions

1. Which of the following is not considered production in economics?
   a. Tilling of soil farmers
   b. Singing a song before friends
   c. Construction of canal by laborers
   d. Painting a picture for sale
2. Which of the following is not a characteristics of labour?
   a. Its separable from labourer
   b. It is immobile & passive
   c. It is human efforts
   d. It is reward with wages.
3. When marginal product (MP.average product (AO both falls)
   a. AP lies below MP
   b. AP & MP interest
   c. MP lies below AP
   d. None of the above
4. Total product, Marginal product & average product for 1st unit of labour are
   a. Identical
   b. Different
   c. Unable to determined
   d. None of the bvoe

5. What is the marginal product of the 2nd Unit of labour?
   a. 95
   b. 195
   c. 295

d. 80

Module 1 completed

Module 2

THEORYOFCOST

2.1MeaningofTheoryofCost

The expenses incurred in the business activity of supplying goods and services to consumers are defined as cost. In economics, the value of the price of an object or condition is the cost of production which is determined by the total cost of resources employed for producing it. The composition of the cost is the factors of production that includes labour, land, capital and entrepreneur as well as taxation.

According to Campbell,'' Production costs are those which must be received by resource owners in order to assume that they will continue to supply them in a particular time of production.''

2.2Types of Cost

(1) ActualCost

Actual cost is defined as the cost or expenditure which a firm incurs for producing or acquiring a good or service. The actual costs or expenditures are recorded in the books of accounts of a business unit. Actual costs are also called as "Outlay Costs "or "Absolute Costs "or" Acquisition Costs ".**Examples:** Cost of raw materials, Wage Bill etc.

(2) OpportunityCost

Opportunity cost is concerned with the cost of forgone opportunities/alternatives. In other words, it is the return from the second best use of the firms resources which the firms forgoes in order to avail of the return from the best use of the resources. It can also be said as the comparison between the policy that was chosen and the policy that was rejected. The concept of opportunity cost of uses on the net revenue that could be generated in the next best use of a scare input. Opportunity cost is also called as "Alternative Cost". If a firm owns a land, there is no cost of using the land (ie., the rent)in the firms account. But the firm has an opportunity cost of using the land, which is equal to the rent for gone by not letting the land out on rent.

(3) Sunk Cost

Sunk costs are those do not alter by varying the nature or level of business activity.Sunk costs are generally not taken into consideration in decision – making as they do not vary with the changes in the future. Sunk costs are apart of the outlay/actual costs. Sunk costs are also called as "Non-Avoidable costs" or "Inescapable costs". **Examples:** All the past costs are

considered as sunk costs. The best example is a mortization of past expenses,like depreciation.

(4) IncrementalCost

Incremental costs are addition to costs resulting from a change in the nature of level of business activity .As the costs can be avoided by not bringing any variation in the activity in the activity, they are also called as "Avoidable Costs" or "Escapable Costs". More ever incremental costs resulting from a contemplated change is the Future, they are also called as "Differential Costs" **Example:** Change in distribution channels adding or deleting a product in the productline.

(5) ExplicitCost

Explicit costs are those expenses/expenditures that are actually paid by the firm.These costs are recorded in the books of accounts.Explicit costs are important for calculating the profit and loss accounts and guide in economic decision-making.Explicit costs are also called as "Paid out costs" **Example**: Interestpaymentonborrowedfunds,rentpayment,wages,utilityexpensesetc.

(6) Implicit Cost

Implicit costs are a part of opportunity cost. They are the theoretical costs ie., they are not recognised by the accounting system and are not recorded in the books of accounts but are very important in certain decisions.They are also called as the earnings of those employed resources which belong to the owner himself.Implicit costs are also called as "Imputed costs". **Examples:** Rent on idle land, depreciation on dully depreciated property still in use, interest on equity capital etc.

(7) Book Cost

Book costs are those business costs which don't involveany cash payments but a provision is made in the books of accounts in order to include them in the profit and loss account and take tax advantages , like provision for depreciation and for unpaid amount of the interest on the owners capital.

(8) Out Of Pocket Costs

Out of pocket costs are secosts are expenses which are current payment sto the outsiders of the firm.All the explicit costs fall into the category of out of pocket costs. **Examples:** Rent Paid, wages, salaries, interest etc

(9) AccountingCosts

Accounting costs are the actual or outlay costs that point out the amount of expenditure that has already been incurred on a particular process or on production as such accounting costs facilitate for managing the taxation need and profitability of the firm. **Examples:** All Sunk costs are accounting costs.

(10) EconomicCosts

Economic costs are related to future.They play a vital role in business decisions as the costs considered in decision- making are usually future costs.They have then ature similar to that of incremental,imputed explicit and opportunity costs.

(11) Direct Cost

Direct costs are those which have direct relationship with a unit of operation like manufacturing a product, organizing a process or an activity etc. In other words, direct costs are those which are directly and definitely identifiable. The nature of the direct costs are related with a particular product/process, they vary with variations in them. Therefore all direct costs are variable in nature. It is also called as "Traceable Costs" **Examples:**
In operating railway services, the costs of wagons, coaches and engines are direct costs.

(12) Indirect Costs

Indirect costs are those which cannot be easily and definitely identifiable in relation to a plant, a product, a process or a department.Like the direct costs indirect costs,do not vary ie.,they may or may not bevariablein nature.However, the nature of indirect costs depend upon the costing under consideration.Indirect costs are both the fixed and the variable type as they may or may not vary as a result of the proposed changes in the production process etc. Indirect costs a real so called as Non-traceable costs. **Example:** The cost of factory building, the track of a railway system etc., are fixed indirect costs and the costs of machinery, labour etc.

(13) Controllable Cost:

Cost which can control

Example: Usage of rawmaterial, Human Resources.

(14) Uncontrollable Cost: Cost which cannot be control **Example:** Obsolescence of machinery, repairs of the machinery.

(15) Original or Historical Cost:

Cost of equipment at the time of purchase.

(16) Replacement Cost:

The Cost incurred for replacing the new machinery in the place of old machinery in the firm.

(17) Abandonment Cost:

Cost incurred for disposal of asset or machinery is called abandonment Cost.

(18) Shutdown Cost:

Cost which would be in curred in the event of suspension of plant.

Example: Storage of plant or machinery,construction off buildings,training the employees.

(19) Urgent Cost:

Must be incurred so that the production goes on.

Example: Rawmaterial cost fuel, power and wages for the labour.

(20) Postponeable Cost:

Costwhosepostponementdoesnoteffectatleastforsometimeonthefirmand on production process and this coast can be paid after sometime.

Example: Transportation charges,rent,interest.

(21) Fixed Cost:

Cost which does not change when there is change in the production.It remains constant.

Example: Rent of the building,intereston capital,salaries,andwages.

(22) Variablecost:

Cost which changes in accordance with production change.

Example: Rawmaterial,power,fuel.

(23) Average Cost:

Costin curred for single unit of production in the total production.

(24) Marginal Cost:

Additional cost incurred by the firm by producing one more units extra.

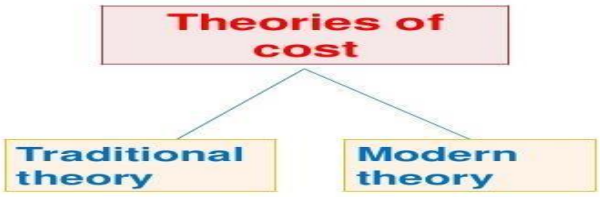
(25) Long run Cost:

Cost incurred for the expansion of plant, for increase in the production of goods.

(26) Short run Cost:

Cost incurred for the production of extra un its with the existing plant capacity without purchasing new machinery.

2.3Theories of Cost



A. Traditional Theory

Traditional theory distinguishes between the short run and the long run. The short run is the period during which some factors) is fixed; usually capital equipment and entrepreneurship are considered as fixed in the short run.

The longrun is the period over which all factors become variable.

2.3.1Short-Run Costs of theTraditionalTheory:

In the traditional theory of the firm total costs are split into two groups total fixed costs and total variable costs:

TC=TFC+ TVC

Thefixedcostsinclude:

(a) Salaries of administrative staff

(b) Depreciation (wear and tear) of machinery

(c) Expenses for building depreciation and repairs

(d) Expenses for land maintenance and depreciation (if any).

Another element that may be treated in the same way as fixed costs is the normal profit, which is a lump sum including a percentage return on fixed capital and allowance for risk.

The variable costs include:

(a) The raw materials

(b) The cost of direct labour

(c) The running expense so fixed capital, such as fuel, ordinary repairs and routine maintenance.

The total fixed cost is graphically denoted by a straight line parallel to the output axis (figure 4.1). The total variable cost in the traditional theory of the firm has broadly an inverse-S shape (figure 4.2) which reflects the law of variable proportions. According to this law, at the initial stages of production with a given plant, as more of the variable factors) is employed, its productivity increases and the average variable cost falls.

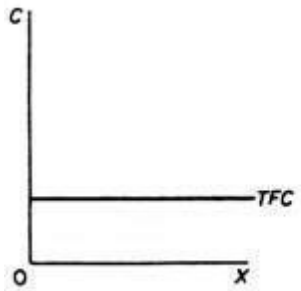


Figure 4.1

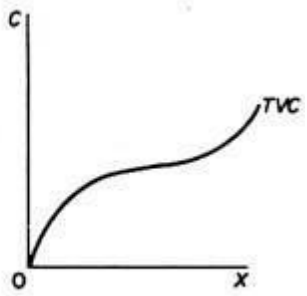


Figure 4.2

This continues until the optimal combination of the fixed and variable factors is reached. Beyond this point as increased quantities of the variable factors(s) are combined with the fixed factors) the productivity of the variable factors) declines (and the A VC rises). By adding the TFC and TVC we obtain the TC of the firm (figure4.3).From the total-cost curves we obtain average- cost curves.

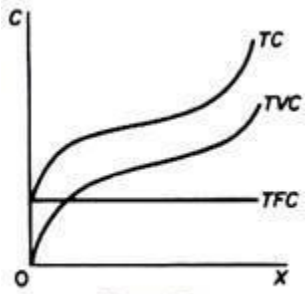


Figure 4.3

The average fixed cost is found by dividing TFC by the level of output:

AFC=TFC /X

Graphically the AFC is a rectangular hyperbola, showing at all its points the same magnitude, that is, the level of TFC (figure 4.4).

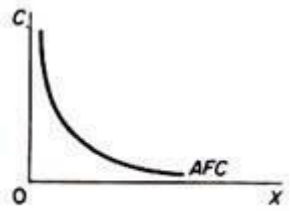


Figure 4.4

The average variable cost is similarly obtained by dividing the TVC with the corresponding level of output:

AVC=TVC/X

Graphically the A VC at each level of output is derived from the slope of a line drawn from the origin to the point on the TVC curve corresponding to the particular level of output. For example, in figure 4.5 the AVC at X1 is the slope of the ray 0a, the A VC at X2 is the slope of the ray Ob, and so on. It is clear from figure 4.5 that the slope of a ray through the origin declines continuously until the ray becomes tangent to the TVC curve at c. To the right of this point the slope of rays through the origin starts increasing. Thus the SA VC curve falls initially as the productivity of the variable factors) increases, reaches a minimum when the plant is operated optimally (with the optimal combination of fixed and variable factors), and rises beyond that point (figure 4.6).

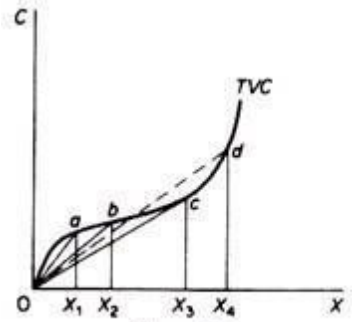


Figure 4.5

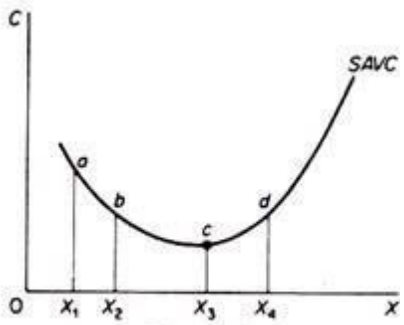


Figure 4.6

The ATC is obtained by dividing the TC by the corresponding level of output:

ATC=TC/X=TFC+TVC/ X=AFC+AVC

Graphically the ATC curve is derived in the same way as the SAVC. The ATC at any level of output is the slope of the straight line from the origin to the point on the TC curve corresponding to that particular level of output (figure 4.7). The shape of the A TC is similar to that of the AVC (both being U-shaped). Initially the ATC declines, it reaches a minimum at the level of optimal operation of the plant (X_M) and subsequently rises again (figure 4.8).

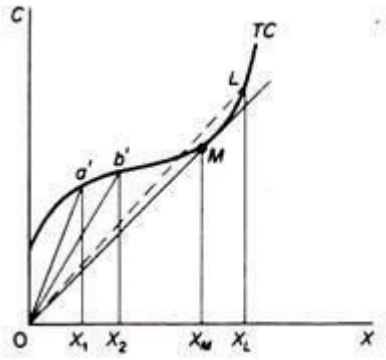


Figure 4.7

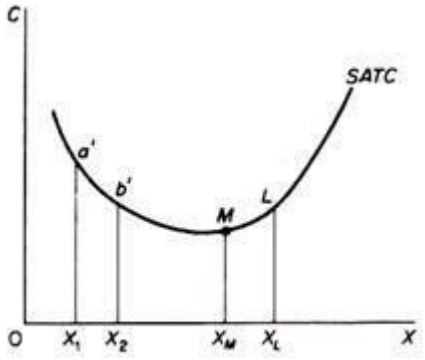


Figure 4.8

The U shape of both the AVC and the ATC reflects the law of variable proportions or law of eventually decreasing returns to the variable factor(s) of production. The marginal cost is defined as the change in TC which results from a unit change in output. Mathematically the marginal cost is the first derivative of the TC function. Denoting total cost by C and output by X we have

$MC=\partial C/\partial X$

Graphically the MC is the slope of the TC curve (which of course is the same at any point as the slope of the TVC). The slope of a curve at any one of its points is the slope of the tangent at that point. With an inverse-S shape of the TC(and TVC) the MC curve will be U-shaped. In figure 4.9 we observe that the slope of the tangent to the total-cost curve declines gradually, until it becomes parallel to the X-axis (with its slope being equal to zero at this point), and then starts rising. Accordingly we picture the MC curve in figure 4.10 as U-shaped.

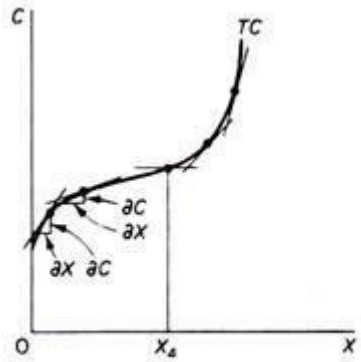


Figure 4.9

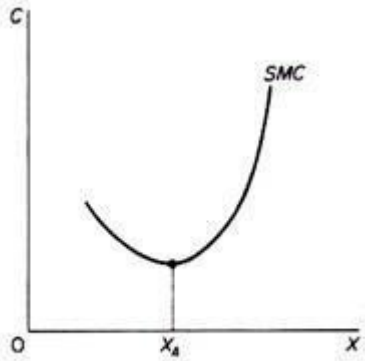


Figure 4.10

In summary: the traditional theory of costs postulates that in the short run the cost curves (AVC, ATC and MC) is U-shaped, reflecting the law of variable proportions. In

the short run with a fixed plant there is a phase of increasing productivity (falling unit costs) and a phase of decreasing productivity (increasing unit costs) of the variable factor(s).

Between these two phases of plant operation there is a single point at which unit costs are at a minimum. When this point on the SATC is reached the plant is utilized optimally, that is, with the optimal combination (proportions) of fixed and variable factors.

- **The relationship between ATC and AVC:**

The AVC is a part of the ATC, given ATC= AFC+ AVC. Both AVC and ATC are U-shaped, reflecting the law of variable proportions. However, the minimum point of the ATC occurs to the right of the minimum point of the AVC (figure 4.11). This is due to the fact that ATC includes AFC, and the latter falls continuously with increases in output.

After the AVC has reached its lowest point and starts rising, its rise is over a certain range offset by the fall in the AFC, so that the ATC continues to fall(over that range) despite the increase in AVC. However, the rise in AVC eventually becomes greater than the fall in the AFC so that the A TC starts increasing. The A VC approaches the A TC asymptotically as X increases.

In figure 4.11 the minimum AVC is reached at X_1 while the ATC is at its minimum at X_2. Between $X_1$and $X_2$the fall in AFC more than offsets the rise in AVC so that the ATC continues to fall. Beyond X_2 the increase in AVC is not offset by the fall in AFC, so that ATC rises. AVC so that the ATC continues to fall. Beyond X2 the increase in AVC is not offset by the fall in AFC, so that ATC rises.

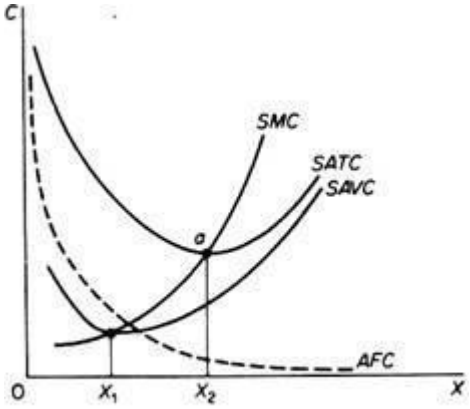


Figure 4.11

- **The relationship between MC and ATC:**

The MC cuts the ATC and the AVC at their lowest points. We will establish this relation only for the ATC and MC, but the relation between MC and AVC can be established on the same lines of reasoning.

We said that the MC is the change in the TC for producing an extra unit of output.

Assume that west art froma level of n unit so f output. If we increase the output by one unit the MC is the change in total cost resulting from the production of the $(n + l)^{th}$ unit.

The AC at each level of output is found by dividing TC by X. Thus the AC at the level of X_n is

$$AC_n = \frac{TC_n}{X_n}$$

and the AC at the level X_{n+1} is

$$AC_{n+1} = \frac{TC_{n+1}}{X_{n+1}}$$

Clearly

$$TC_{n+1} = TC_n + MC$$

Thus:

(a) If the MC of the$(n+1)^{th}$ unit is less than AC_n(the AC of the previous n units) the AC_{n+1}will be smaller than the AC_n.

(b) If the MC of the $(n + 1)^{th}$ unit is higher than AC_n (the AC of the previous n units) the AC_{n+1}will be higher than the AC_n.

So long as the MC lies below the AC curve, it pulls the latter downwards; when the MC rises above the AC, it pulls the latter upwards. In figure 4.11 to the left of a the MC lies below the AC curve, and hence the latter falls downwards. To the right of a the MC curve lie above the AC curve, so that AC rises. It follows that at point a, where the intersection of the MC and AC occurs, the AC has reached its minimum level.

2.3.2Long-RunCostsoftheTraditionalTheory:The‘Envelope’Curve:

In the long run all factors are assumed to become variable. We said that the long-run cost curve is a planning curve, in the sense that it is a guide to the entrepreneur in his decision to plan the future expansion of his output. The long-run average-cost curve is derived from short-run cost curves. Each point on the LAC corresponds to a point on a short-run cost curve, which is tangent to the LAC at that point. Let us examine in detail how the LAC is derived from the SRC curves.

Assume, as a first approximation, that the available technology to the firm at a particular point of time includes three methods of production, each with a different plant size: a small plant, medium plant and large plant. The small plant operate swith costs denoted by the curve SAC_1,the medium-size plant operates with the costs on SAC_2 and the large-size plant gives rise to the costs show non SAC_3 (figure4.12).If the firm plans to produce output X_3 it will choose the small plant. If it plans to produce X_2 it will choose the medium plant. If it wishes to produce X_1it will choose the large- size plant.

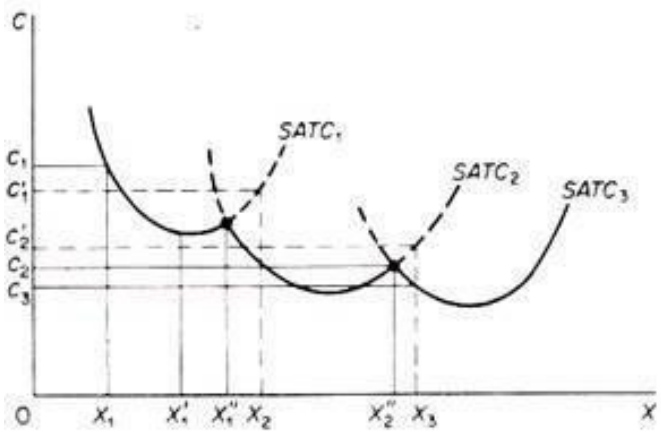


Figure 4.12

If the firm starts with the small plant and its demand gradually increases ,it will produce at lower costs (upto level X'1). Beyond that point costs start increasing. If its demand reaches the level X"1 the firm can either continue to produce with the small plant or it can install the medium-size plant. The decision at this point depends not on costs but on the firm's expectations about its future demand. If the firm expects that the demand will expand further than X"1 it will install the medium plant, because with this plant outputs larger than X'1 are produced with a lower cost.

Similar consideration should for the decision of the firm when it reaches the level X"2. If it expects its demand to stay constant at this level, the firm will not install the large plant, given that it involves a larger investment which is profitable only if demand expands beyond X"2. For example, the level of output X3 is produce data cost c3 with the large plant, while it costs c'2 if produced with the medium-size plant (c'2> c3).

Now if were lax the assumption of the existence of only three plants and assume that the available technology includes many plant sizes, each suitable for a certain level of output, the points of intersection of consecutive plants (which are the crucial points for the decision of whether to switch to a larger plant) are more numerous. In the limit, if we assume that there is a very large number (infinite number) of plants, we obtain a continuous curve, which is the planning LAC curve of the firm.

Each point of this curve shows the minimum (optimal) cost for producing the corresponding level of output. The LAC curve is the locus of points de noting the Least cost of producing the corresponding output. It is a planning curve because on the basis of this curve the firm decides what plant to set up in order to produce optimally (at minimum cost) the expected level of output.

The firm chooses the short-run plant which allow sit to produce the anticipated (in the long run) output at the least possible cost. In the traditional theory of the firm the LAC curve is U-shaped and it is often called the 'envelope curve' because it 'envelopes' the SRC curves (figure 4.13).

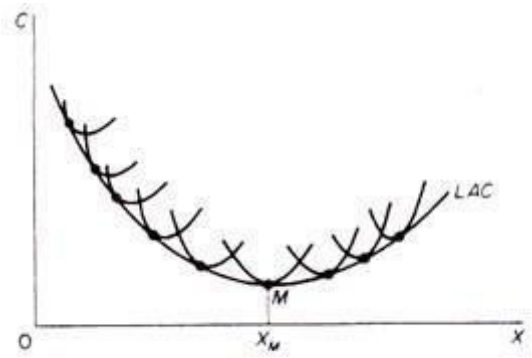


Figure 4.13

Let us examine the U shape of the LAC. This shape reflects the laws of returns to scale. According to these laws the unit costs of production decrease as plant size increases, due to the economies of scale which the larger plant sizes make possible. The traditional theory of the firm assumes that economies of scale exist only up to a certain size of plant, which is known as the optimum plant size, because with this plant size all possible economies of scale are fully exploited.

If the plant increases further than this optimum size the reared is economies of scale, arising from managerial inefficiencies. It is argued that management becomes highly complex, managers are overworked and the decision-making process becomes less efficient. The turning-up of the LAC curve is due to managerial diseconomies of scale, since the technical diseconomies can be avoided by duplicating the optimum technical plant size.

A serious implicit assumption of the traditional U-shaped cost curves is that each plant size is designed to produce optimally a single level of output (e.g. 1000 units of X). Any departure from that X, no matter how small (e.g. an increase by 1 unit of X) leads to increased costs. The plant is completely in flexible. There is no reserve capacity,not even to meet seasonal variations in demand.

As a consequence of this assumption the LAC curve ‘ envelopes’ the SRAC. Each point of the LAC is appoint of tangency with the corresponding SRAC curve.The point of tangency occurs to the falling part of the SRAC curves for points lying to the left of the minimum point of the LAC since the slope of the LAC is negative upto M (figure4.13) the slope of the SRMC curves must also be negative, since at the point of their tangency the two curves have the same slope.

The point of tangency for outputs larger than XM occurs to the rising part of the SRAC curves since the LAC rises, the SAC must ri seat the point of the irtangency with the LAC. Only at the minimum point M of the LAC is the corresponding SAC also at a minimum. Thus at the falling part of the LAC the plants are not worked to full capacity; to the rising part of the LAC the plants are overworked; only at the minimum point M is the (short-run) plant optimally employed.

We stress once more the optimality implied by the LAC planning curve each point represents the least unit-cost for producing the corresponding level of output. Any point above the LAC is inefficient in that it shows a higher cost for producing the

corresponding level of output. Any point below the LAC is economically desirable because it implies a lower unit-cost, but it is not attainable in the current state of technology and with the prevailing market prices of factors of production. (Recall that each cost curve is drawn under a ceterispari bus clause, which implies given state of technology and given factor prices.)

The long-run marginal cost is derived from the SRMC curves, but does not 'envelope' them. The LRMC is formed from points of intersection of the SRMC curves with vertical lines (to the X-axis) drawn from the points of tangency of the corresponding SAC curves and the LRA cost curve (figure 4.14). The LMC must be equal to the SMC for the output at which the corresponding SAC is tangent to the LAC. For levels of X to the left of tangency a the SAC > LAC.

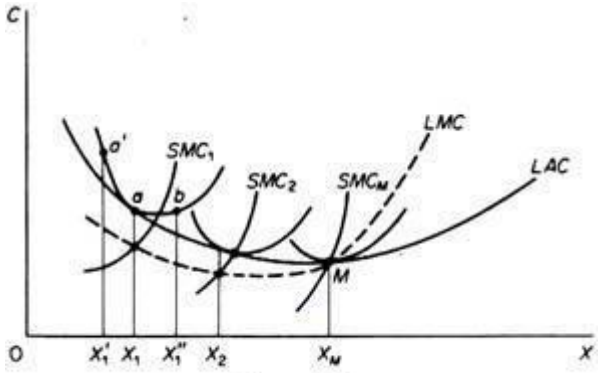


Figure 4.14

At the point of tangency SAC = LAC. As we move from point a' to a, we actually move from a position of inequality of SRAC and LRAC to a position of equality. Hence the change in total cost (i.e. the MC) must be smaller for the short-run curve than for the long-run curve. Thus LMC > SMC to the left of a. For an increase in output beyond X,(e.g. X'1) the SAC>LAC. That is, we move from the position a of equality of the two costs to the position b where SAC is greater than LAC. Hence the addition to total cost (= MC) must be larger for the short- run curve than for the long-run curve. Thus LMC < SMC to the right of a.

Since to the left of a,LMC>SMC, and to the right of a,LMC<SMC,it follows that ata,LMC–SMC.If we draw a vertical line from a to the X-axis the point at which it intersects the SMC (point A for SAC1) is a point of the LMC.

If we repeat this procedure for all points of tangency of SRAC and LAC curves to the left of the minimum point of the LAC, we obtain points of the section of the LMC which lies below the LAC .At the minimum point M the LMC intersects the LAC.To the right of M the LMC lies above the LAC curve.At point M we have

SACM=SMCM=LAC=LMC

There are various mathematical forms which give rise to U-shaped unit cost curves. The simplest total cost function which would incorporate the law of variable proportions is the cubic polynomial

$$C = \underbrace{b_0}_{TFC} + \underbrace{b_1X - b_2X^2 + b_3X^3}_{TVC}$$

$$TC = TFC + TVC$$

The AVC is

$$AVC = \frac{TVC}{X} = b_1 - b_2X + b_3X^2$$

The MC is

$$MC = \frac{\partial C}{\partial X} = b_1 - 2b_2X + 3b_3X^2$$

The ATC is

$$\frac{C}{X} = \frac{b_0}{X} + b_1 - b_2X + b_3X^2$$

The TC curve is roughly S-shaped, while the ATC, the AVC and the MC area llU-shaped; the MC curve intersects the other two curves at their minimum points (figure 4.11).

Let's sum -up

Dear Learners , In this Module We learn about Meaning of Cost, Types of Cost, Theories of cost, Short run cost curves, Long run cost curves.

Self-Assessment questions

1. What is the primary basis of the concept?
   a. Financial audit
   b. Tax companies
   c. Cost estimation
   d. Analysis of profit
2. What kind of the firm is costing of the most?
   a. Bricklaying companies
   b. Oil refining companies
   c. Hospitals
   d. Transports firms.
3. How many

ways is cost classification possible.

a. There are many ways to use it.
b. Two ways
c. Three ways
d. Four ways

4. What cost will be payable even if the company is closed?

a. Cost of shut down
b. Cost of the historical record
c. Cost of sunk
d. Imputed cost.

5. How do you define direct costs, also referred to as?

a. Chargeable expenses
b. Other expenses
c. Overhead expenses
d. Major expenses

Module 2 completed

Module 3

MARKET STRUCTURE

3.1Meaning of Market Structure

The **Market Structure** refers to the characteristics of the market either organizational or competitive, that describes the nature of competition and the pricing policy followed in the market.

Thus, the market structure can be defined as, the number of firms producing the identical goods and services in the market and whose structure is determined on the basis of the competition prevailing in that market.

The term " market" refers to a place where sellers and buyers meet and facilitate the selling and buying of goods and services. But in economics, it is much wider than just a place, It is a gamu to fall the buyer sand sellers, who are spread out to perform the marketing activities.

3.2TYPESOFMARKETSTRUCTURE

1. Perfect Competition Market Structure
2. Monopolistic competition Market Structure
3. Oligopoly Market Structure
4. Monopoly Market Structure

➢ **DETERMINANTS OF THE MARKET STRUCTURE ARE:**

1. The number of sellers operating in the market.
2. The number of buyers in the market.
3. The nature of goods and services offered by the firms.
4. The concentration ratio of the company, which shows the largest market shares held by the companies.
5. The entry and exit barriers in a particular market.
6. The economics of scale , i.e. how cost efficient a firm is in producing the goods and services at a low cost. Also the sunk cost, the cost that has already been spent on the business operations.
7. The degree of vertical integration, i.e. the combining of different stages of production and distribution, managed by a single firm.
8. The level of product and service differentiation, i.e. how the company's offerings differ from the other company's offerings.
9. The customer turn over, i.e. the number of customers willing to change their choice with respect to the goods and services at the time of adverse market conditions.

Thus, the structure of the market affects how firm price and supply their goods and services, how they handle the exit and entry barriers, and how efficiently a firm carry out its business operations.

3.2.1Perfect Competition

✓ **Meaning of Perfect Competition:**

The **Perfect Competition** is a market structure where a large number of buyers and sellers are present, and all are engaged in the buying and selling of the homogeneous products at a single price prevailing in the market.

In other words, perfect competition also referred to as a pure competition, exists when there is no direct competition between the rivals and all sell identically the same products at a single price.

- **Features of Perfect Competition**

1. **Large number of buyers and sellers:**

   In perfect competition, the buyers and sellers are large enough, that no individual can influence the price and the output of the industry. An individual customer cannot influence the price of the product, as he is too small in relation to the whole market. Similarly, a single seller cannot influence the levels of output, who is too small in relation to the gamut of sellers operating in the market.

2. **Homogeneous Product:**

   Each competing firm offers the homogeneous product, such that no individual has a preference for a particular seller over the others. Salt, wheat, coal, etc. are some of the homogeneous products for which customers are indifferent and buy these from the one who charges a less price. Thus, an increase in the price would let the customer go to some other supplier.

3. **Free Entry and Exit:**

   Under the perfect competition, the firms are free to enter or exit the industry. This implies, If a firm suffers from a huge loss due to the intense competition in the industry, then it is free to leave that industry and begin its business operations in any of the industry, it wants. Thus, there is no restriction on the mobility of sellers.

4. **Perfect knowledge of prices and technology**:

   This implies, that both the buyers and sellers have complete knowledge of the market conditions such as the prices of products and the latest technology being used to produce it. Hence, they can buy or sell the products anywhere and anytime they want.

5. No transportation cost:

There is an absence of transportation cost, i.e. incurred in carrying the goods from one market to another. This is an essential condition of the perfect competition since the homogeneous product should have the same price acrossthemarketandifthetransportationcostisaddedtoit,thentheprices may differ.

6. Absence of Government and Artificial Restrictions:

Under the perfect competition, both the buyers and sellers are free to buy and sell the goods and services. This means any customer can buy from any seller, and any seller can sell to any buyer. Thus, no restriction is imposed on either party. Also, the prices are liable to change freely as per the demand-supply conditions. In such a situation, no big producer and the government can intervene and control the demand, supply or price of the goods and services.

Thus, under the perfect competition, a seller is the price taker and cannot influence the market price.

✓ **Assumptions:**

The model of perfect competition is based on the following assumptions.

1. Large numbers of sellers and buyers:

The industry or market includes a large number of firms (and buyers), so that each individual firm, however large, supplies only a small part of the total quantity offered in the market. The buyers are also numerous so that no monopolistic power can affect the working of the market. Under these conditions each firm alone cannot affect the price in the market by changing its output.

2. Product homogeneity:

The industry is defined as a group of firms producing a homogeneous product. The technical characteristics of the product as well as the services associated with its sale and delivery are identical. There is no way in which a buyer could differentiate among the products of different firms. If the product were differentiated the firm would have some discretion in setting its price. This is ruled out ex hypothesis in perfect competition.

The assumptions of large numbers of sellers and of product homogeneity imply that the individual firm in pure competition is a price-taker: its demand curve is infinitely elastic, indicating that the firm can sell any amount of output at the prevailing market price (figure 5.1). The demand curve of the individual firm is also its average revenue and its marginal revenue curve (see page 156).

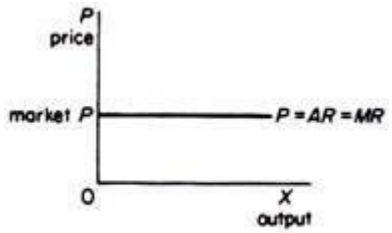


Figure 5.1

3. Free entry and exit offirms:

There is no barrier to entry or exit from the industry. Entry or exit may take time, but firms have freedom of movement in and out of the industry. This assumption is supplementary to the assumption of large numbers. If barriers exist the number of firms in the industry may be reduced so that each one of them may acquire power to affect the price in the market.

4. Profit maximization:

The goal of all firms is profit maximization. No other goals are pursued.

5. No government regulation:

There is no government intervention in the market (tariffs, subsidies, rationing of production or demand and so on are ruled out). The above assumptions are sufficient for the firm to be a price-taker and have an infinitely elastic demand curve. The market structure in which the above assumptions are fulfilled is called pure competition. It is different from perfect competition, which requires the fulfillment of the following additional assumptions.

6. Perfect mobility of factors of production:

The factors of production are free to move from one firm to another throughout the economy. It is also assumed that workers can move between different jobs, which implies that skills can be learned easily. Finally, raw materials and other factors are not monopolized and labour is not unionized. In short, there is perfect competition in the markets of factors of production.

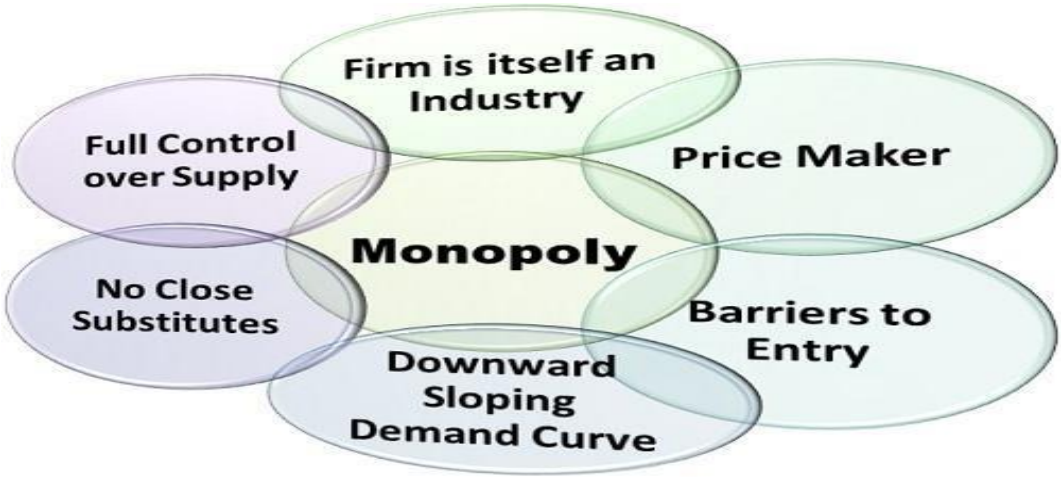
7. Perfect knowledge:

It is assumed that all sellers and buyers have complete knowledge of the conditions of the market. This knowledge refers not only to the prevailing conditions in the current period but in all future periods as well. Information is free and costless. Under these conditions uncertainty about future developments in the market is ruled out. Under the above assumptions we will examine the equilibrium of the firm and the industry in the short run and in the long run.

3.2.2 Monopoly Market

Definition: The **Monopoly** is a market structure characterized by a single seller, selling the unique product with the restriction for a new firm to enter the market. Simply, monopoly is a form of market where there is a single seller selling a particular commodity for which there are no close substitutes.

✓ **Features of Monopoly Market**



1. Under monopoly, the firm has full control over the supply of a product.The elasticity of demand is zero for the products.
2. There is a single seller or a producer of a particular product, and there is no difference between the firm and the industry. The firm is itself an industry.
3. The firms can influence the price of a product and hence, these are price makers, not the price takers.
4. There are barriers for the new entrants.
5. The demand curve under monopoly market is downward sloping, which means the firm can earn more profits only by increasing the sales which are possible by decreasing the price of a product. There are no close substitutes for a monopolist's product.

   Under a monopoly market, new firms cannot enter the market freely due to any of the reasons such as Government license and regulations,hugecapital requirement, complex technology and economies of scale. These economic barriers restrict the entry of new firms.

✓ **Advantages of monopoly**

1. Monopoly avoids duplication and hence avoids wastage of resources. (We have to understand that duplicate and fake products are a real problem in many countries).
2. A monopoly enjoys economies of scale as it is the only supplier of product or service in the market. The benefits can be passed on to the consumers.
3. Due to the fact that monopolies make lots of profits, it can be used for research and development and to maintain their status as a monopoly.
4. Monopolies may use price discrimination which benefits the economically weaker sections of the society.
5. Monopoliescanaffordtoinvestinlatesttechnologyandmachineryinorder to be efficient and to avoid competition.
6. Source of revenue forth e-government- the government gets revenue in form of taxation from monopoly firms.

✓ **Disadvantages of monopoly**

1. Poor level of service.
2. No consumer sovereignty. A monopoly market is best known for consumer exploitation. There are indeed no competing products and as a result the consumer gets a raw deal in terms of quantity, quality and pricing.
3. Consumers may be charged high prices for low quality of goods and services.
4. Lack of competition may lead to low quality and outdated goods and services.

3.2.3 Monopolistic Competition

Definition: Under, the **Monopolistic Competition**, there are a large number of firms that produce differentiated products which are close substitutes for each other. In other words, large sellers selling the products that are similar, but not identical and compete with each other on other factors besides price.

✓ **Features of Monopolistic Competition**

1. **Product Differentiation:** This is one of the major features of the firms operating under the monopolistic competition, that produces the product which is not identical but is slightly different from each other. The products being slightly different from each other remain close substitutes of each other and hence cannot be priced very differently from each other.
2. **Large number of firms:** A large number of firms operate under the monopolistic competition,and there is a stiff competition between the existing firms. Unlike the perfect competition, the firms produce the differentiated products which are substitutes for each other, thus make the competition among the firms a real and a tough one.
3. **Free Entry and Exit:** With an intense competition among the firms, the entity incurring the loss can move out of the industry at any time it wants. Similarly, the new firms can enter into the industry freely, provided it comes up with the unique feature and different variety of products to outstand in the market and meet with the competition already existing in the industry.

4. **Some control over price:** Since, the products are close substitutes for each other, if a firm lowers the price of its product, then the customers of other products will switch over to it. Conversely, with the increase in the price of the product, it will lose its customers to others. Thus, under the monopolistic competition, an individual firm is not a price taker but has some influence over the price of its product.
5. **Heavy expenditure on Advertisement and other Selling Costs:** Under the monopolistic competition, the firms incur a huge cost on advertisements and other selling costs to promote the sale of their products. Since the products are different and are close substitutes for each other; the firms need to undertake the promotional activities to capture a larger market share.
6. **Product Variation:** Under the monopolistic competition, there is a variation in the products offered by several firms. To meet the needs of the customers, each firm tries to adjust its product accordingly. The changes could be in the form of new design, better quality, new packages or container, better materials, etc. Thus, the amount of product a firm is selling in the market depends on the uniqueness of its product and the extent to which it differs from the other products.

The monopolistic competition is also called as **imperfect Competition** because this market structure lies between the pure monopoly and the pure competition.

✓ **Examples of monopolistic competition**

- Restaurants – restaurants compete on quality of food as much as price. Product differentiation is a key element of the business. There are relatively low barriers to entry in setting up a new restaurant.
- Hair dressers. A service which will give firms are putation for the quality of their hair-cutting.
- Clothing. Designer label clothe sareab out the brand and product differentiation
- TV programmers – globalization has increased the diversity of tv programmes from networks around the world. Consumers can choose between domestic channels but also imports from other countries and new services, such as Netflix.

✓ **Limitations of the model of monopolistic competition**

- Some firms will be better at brand differentiation and therefore, in the real world, they will be able to make supernormal profit.
- New firms will not be seen as a close substitute.
- There is considerable overlap with oligopoly – except the model of monopolistic competition assumes no barriers to entry. In there a world, there are likely to be at least some barriers to entry
- If a firm has strong brand loyalty and product differentiation – this itself becomes a barrier to entry. A new firm can't easily capture the brand loyalty.
- Many industries, we may describe as monopolistically competitive are very profitable, so the assumption of normal profits is too simplistic.

✓ **Merits of Monopolistic Competition:**

1. An important merit of monopolistic competitions that it is much closer to reality than several other models of market structure. Firstly, it incorporates thefactsofproductdifferentiationandsellingcosts.Secondly,itcanbeeasily used for the analysis of duopoly and oligopoly.

2. Under monopolistic competition it is possible to see that even when each individual firm produces under condition so f increasing returns, not only the firm under consideration but also the entire group of firms can be in equilibrium.

3. Moreover, monopolistic competition is able to show that even when each individual firm is producing under increasing returns, it still earns only normal profit in the long run.

4. The theory of monopolistic competition helps us in bringing in the concept of market share of an individual firm. This opens up the possibility of considering those situations in which a firm may be pursuing a goal other than profit maximization.

5. In monopolistic competition we are able to consider the interaction between several interdependent variables on the basis of which a firm takes its decisions.

✓ **Demerits of Monopolistic Competition:**

1. The biggest conceptual difficulty with monopolistic competition is the concept of age group offirms. There is no standard theoretical foundation for deciding the boundaries of a group.

2. Related with the concept of a group offirms, we face thedifficultyof
Defining the meaning of a‘ close substitute’. We are not told at what values of cross elasticity, two products become close substitutes of each other.

3. The theory of monopolistic competition fails to take into account the fact that the demand by final consumers is largely influenced by the retail dealers because the consumers themselves are not fully aware of the technical qualities of the product.

4. Similarly, the theory fails to fully account for the determination of equilibrium quantities and prices of goods like raw materials and other inputs. To a large extent, their demand is governed by a combination of the technical quality, price and timely availability rather than by brand name, etc. Given the technical quality of an input, its demand is governed more by its price and availability than its brand name

3.2.4 Oligopoly Market:

Definition: The **Oligopoly Market** characterized by few sellers, selling the homogeneous or differentiated products. In other words, the Oligopoly market structure lies between the pure monopoly and monopolistic competition, where few sellers dominate the market and have controlover the price of the product.

✓ **Under the Oligopoly market, a firm either produces:**

- **Homogeneous product:** The firms producing the homogeneous products are called as Pure or Perfect Oligopoly. It is found in the producers of industrial products such as aluminum, copper, steel, zinc, iron, etc.
- **Heterogeneous Product:** The firms producing the heterogeneous products are called as Imperfector Differentiated Oligopoly.Such type of Oligopoly is found in the producers of consumer goods such as automobiles, soaps, detergents, television, refrigerators, etc.

➢ **Features of Oligopoly Market**

1. FewSellers:

Under the Oligopoly market, the sellers are few, and the customers are many. Few firms dominating the market enjoys a considerable control over theprice of the product

2. Interdependence:

It is one of the most important features of an Oligopoly market, where in, the seller has to be cautious with respect to any action taken by the competing firms. Since there are few sellers in the market, if any firm akes the change in the price or promotional scheme, all other firms in the industry have to comply with it, to remain in the competition.

Thus, every firm remains alert to the actions of others and plan their counterattack beforehand, to escape the turmoil. Hence, there is a complete interdependence among the sellers with respect to the irprice – output policies.

3. Advertising:

Under Oligopoly market, every firm advertises their products on a frequent basis,with the intention to reach more and more us to mersand increase their customer base.This is due to the advertising that makes the competition intense.

f any firm does a lot of advertisement while the other remained silent, then he will observe that his customers are going to that firm who is continuously promotion gits product. Thus ,in order to be in the race, each firms p end slots of money on advertisement activities.

4. Competition:

It is genuine that with a few players in the market, there will be an intense competition among the sellers. Any move taken by the firm will have a considerable impact on its rivals. Thus,every seller keeps an eye overitsrival and be ready with the counterattack.

5. Entry and Exit Barriers:

The firms can easily exit the industry whenever it wants, but has to face certain barriers to entering into it. These barriers could be Government license, Patent, largefirm's economies of scale, high capital requirement,
Complex technology, etc. Also, some times the government regulations favor the existing large firms, thereby acting as a barrier for the new entrants.

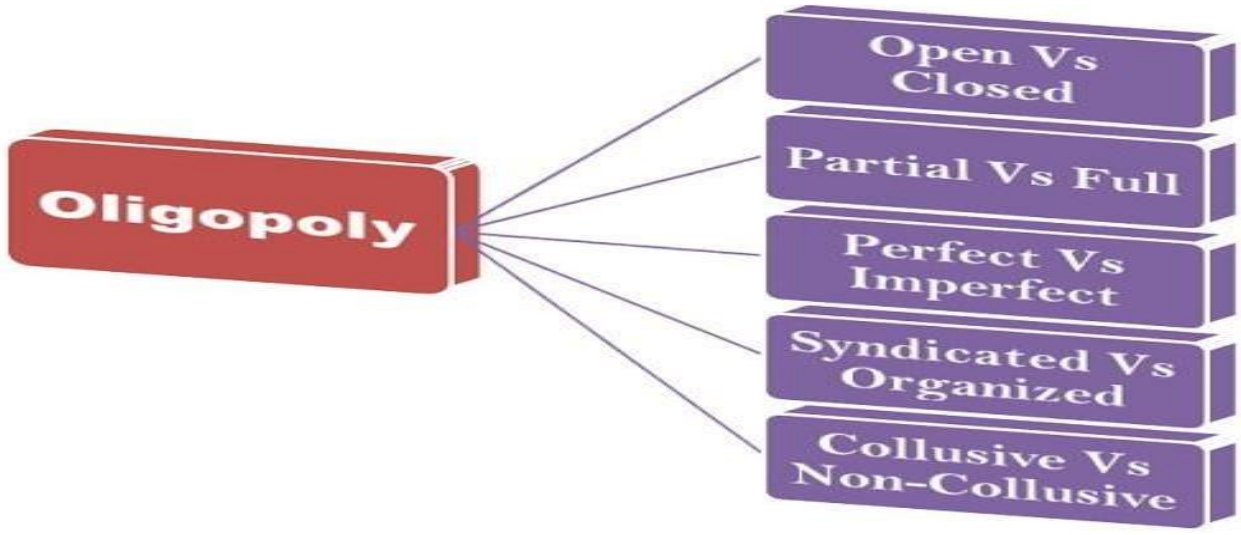
6. Lack of Uniformity:

There is a lack of uniformity among the firms in terms of their size,some are big, and some are small.

Since there are less number of firms, any action taken by one firm has a considerable effect on the other. Thus, every firm must keep a close eye on its counterpart and plan the promotional activities accordingly.

- ✓ **Types of Oligopoly Market**

Definition: The **Oligopoly** is a market structure where in few sellers dominate the market and sell the homogeneous or heterogeneous products.



Open Vs Closed Oligopoly: This classification is made on the basis of freedom to enter into the new industry. An open Oligopoly is the market situation where in firm can enter into the industry any time it wants, whereas, in the case of a closed Oligopoly, there are certain restrictions that act as a barrier for a new firm to enter into the industry.

1. **Partial Vs Full Oligopoly:** This classification is done on the basis of price leadership. The partial Oligopoly refers to the market situation, wherein one large firm dominates the market and is looked upon as a price leader.

   Whereas in full Oligopoly, the price leadership is conspicuous by its absence.

2. **Perfect (Pure) Vs Imperfect (Differential) Oligopoly:** This classification is made on the basis of product differentiation. The Oligopoly is perfect or pure when the firms deal in the homogeneous products. Whereas the Oligopoly is said to be imperfect, when the firms deal in heterogeneous products, i.e. products that are close but are not perfect substitutes.

3. **Syndicated Vs Organized Oligopoly:** This classification is done on the basis of a degree of coordination found among the firms. When the firms come together and sell their products with the common interest is called as a Syndicate Oligopoly. Whereas, in the case of an Organized Oligopoly, the firms have a central association for fixing the prices, outputs, and quotas.

4. **Collusive Vs Non-Collusive Oligopoly:** This classification is made on the basis of agreement or understanding between the firms. In Collusive Oligopoly, instead of competing with each other, the firms come together and with the consensus of all fixes the price and the outputs. Whereas in the case of a non- collusive Oligopoly, there is a lack of understanding among the firms and they compete against each other to achieve their respective targets.

   Thus, oligopoly market is a market structure that lies between the monopolistic competition and a pure monopoly.

- ✓ **List of Advantages of Oligopoly**

1. It offers simple choices.
With only a few businesses offering products or services, it will be easy for consumers to compare and choose the best option for their needs.Inother types of market, it can be very challenging to thoroughly look into all the things offered by a huge group of companies and then compare prices.

2. It generates high profits.
Because there is only little competition in oligopoly, the businesses involved in it enjoy the benefit of bringing in huge amounts of profits. Generally, the products and services controlled through this type of market are highly needed by a large majority of consumers.

3. It offers better information, products and services.
Along with fair price competition, competition among products also plays a huge role in this market structure, where every business would scramble to come out with best and latest items to attract consumers. The same goes to the amount of information, advertising and support offered to consumers.

4. It creates competitive prices.
As already implied, the ability to easily compare prices coerces business to keep their prices in competition with their competitors. This is a great perk for consumers, as prices could continually go down.

✓ **List of Disadvantages of Oligopoly**

1. It offers fewer choices.
In many cases, choosing the best brand in an oligopoly is like going for the least evil. This means that consumers would have very limited options for the products or services they are looking for.

2. It makes it difficult for smaller entities to establish as pot in the market.
For smaller enterprises and creatives, their outlook for business in this type of market is grim, as only the extremely advanced and large companies have complete control over market. This makes it nearly impossible for smaller and new entities to break into the market.

3. It eliminates motivation to compete.
Generally, companies in oligopoly become very settled with their ventures, as their operations and profits are guaranteed. This means that they would no longer feel the necessity to create new innovative ideas.

4. Its fixed prices can be bad for consumers.
While competitive prices are good, they are rarely far apart from those of other companies they could go with, as businesses agree to fix prices, where there is a set limit for how low prices could go.

Given the nature of an oligopoly form of market and the size of the businesses that participates in it, it definitely has some benefits and drawbacks. By weighing down the pros and cons listed above, you will be able to come up with a well-informed opinion whether it is good to engage in or not.

➢ **The Sweezy Model of Kinked Demand Curve(Rigid Prices)(Non- Collusive Oligopoly):**

In his article published in1939, Prof.Sweezy presented the kinked demand curve analysis to explain price rigidities often observed in oligopolistic markets. Sweezy assumes that if the oligopolistic firm lowers its price, its rivals will react by matching that price cut in order to avoid losing their customers.

Thus the firm lowering the price will not be able to increase its demand much. This portion of its demand curve is relatively inelastic.

On the other hand, if the oligopolistic firm increases its price, its rivals willnot follow it

and change their prices. Thus the quantity demanded of this firm will fall considerably. This portion of the demand curve is relatively elastic. In these two situations, the demand curve of the oligopolistic firm has a kink at the prevailing market price which explains price rigidity.

✓ ***Its Assumptions:***

The k inked demand curve hypothesis of price rigidity is based on the following assumptions:

(1) There are few firms in the oligopolistic industry.

(2) The product produced by one firm is a close substitute for the other firms.

(3) The product is of the same quality. There is no product differentiation.

(4) There are no advertising expenditures.

(5) There is an established or prevailing market price for the product at which all the sellers are satisfied.

(6) Each seller's attitude depends on the attitude of his rivals.

(7) Any attempt on the part of a seller to push up his sales by reducing the price of his product will be counter acted by other sellers who will follow his move.

(8) If he raises the price, others will not follow him; rather they will stick to the prevailing price and cater to the customers, leaving the price-raising seller.

(9) The marginal cost curve passes through the dotted portion of the marginal revenue curve so that changes in marginal cost do not affect output and price.

The Model:

Given these assumptions, the price-output relationship in the oligopolist market is explained in Figure 5 where KPD is the kinked demand curve and $OP_o$the prevailing price in the oligopoly market for the OR product of one seller. Starting from point P, corresponding to the current price OP_o, any increase in price above it, will considerably Reduce his sales, for his rivals are not expected to follow his price increase.

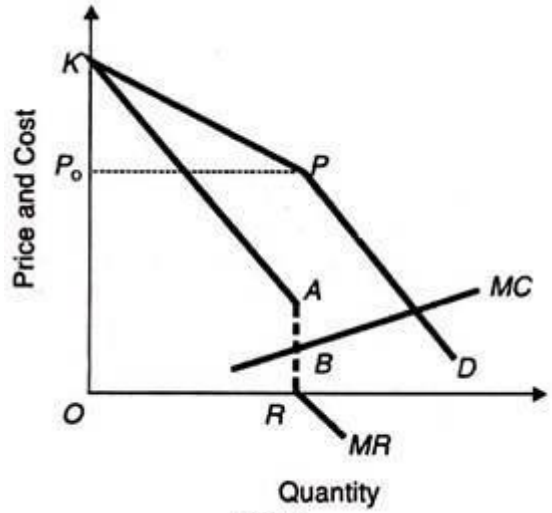


Fig. 5

This is so because the KP portion of the kinked demand curve is elastic, and the corresponding portion KA of the MR curve is positive.Therefore,anyprice – increase will not only reduce his total sales but also his total revenue and profit.

On the other hand if the seller reduces the price of the product below OP_o (or P) his rivals will also reduce their prices. Though he will increase his sales, his profit would be less than before. The reason is that the PD portion of the kinked demand curve below P is less elastic and the corresponding part of marginal revenue curve below R is negative.

Thus in both the price-raising and price-reducing situations the seller will be a loser. He would stick to the prevailing market price OP_owhich remains rigid.

In order to study the working of the k inked demand curve, let us analyse the effect of changes in cost and demand conditions on price stability in the oligopolistic market.

✓ **Changes in Costs:**

In oligopoly under the k inked demand curve analysis, changes in costs with in a certain range do not affect the prevailing price. Suppose the cost of production falls so that the new MC curve is $MC_1$to the right, as in Figure 6.

It cuts the MR curve in the gap AB so that the profit- maximising output is OR which can be sold at OP_o price. It should be noted that with any cost reduction the new MC curve will always cut the MR curve in the gap because as costs fall the gap AB continues to widen due to two reasons:

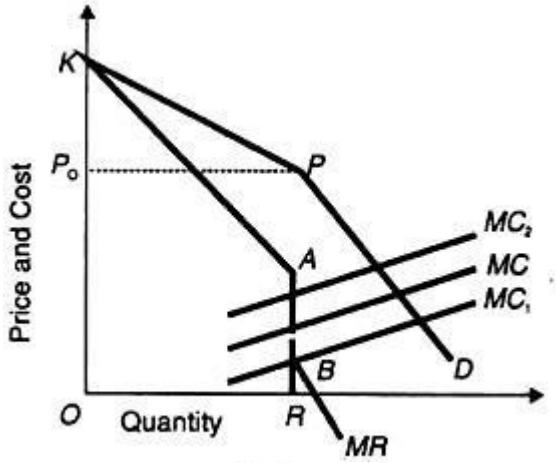


Fig. 6

As costs fall, the upper portion KP of the demand curve becomes more elastic because of the greater certainty that a price rise by one seller will not be followed by rivals and his sales would be considerably reduced.

With the reduction in costs the lower portion PD of the k inked curve becomes more inelastic, because of the greater certainty that a price reduction by one seller will be followed by the other rivals.

Thus the angle KPD tends to be a right angle at P and the gap AB widens so that any Ac curve below point A will cut the marginal revenue curve inside the gap. The net result is the same output OR at the same price $OP_o$and large profits for the oligopolistic sellers.

In case the cost of production rises the marginal cost curve will shift to the left of the old curve MC as MC2. So long as the higher MC curve intersects the MR curve within the gap up to point A, the price situation will be rigid.

However, with the rise in costs the price is not likely to remain stable indefinitely and if the Ml curve rises above point A ,it will intersect the MC curve in the portion KA so that a lesser quantity is sold at a higher price.

We may conclude that there may be price stability under oligopoly even when costs change so long as the MC curve cuts the MR curve in its discontinuous portion. However, chances of the existence of price-rigidity are greaterwhere there is a reduction in costs than there is a rise in costs.

✓ **Changes in Demand:**

- We now explain price rigidity where there is a change in demand with the help of Figure 7, D2is the original demand curve, MR2is its corresponding marginal revenue curve and MC is the marginal cost curve. Suppose there is a decrease in demand shown by D1curve and MR1is its marginal revenue curve.
- When demand decreases, a price-reduction move by one seller will be followed by other rivals. This will make LD1the lower portion of the new demand curve, more in elastic than the lower portion HD2 of the old demand curve.

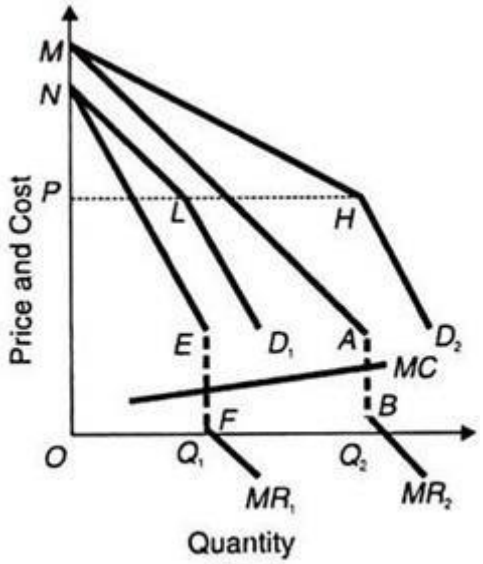


Fig. 7

This will tend to make the angle at L approach a right angle. As a result, the gap EF in MR1 curve is likely to be wider than the gap A B of the MR2 curve. The marginal cost curve MC will, therefore, intersect the lower marginal revenue curve MR1inside the gap EF, thus indicating a stable price for the oligopolistic industry.

Since the level of the kinks H and L of the two demand curves remains the same, the same price OP is maintained after the decrease in demand. But the output level falls from OQ2to OQ1. This case can be reversed to show increase in demand by taking D1and MR1as the original demand and marginal revenue curves and D2and MR2as the higher demand and marginal revenue curves respectively.

The price OP is maintained but the output rises from OQ1 to OQ. So long as the MC

curve continues to intersect the MR curve in the discontinuous portion, there will be price rigidity.
However, if demand increases, it may lead to a higher price. When demand increases, a seller would like to raise the price of the product and others are expected to follow him. This will tend to make the upper portion MH of the new demand curve elastic than the NL portion of the old curve.

Thus the angle at H becomes obtuse, away from the right angle. The gap AB in the MR_2curve becomes smaller and the MC curve intersects the MR_2curve above the gap, indicating a higher price and lower output. If, however, the marginal cost curve passes through the gap of MR_2, there is price stability.

Conclusion:
The whole analysis of the kinked demand curve points out that price rigidity in oligopolistic markets is likely to prevailifthereisa price reduction move on the part of all sellers. Changes in costs and demand also lead to price stability undernormalconditionssolongastheMCcurveintersectstheMRcurveinits discontinuous portion.

But price increase rather than price rigidity may be found in response to rising cost or increased demand.

- ***Reasons for Price Stability:***

There are a number of reasons for price rigidity in certain oligopoly markets.

(1) Individual sellers in an oligopolistic industry might have learnt through experience the futility of price wars and thus prefer price stability.

(2) They may be content with the current prices, outputs and profits and avoid any involvement in unnecessary insecurity and uncertainty.

(3) They may also prefer to stick to the present price level to prevent new firms from entering the industry.

(4) The sellers may intensify their sales promotion efforts at the current price instead of reducing it. They may view non-price competition better than price rivalry.

(5) After spending a lot of money on advertising his product, a seller maynot like to raise its price to deprive himself of the fruits of his hard labour. Naturally, he would stick to the going price of the product.

(6) If a stable price has been set through agreement or collusion, no seller would like to disturb it, for fearo fun leashing a price war and thus engulfing himself into an era of uncertainty and insecurity.

(7) It is the k inked demand curve analysis which is responsible for price rigidity in oligopolistic markets.

➢ ***Its Shortcomings:***

But the theory of k inked demand curve in oligopoly pricing is not without shortcomings.

(1) Even if we accept all its assumptions it is not likely that the gap in the marginal revenue curve will be wide enough for the marginal cost curve to pass through it. It may be shortened even under conditions off allin demand or costs, thereby making price unstable.

(2) One of its major shortcomings, according to Professor Stigler, is that **"the theory does not explain why prices that have once changed should settle down, again acquire stability, and gradually produce a new kink."** For instance in Figure 6 the kink occurs at P because OP_o is the prevailing price. But the theory does not explain the forces that established the initial price OP_o.

(3) Price stability may be illusory because it is not based on the actual market behaviour. Sales do not always occur at list prices. There are often deviations from posted prices because of trade-ins, allowances and secret price concessions. The oligopolistic seller may outwardly keep the price stable but he may reduce the quality or quantity of the product. Thus price stability becomes illusory.

(4) Moreover, it is not possible to statistically compile actual sales prices in the case of many products that may reflect stable prices for them. It is, therefore, doubtful that price stability actually exists in oligopoly.

(5) Critics point out that the k inked demand curve analysis holds during the short-run, when the knowledge about the reactions of rivals is low. But it is difficult to guess correctly the rivals' reactions in the long-run. Thus the theory is not applicable in the long-run.

(6) According to some economists, the kinked demand curve analysis applies to an oligopolistic industry in its initial stages or to that industry in which new and previously unknown rivals enter the market.

(7) The kinked demand curve analysis is based on two assumptions: first, other firms will follow a price cut and, second, they will not follow a price rise. Stiglerhass how non empirical evidence that in an inflation ary period the rise in output prices is not confined only to one firm but is industry-wide. So all firms having similar costs will follow one another in raising price.

(8) Economists have concluded from this that the kinked demand curve analysis is applicable only under depression. For in an inflationary period when demand increases, the oligopolistic firm will raise price and other firms will also follow it.

In such a situation, the demand curve of the oligopolist will have an inverted kink. This reverse k ink is based on his expectation that all his competitors will follow him when he raises the price of his product, but none will follow a price cut because of inflationary condition.

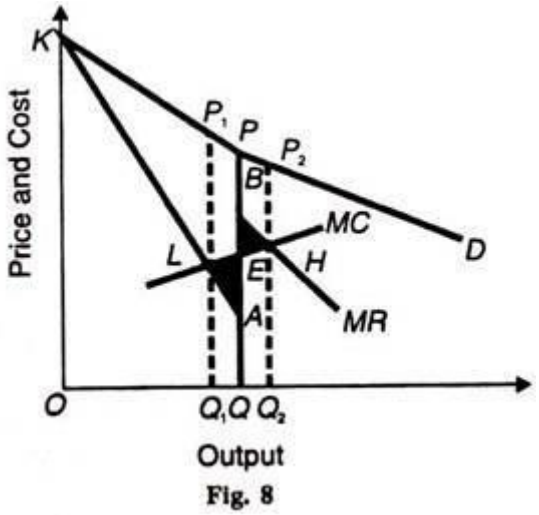


Fig. 8

This is illustrated in Figure where KPD is the reverse k inked demand curve.Its corresponding marginal revenue curve is KABM which is composed of KA and BM, and the AB portion is its gap. The curve MC passes through all the three portions of this curve at L, E and H respectively.

The areas ALE and BHE are of uncertainty. Whether the firm decides to continue production at L, E and H depends on the balance of gain and loss. A movement from L to E results in a loss because MC>MR. A movement from E to H results in again because MR>MC. If the firm raises the price to Q1 P1 and lowers the output to OQ1 and moves from E to L, it would reduce the loss. If it lowers the price to Q2 P2, and raises the output to OQ2 and moves from E to H, it would increase the gain. The firm would move to the larger area of gain.
Thus there would be no price rigidity.

(9) Stigler's empirical evidence further shows that cases in oligopoly industries where the number of sellers is either very small or some what large, the k inked demand curve is not likely to be there. Thus the empirical evidence does not support the existence of a kink.

"However", aspointedout byProfessorBaumol, **"the analysis does show how the oligopolistic firm's view of competitive reaction patterns can affect the changeability of whatever price it happens to be charging."**

❖ ROLE OF MACRO ECONOMICANAL YS IS INFORMULATION OF BUSINESS POLICIES & DECISION MAKING

Macroeconomics helps the business in in-depth knowledge of macroeconomic environment of business relating to industrial policy, licensing policy, economic planning monetary and fiscal framework and overall economic policy. The role of macro economics in business policy formulation is being discussed in the following points:

1. Macroeconomic policy:- Macro economics helps in formulation of economic policy. The subjects of an economic policy are monetary policy, fiscal policy, incomes policies and policy on balance of payment. Economic policy should be such that it promotes the

business environment and provides impetus to business activities.

2. Economic planning:- A serious attempt towards self sustained growth of business is only possible by efficient planning. Planning is now a days synonymous with growth and development. Identification of priority areas, estimation of resources and coordination among various sectors of economy can be done through proper planning. Planning directs the growth in desirable corners.

3. Solving macro paradoxes:- Macro economics helps in solving macro paradoxes like paradox of thrift related to savings, paradox f assumption by commercial banks that all depositors would not with draw their money on any particular day and their right to withdrawal.

4. Tracing effect to f government policy on business:- Macroeconomics helps in tracing the implications of government policy changes on existing business activity.

5. Help in solving problem of general unemployment:- Effective demand is the focal point of macro economics. Reduction in effective demand brings economic depression and thereby general unemployment. Hence, the level of effective demand should be increased in order to increase the level of employment.

6. Analysis of trade cycles:- Macroeconomics tries to know about the behavior and occurrence of booms and slumps and the implication on business activity. This analysis is very useful for a free enterprise economy. Business cycles are boundtooccur.Macroeconomicshelpsthebusinessinfacingboomsandslumps so that negative impact is minimized.

7. Macro analysis helps in development of micro analysis:-In the deductive method process of logic goes from general to particular. We goon deducting to draw specific conclusions. Many of microeconomic conclusions are outcome of macro conclusion. The assumption that consumer is rational has been decided only after knowing about the behavior of a group. A medico is allowed to specialize in some part of human body from surgical view point only when he has understood the anatomy and physiology of human body.

8. Inability of microeconomics to study some areas:- Micro economics is not able to study monetary problems, fiscal problems, financial sector problems, foreign exchange regulation problems and inflationary and recessionary situations problems. Business needs to be protected from these ticklish problems and therefore, needs the helpof macro economics.

9. Macroeconomic models:- Macroeconomics helps in building or constructing macroeconomic models. The major objective function of a macroeconomic mode list to maintain the macro equilibrium in the country at the full employment level. The role of government through its monetary and fiscal operations becomes important as independent variables i.e. these policies are used to explain the dependent variable i.e. maintaining macro equilibrium.

Let's sum -up

Dear Learners , In this Module We learn about Meaning of Market structure, Types of Market structure, Perfect competition, Monopoly, monopolistic competition, Oligopoly Market.

Self-Assessment questions

1.The united states automobile industry is a good example of :
a. a monopoly
b. Competitive market
c. an oligopoly
d. an unconcern rated industry

2. Compared to a firm in a competitive market, a monopoly has
a. more pressure to reduced cost
b. less pressure to reduced costs.
c. lower profits
d. greater output

3.which of the following serves to limit market power?
a. Patents
b. economics of scale
c. import competition
d. limit pricing

4.A firm that is sole seller of a product without close substitute is
a. perfect competitive
b. monopolistic competitive
c. an oligopolistic
d. a monopolistic

5. Economics of scale over a wide range of output.
a. are barrier to entry.
b. cost per unit out put is lower at higher levels of output.
c. cost per unit of output is higher at low level of output.
d. all of the above.

Module 3 completed

Module 4

Pricing

4.1 Meaning of Pricing:

Pricing is a process of fixing the value that a manufacturer will receive in the exchange of services and goods. Pricing method is exercised to adjust the cost of the producer's offerings suitable to both the manufacturer and the customer. The pricing depends on the company's average prices, and the buyer's perceived value of an item, as compared to the perceived value of competitor's product.

Every businessperson starts a business with a motive and intention of earning profits. This ambition can be acquired by the pricing method of a firm. While fixing the cost of a product and services the following point should be considered:

- ✓ The identity of the goods and services
- ✓ The cost of similar goods and services in the market
- ✓ The target audience for whom the goods and services are produces
- ✓ The total cost of production (raw material, labour cost, machinery cost, transit, inventory cost etc).
- ✓ External elements like government rules and regulations, policies, economy, etc.,

4.2 Objectives of Pricing:

Survival- The objective of pricing for any company is to fix a price that is reasonable for the consumers and also for the producer to survive in the market. Every company is in danger of getting ruled out from the market because of rigorous competition, change in customer's preferences and taste. Therefore, while determining the cost of a product all the variables and fixed cost should be taken into consideration. Once the survival phase is over the company can strive for extra profits.

Expansion of current profits-Most of the company tries to enlarge their profit margin by evaluating the demand and supply of services and goods in the market. So the pricing is fixed according to the product's demand and the substitute for that product. If the demand is high, the price will also be high.

Ruling the market- Firm's impose low figure for the goods and services to get hold of large market size. The technique helps to increase the sale by increasing the demand and leading to low production cost.

A market for an innovative idea- Here, the company charge a high price for their product and services that are highly innovative and use cutting-edge technology. The price is high because of high production cost. Mobile phone, electronic gadgets are a few examples.

What is Pricing Method?

Pricing method is a technique that a company apply to evaluate the cost of their products. This process is the most challenging challenge encountered by a company, as the price should match the current market structure and also compliment the expenses of a company and gain profits. Also, it has to take the competitor's product pricing into consideration so, choosing the correct pricing method is essential.

4.3 Types of Pricing Method: The pricing method is divided into two parts:

Cost Oriented Pricing Method– It is the base for evaluating the price of the finished goods, and most of the company apply this method to calculate the cost of the product. This method is divided further into the following ways.

Cost-Plus Pricing- In this pricing, the manufacturer calculates the cost of production sustained and includes a fixed percentage (also known as mark up) to obtain the selling price. The mark up of profit is evaluated on the total cost (fixed and variable cost).

Mark-up Pricing- Here, the fixed number or a percentage of the total cost of a product is added to the product's end price to get the selling price of a product.

Target-Returning Pricing- The company or a firm fix the cost of the product to achieve the Rate of Return on Investment.

Market-Oriented Pricing Method- Under this category, the is determined on the base of market research

Perceived-Value Pricing- In this method, the producer establish the cost taking into consideration the customer's approach towards the goods and services, including other elements such as product quality, advertisement, promotion, distribution, etc. that impacts the customer's point of view.

Value pricing- Here, the company produces a product that is high in quality but low in price.

Going-Rate Pricing- In this method, the company reviews the competitor's rate as a foundation in deciding the rate of their product. Usually, the cost of the product will be more or less the same as the competitors.

Auction Type Pricing- With more usage of internet, this contemporary pricing method is blooming day by day. Many online platforms like OLX, Quickr, eBay, etc. use online sites to buy and sell the product to the customer.

Differential Pricing- This method is applied when the pricing has to be different for different groups or customers. Here, the pricing might differ according to the region, area, product, time etc.

4.4PRICING METHODS IN PRACTICE:

Pricing policies are the decisions by a company determining prices to be charged for its products. There are a number of different pricing policies or strategies which a firm may adopt in order to achieve its pricing objectives.

i. **Skim pricing:**

It uses high prices to obtain a high proits and quick recovery of the development costs in the early stages of a product?s life before competition intensities.

ii. **Penetration pricing:**

Is the use of lower than normal prices to increase market share. It is also used to establish a new product in a market which is expected to have a long-life and potential for growth.

iii. Mixed pricing:

It is a policy which initially uses skim pricing and then, as competition increases, price cutting, sometimes even below cost, to penetrate the market, increases market share and eliminate competition.

iv**. Destructive pricing:**

It involves reducing the price of an existing product or selling a new product at an artificially low price in order to destroy competitor's sales.

v. Differential or discrimination pricing:

It is the use o different prices for the same product when it is sold in different locations or market segments.

While small buyers or those loacted in remote areas may be charges a higher price to cover the additional distribution costs.

vi. Absorption pricing:

It involves the use of lower than normal prices ether to launch a new product or to periodically boost the sales of existing products.

vii. Marginal cost pricing:

It is something used when a firm has some spare capacity which it wishes to use without diverting a way from its regular business. Essentially, a firm incurs fixed costs such as rent, whether or not it is operating at full capacity.

viii. Negotiable pricing:

It is common in industrial markers. The price is individually calculated to take account of cost, demand and any specific customer requirement.

ix. Single pricing:

It involves a policy of charging one price to everyone. Examples include standard bus fares, prices of books etc.

x. Market pricing:

It is determined by the interaction of demand and supply.

The seller has little control over the price in the situation which is likely to fluctuate daily.

xi. Sealed-bid pricing:

It is widely used in government, public sector and other private sector markets whereby suppliers are invited to tender(offer a fixed price) for the supply of specified goods or services.

Let's sum -up

Dear Learners , In this Module We learn about Meaning of Pricing, Objectives, Types of Pricing , Pricing methods in Practice.

Self-Assessment questions

1. Which of the following has major influence on pricing decision?
   a. Customer demand
   b. Action of competitors
   c. Costs
   d. All of the above
2. What is the name of the practice of setting prices relatively low when introducing a new products to the market?
   a. Skimming pricing
   b. Penetration pricing
   c. Target pricing
   d. Cost plus pricing
3. When a company offers optional extras to increase the overall price of product and services it is using which pricing strategy.
   a. Economy pricing
   b. Promotional pricing
   c. Psychological pricing
   d. None of the above
4. In penetration pricing a business firm seeks to access deeper market penetration by keeping prices
   a. Higher
   b. Competitive
   c. Low flexible
5. Make a correct sequence of key steps in determining the price of a product.
   a. Determine the demand for the product
   b. Analyze competitive reaction
   c. Select pricing strategy
   d. Select target makret

Unit summary

Dear learners s, in this unit we discuss about ,

- Introduction to Production function, Features of Production function, Law of Return to scale, Economics of Scale, Dis-Economics of Scale, Iso-quant Production function, Cobb-Douglas Production Function.
- Introduction to Production function, Features of Production function, Law of Return to scale, Economics of Scale, Dis-Economics of Scale, Iso-quant Production function, Cobb-Douglas Production Function.
- Meaning of Market structure, Types of Market structure, Perfect competition, Monopoly, monopolistic competition, Oligopoly Market.
- Meaning of Pricing, objecitves and types of pricing and pricing methods in practice.

Web resources :

1. https://nios.ac.in/media/documents/SrSec318NEW/318_Economics_Eng/318_Economics_Eng_Lesson18.pdf
2. https://books.google.co.in/books?id=H7FDDAAAQBAJ&printsec=copyright&redir_esc=y#v=onepage&q&f=false

Module 4 completed

UNIT – IV

Macro Economic variable

Macro-Economic Variables - National Income – Concepts – Gross Domestic Product, Gross National Product, Net National Product – Measurement of National Income, Savings, Investment – Business Cycle and Contra cyclical policies – role of Economic policy – Indian Economic planning.

Unit Module Structuring

1.National Income

2. Business cycle and contra cyclical policy

3. role of economic policy and Indian Economic Planning

Self Learning Materila Development – Stage 1

Table of content for the unit 4

3.3 Characteristics of Economic policy 3.4 Importance 3.5 Types of Economic Policy 3.6 Objectives of Economic Policy		

Unit objectives

- To analyse the Indian Economic system
- To interpret the economic policy in India.

1.1 MEANINGOFECONOMICSYSTEM

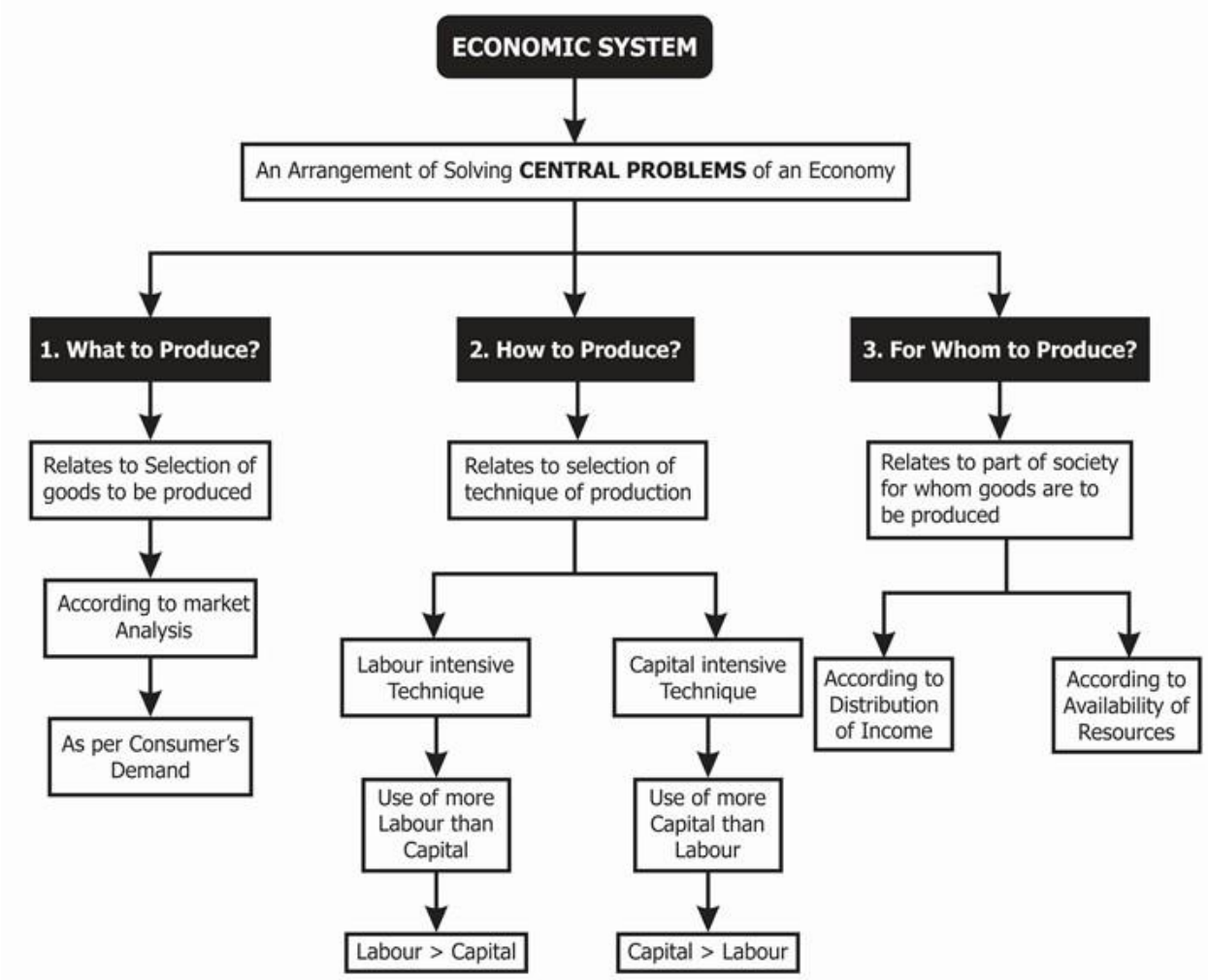
An economic system is a mechanism with the help of which the government plans and allocates accessible services, resources and commodities across the country. Economic systems manage elements of production, combining wealth, labour, physical resources and business people. An economic system in corporate many companies, agencies, objects, models, as well as for deciding procedures.

1.2 TYPES OF ECONOMIC SYSTEMS

1. Capitalist Economy- In a capitalist system, the products manufactured are divided among people not according to what people want but on the basis of Purchasing Power—which is the ability to buy products and services. This means an individual needs to have the money with him to buy the goods and services. The Low-cost housing for the underprivileged is much required but will not include as demand in the market because the needy do not have the buying power to back the demand. Therefore, the commodity will not be manufactured and provided as per market forces.

2. Socialist Economy- This economy system acknowledges the three in quiries in a different way. In a socialist society, the government determines what products are to be manufactured in accordance with the requirements of society. It is believed that the government understands what is appropriate for the citizen of the country, therefore, the passions of individual buyers are not given much attention. The government concludes how products are to be created and how the product should be disposed of. In principle, sharing under socialism is assumed to be based on what an individual needs and not what they can buy. A socialist system does not have a separate estate because everything is controlled by the government.

3. Mixed Economic– Mixed systems have characteristics of both the command.For this purpose, the mixed economic systems are also called dual economic systems. However, there is no sincere method to determine a mixed system. Sometimes, the word represents a market system beneaththestrictadministrativecontrolincertainsectionsoftheeconomy.



❖ **ECONOMICSECTOR**

The economic sector is divided into three economic sectors

1. Primary Sector: It is that sector which relies on the environment for any production or manufacturing. A few examples of the primary sector a remining, farming, agriculture, fishing, etc.

2. Secondary Sector: In this sector, the raw material is transferred to a valuable product. A few examples are construction industries and manufacturing of steel , etc.

3. TertiarySector : It is also known as Service Sector, and includes production and exchange of services. A few examples are banking, insurance, transportation, communication, etc.

❖ DIFFERENCE BETWEEN CAPITALIST,SOCIALIST & MIXED ECONOMY

Basis	Capitalist Economy	SocialistEconomy	Mixed Economy
Ownershipof Property	Privateownership	Public ownership	Bothpublicandprivate ownership
Price Determination	Prices are determined bythemarketforcesof demand and supply	Prices are determinedbythe central planning authority.	Prices are determined by centralplanningauthority and demand and supply.
Motive of Production	Profit motive	Social welfare	The profit motive in the private sector and welfare motiveinthepublicsector.
Role of Government	Norole	Completerole	Full role in the public sectorandlimitedrolein the private sector
Competition	Exists	Nocompetition	Existonlyintheprivate sector
Distributionof income	VeryUnequal	Quite Equal	Considerableinequalities exist.

1.3 NATIONALINCOME

National Income is total amount of goods and services produced within the nation during the given period say, 1 year. It is the total of factor income i.e. wages, interest, rent, profit, received by factors of production i.e. labour, capital, land and entrepreneurship of a nation.

Definitions of National Income:

The definitions of national income can be grouped into two classes: One, the traditional definitions advanced by Marshall, Pigou and Fisher; and two, modern definitions.

I. Traditional Definitions

1. The Marshallian Definition:

According to Marshall: "The labour and capital of a country acting on its natural resources produce annually a certain net aggregate of commodities, material and immaterial including services of all kinds. This is the true net annual income or revenue of the country or national dividend."

In this definition, the word 'net' refers to deductions from the gross national income in respect of depreciation and wearing out of machines. And to this, must be added income from abroad.

It's Defects:

Though the definition advanced by Marshall is simple and comprehensive, yet it suffers from a number of limitations. First, in the present day world, sovaried and numerous are the goods and services produced that it is very difficult to have a correct estimation of them.

Consequently, the national income cannot be calculated correctly. Second, there always exists the fear of the mistake of double counting, and hence the national income cannot be correctly estimated. Double counting means that a particular commodity or service like raw material or labour, etc.might get included in the national income twice or more than twice.

For example, a peasant sells wheat worth Rs.2000 to a flour mill which sells wheat flour to the wholesaler and the wholesaler sells it to the retailer who, in turn, sells it to the customers. If each time, this wheat or its flour is taken into consideration, it will workout to Rs.8000, whereas, in actuality, the reisonlyan increase of Rs.2000 in the national income.

Third, it is again not possible to have a correct estimation of national income because many of the commodities produced are not marketed and the producer either keeps the produce for self-consumption or exchanges it for other commodities. It generally happens in an agriculture-oriented country like India. Thus the volume of national income is underestimated.

2. The Pigouvian Definition:

A.C. Pigou has in his definition of national income included that income which can be measured in terms of money.

In the words of Pigou," National income is that part of objective income of the community, including of course income derived from abroad which can be measured in money."

This definition is better than the Marshallian definition. It has proved to be more practical also. While calculating the national income now-a- days, estimates are prepared in accordance with the two criteria laid down in this definition.

First, avoiding double counting, the goods and services which can be measured in money are included in national income.

Second, income received on account of investment in foreign countries is included in national income.

It's Defects:

The Pigouvian definition is precise, simple and practical but it is not free from criticism. First, in the light of the definition put forth by Pigou, we have to unnecessarily differentiate between commodities which can and which cannot be exchanged for money.

But, in actuality, there is no difference in the fundamental forms of such commodities, no matter they can be exchanged for money. Second, according to this definition when only such commodities as can be exchanged for money are included in estimation of national income, the nation al income cannot be correctly measured.

According to Pigou, a woman's services as a nurse would be included in national income but excluded when she worked in the home to look after her children because she did not receive any salary for it. Similarly, Pigou is of the view that if a man marries is lady secretary, the national income diminishes as he has no longer to pay for her services.

Thus the Pigovian definition gives rise to a number of paradoxes. Third, the Pigovian definition is applicable only to the developed countries where goods and services are exchanged for money in the market.

According to this definition, in the backward and underdeveloped countries of the world, where a major portion of the produce is simply bartered, correct estimate of national income will not be possible, because it will always work outless than the real level of income. Thus the definition advanced by Pigou has a limited scope.

3. Fisher's Definition:

Fisher adopted 'consumption' as the criterion of national income whereas Marshall and Pigou regarded it to be production. According to Fisher, "The National dividend or income consists solely of services as received by ultimate consumers, whether from their material or from the human environments. Thus, a piano, or an overcoat made for me this year is not a part of this year's income, but an addition to the capital. Only the services rendered to me during this year by these things are income."

Fisher's definition is considered to be better than that of Marshall or Pigou, because Fisher's definition provides an adequate concept of economic welfare which is dependent on consumption and consumption represents our standard of living.

It's Defects:

But from the practical point of view, this definition is less useful, because there are certain difficulties in measuring the goods and services in terms of money. First, it is more difficult to estimate the money value of net consumption than that of net production.

In one country there are several individuals who consume a particular good and that too at different places and, therefore, it is very difficult to estimate their total consumption in terms of money. Second, certain consumption goods are durable and last for many years.

If we consider the example of piano or overcoat, as given by Fisher, only the services rendered for use during one year by them will be included in income. If an over coatc osts Rs.100 and lasts for ten years, Fisher will take into account only Rs. 100 as national income during one year, whereas Marshall and Pigou will include Rs. 100 in the national income for the year, when it is made.

Besides, it cannot be said with certainty that the overcoat will last only for ten years. It may last longer or for a shorter period. Third, the durable goods generally keep changing hands leading to a change in their ownership and value too.

It, therefore, becomes difficult to measure in money the service-value of these goods from the point of view of consumption. **For instance, the owner of a Maruti car sells it at a price higher than its real price and the purchaser after using it for a number of years further sells it at its actual price**.

Now the question is as to which of its price, whether actual or black market one, should we take into account, and afterwards when it is transferred from one person to another, which of its value according to its average age should be included in national income?

But the definitions advanced by Marshall, Pigou and Fisher are not altogether flawless. However, the Marshallian and Pigovian definitions tell us of the reasons influencing economic welfare, whereas Fisher's definition helps us compare economic welfare in different years.

II Modern Definitions:

From the modern point of view,

1. Simon Kuznets has defined national income as "the net output of commodities and services flowing during the year from the country's productive system in the hands of the ultimate consumers."

On the other hand, in one of the reports of United Nations, national income has been defined on the basis of the systems of estimating national income, as net national product, as addition to the shares of different factors, and as net national expenditure in a country in a year's time. In practice, while estimating national income, any of these three definitions may be adopted, because the same national income would be derived, if different items were correctly included in the estimate.

❖ Assumption of National Income

This basic model of national income (GDP) determination is based on the following assumptions.

1. The economy has only two sectors, viz. , households and business enterprises. The households spend money on consumption and the business enterprises on investment.

2. There is no government or the government does not interfere in the economy in any manner. It neither imposes taxes, nor does it spend money on subsidies consumption or investment.

3. The country has a closed economy. It neither exports, nor imports goods services and thus has no economic relationship with the rest of the world.

4. Prices of all goods produced in the economy and all inputs used in production are fixed.

5. The economy has excess capacity ,i.e., all the production units are producing less than their capacity output. Hence there are no constraints onexpansionof output.

6. In this model of GDP determination, we are dealing with a short period of time short run here means that a deviation of actual GDP from the potential GDP and the consequent excess capacity, unemployment and recessionary trends, etc., are likely to be maintained during this time span as the time period is not sufficient for the operation of the automatic adjustment mechanism to restore equilibrium at the potential GDP level.

1.4 Concepts of National Income

There are various concepts of National Income, such as GDP, GNP, NNP, NI, PI, DI, and PCI which explain the facts of economic activities.

1. **GDP at market price:** Is money value of all goods and services produced within the domestic domain with the available resources during a year.

GDP=(PXQ)

Where, GDP=gross domestic product P = Price of goods and services
Q=Quantity of goods and services GDP is made up of 4 Components

a) Consumption
b) Investment
c) Government Expenditure
d) Net Foreign Exports Of A Country

GD=C+I+G+(X-M)

Where, C=Consumption I=Investment

G=Government expenditure
(X-M)=Export minus import

2.Gross National Product (GNP): Is market value of final goods and services produced in a year by the residents of the country with in the domestic territory as well as abroad. GNP is the value of goods and services that the country's citizens produce regardless of their location.

GNP=GDP+NFIA or, GNP=C+I+G+(X-M)+NFIA

Where, C=Consumption I=Investment
G=Government expenditure
(X-M)=Export minus import

NFIA= Net factor income from abroad.

3.Net National Product (NNP) at MP: Is market value of net output Of final goods and services produced by an economy during a year and net factor income from abroad.

NNP=GNP-Depreciation

or, NNP= C+I+G+(X-M)+NFIA-IT-Depreciation

Where, C=Consumption I=Investment
G=Government expenditure (X-M)=Export minus import

NFIA=Net factor income from abroad. IT= Indirect Taxes

4.National Income(NI): Is also known as National Income at factor cost which means total income earned by resources for their contribution of land, labour, capital and organizational ability. Hence, the sum of the income received by factors of production in the form of rent, wages, interest and profit is called National Income.

Symbolically, **NI=NNP +Subsidies-Interest Taxes or, GNP- Depreciation + Subsidies-Indirect Taxes**
Or ,NI = C+G+I+(X-M)+NFIA-Depreciation-Indirect Taxes+ Subsidies

5. Personal Income (PI): Is the total money income received by individuals and households of a country from all possible sources before direct taxes.
Therefore, personal income can be expressed as follows:
PI=NI- Corporate Income Taxes-UndistributedCorporateProfits- Social Security Contribution +Transfer Payments.
Disposable Income(DI) : It is the income left with the individuals after the payment of direct

taxes from personal income. It is the actual income left for disposal or that can be spent for consumption by individuals.

Thus,it can be expressed as:

DI=PI-DirectTaxes

6.Per Capital income(PCI): Is calculated by dividing the national income of the country by the total population of a country.

Thus,PCI=Total National Income/Total National Population

1.5 Factors That Affect National Income

Several factors affect the national income of a country. Some of them have been listed below:

1. Factors of Production:- Normally, the more efficient and richer the resources, higher will be the level of National Income or GNP

(a) Land:- Resources like coal, iron and timber are essential for heavy industries so that they must be available and accessible. In other words, the geographical location of these natural resources affects the level of GNP.

(b) Capital:-Capital Is generally determined by investment .Investment in turn depends on other factors like profitability, political stability etc.

(c) Labour:-The quality or productivity of human resources is more important than quantity. Manpower planning and education affect the productivity and production capacity of an economy.

(d) Entrepreneur

(e) Technology:-This factor is more important for Nations with fewer natural resources. The development in technology is affected by the level of invention and innovation in production.

(f) Government:- Government can help to provide a favorable business environment for investment. It provides law and order, regulations.

(g) Political Stability:- A stable economy and political system helps in appropriate allocation of resources. Wars, strikes and social unrests will discourage investment and business activities.

1.6 Methods of National Income Calculation

There are three approaches and methods of measuring National Income:

A. Income Method:- By this National Income is calculated compiling income of factors of production viz., land, labour, capital and entrepreneur. **National Income =Total Wage +Total Rent +Total Interest +Total Profit** In Indian context, since 1993 as per the System of National Accounts (SNA), National Income is total of the following:

GDP=Compensation of Employees + Consumption of Fixed Capital + (Other Taxes on Production – Subsidies of Production) + Gross Operating Surplus

(i) Compensation of employees: (Wage) salaries paid in cash and kind and other benefits provided to employees.
(ii) Consumption of Fixed Capital: wear and tear of machinery which are replaced by new parts.
(iii) Other Taxes on Production minus Subsidies: Net tax on production.

There is a difference between tax on products and tax on production. Tax on products includes taxes like sales tax and excise duty. Tax on production is tax imposed irrespective of production like license fees and land tax.

Gross Operating Surplus: balance of value added after deducting the above three components. It goes to pay rent of land and interest of capital.

B. Product Method (or Value Added Method, Output Method):-It is used by economists to calculate GDP at market prices, which are the total values of outputs produced at different stages of production.

Some of the goods and services included in production are :

(i) Goods and services actually sold in the market.

(ii) Goods and services not sold but supplied free of cost. (No Charge/Complementary)

Some of the goods and services not included in productionare:

(i) Second hand items and purchase and sale of the same. Sale and purchase of second cars, for example, are not a part of GDP calculation as no new production takes place in the economy.

(ii) Production due to unwarranted/ illegal activities.

(iii) Non-economic goods or natural goods such as air and water.

(iv) Transfer Payments such as scholarships, pensions etc. are excluded as ther is income received, but no good or service is produced in return.

(v) Imputed rental for owner-occupied housing is also excluded.

(vi) Here the Gross Value of final goods and services produced in a country in certain year is calculated.

(vii) GDP is a concept of value added; it is the sum of gross value added of all resident producer units (institutional sectors, or industries) plus that part of taxes (total) less subsidies, on products which is not included in the valuation of output.

Gross Value Added = Output of Final Goods and Services – Intermediate Consumption
National Income= Gross Value Added + Indirect Taxes–Subsidies

C. Expenditure Method:-It measures all spending on currently-produced final goods and services only in an economy.

In an economy, there are three main agencies which buy goods and services: Households, Firms and the Government.

This final expenditure is made up of the sum of 4 expenditure items, namely;

(i) Consumption (C): Personal Consumption made by households, the payment of which is paid by households directly to the firms which produced the goods and services desired by the households.

(ii) Investment Expenditure (I): Investment is an addition to capital stock of an economy in a given time period. This includes investments by firms as well as governments sectors.

(iii) Government Expenditure (G): This category includes the value of goods and service purchased by Government. Government expenditure on pension schemes, scholarships, unemployment allowances etc. are not included in this as all of them come under transfer payments.

(iv) Net Exports (X-IM): Expenditures on foreign made products (Imports) are expenditure that escapes the system, and must be subtracted from total expenditures. In turn, goods produced by domestic firms which are demanded by foreign economies involve expenditure by other economies on our production (Exports), and are included in total expenditure. The combination of the two gives us Net Exports.

National Income = Consumption (C) + Investment Expenditure (I) + Government Expenditure (G) + Net Exports (X-IM)

Calculating GDP (National Income)is extremely important as the performance of the economy is fixed by means of this method. The results would help the country to forecast the economic progress, determine the demand and supply, understand the buying power of the people, the per capital income,the position of the economy in the global arena. The Indian GDP is calculated by the expenditure method.

- **Main uses of national income.**

1. Since income is a flow of wealth changes in the national income give some indication of economic welfare.

National income issued to compare standard so living in different countries.

2. National income figures are used to measure the rate of growth of a country.

3. The national income accounts make it possible for an analysis of the behavior of the different sectors of the economy.

4. Inflationary and deflationary pressures can be estimated with the help of national income statistics.

6 National income statistics can be used to forecast the level of business activity at later date, and to find out trends in other annual data.

7. The national income figures are useful in providing a correct sense of proportion about the structure of the economy.

8. In war time, the study of components of national income is of great

importance because they show the maximum possible production possibilities of the country.

9. National income statistics can be used to determine how an international financial burden should be an apportioned between different countries. The quantum of national income measures the ability of a country to pay contributions for international purposes, just as the income of a person measures his ability to pay for the upkeep of his country.

10. Above all the national income statistics are used for planned economic development of a country. In the absence of such data, planning will not be possible.

❖ **Importance of National Income**

1. For the Economy: - National income data are of great importance for the economy of a country. These days the national income data are regarded as accounts of the economy, which are known as social accounts.

2. National Policies: -National income data form the basis of national policies such as employment policy because these figures enable us to know the direction in which the industrial output, investment and savings' etc. change, and proper measures can be adopted to bring the economy to the right path.

3. Economic Planning:- In the percentage of planning, the national data are of great importance. For economic planning, it is essential that the data pertaining to a country's gross income, output, saving and consumption from different sources should be available.

Without these, planning is not possible. Similarly, the economists propound short-runaswelllong-runeconomicmodelsorlong-runinvestmentmodelsin which the national income data are very widely used.

4. Economic Models:- Economists build short-run and long-run economic models in which the national income data are widely used.

5. For Research:-The national income data are also made use of by the research scholars of economics, they make use of the various data of the country's input, output, income, saving, consumption, investment employment, etc., which are obtained from social accounts.

6. Per-CapitaIncome:-Nationalincomedataaresignificantforacountry'sper capita income which reflects the economic welfare of the country. The higher the per capita income, the higher the economic welfare and vice versa.

7. Distribution of Income:- National income statistics enable us to know about the distribution of income in the country. From the data pertaining to wages, rent, interest and profits we learn of the disparities in the incomes of different sections of the society.

Similarly, the regional distribution of income is revealed it is only on the basis ofthesethatthegovernmentcanadoptmeasurestoremovetheinequalitiesin income distribution and to restore regional equilibrium. With a view to removing these personal and regional disequilibria, the decision stolevy more taxes and increase

public expenditure also rest on national income statistics.

❖ Difficulties or Limitations in the Measurement of National Income

The following points highlight the eight major difficulties in the measurement of national income.

1. Prevalence of Non-Monetized Transactions:-There are certain transactions in India in which a considerable part of output does not come into the market at all.

For example:-Agriculture in which a major part of output is consumed at the farm level itself. The national income statistician, therefore, has to face the problem of finding a suitable measure for this part of output.

2. Illiteracy:-The majority of people in India a re-illiterate and they do not keep any accounts about the production and sales of their products. Under the circumstances the estimates of production and earned incomes are simply guess work.

3. Occupational Specialization is Still Incomplete and Lacking:-There is the lack of occupational specialization in our country which makes the calculation of national income by product method difficult. Besides the crop, farmers are also engaged is supplementary occupations like—dairying, poultry, cloth- making etc. But income from such productive activities is not included in the national income estimates.

4. Lack of Availability of Adequate Statistical Data:-Adequate and correct production and cost data are not available in our country. For estimating national income data on unearned incomes and on persons employed in the service are not available. Moreover data on consumption and investment expenditures of the rural and urban population are not available for the estimation of national income. Moreover, there is no machinery for the collection of data in the country.

5. Value of Inventory Changes:-The value of all inventory changes (i.e., changes in stock etc.) which may be either positive or negative are added or subtracted from the current production of the firm. Remember, if in the change in inventories and not total inventories for they earth at are taken into account in national income estimates.

6. The Calculation of Depreciation:-The calculation of depreciation on capital consumption presents another formidable difficulty. There are no accepted standard rates of depreciation applicable to the various categories of machine. Unless from the gross national income correct deductions are made for depreciation the estimate of net national income is bound to go wrong.

7. Difficulty of Avoiding the Double Counting System:- The very important difficulty which a calculator has to face in measurement is the difficulty of avoiding double counting.

For example:-If the value of the output of sugar and sugar cane are counted separately, the value of the sugarcane utilized in the manufacture of sugar will have been counted twice, which is not proper. This must be avoided for a correct measurement.

8. Difficulty of Expenditure Method:-The application of expenditure method in the calculation of national income has become a difficult task and it is full of difficulties. Because in this method It is difficult to estimate all personal as well as investment expenditures.

Let's sum up

Dear Learners , In this module we learn about Introduction to Economic system, Types of Economic system,National Income –Introduction, Concept of National Income, Factors affecting the National Income, Methods of Measuring the National Income.

Self Assessment Questions

1. Who measure the first national income of India?
   a.Dadabhai Naoroji
   b. William digboi
   c. V.K.R.V Rao
   d. Professor P.C. Mahalanbis
2. The Short form of ITR associated with Income tax stands for?
   a. Income tax return
   b. Income tax revenue
   c. Income tax result
   d. Income tax receipt.
3. Select the right options which is used for measuring the national income.
   a. Income method b. Product Method
   c. Expenditure method d. All of the above
4. which organisation is accountable for calculating the Gross national product of India.
   a. Indian statistical Institute b. RBI
   c. National Statistical Office d. Ministry of commerce Office.
5. which one of the following options is not an example of indirect tx?
   a. custom duty b. Estate duty
   c. Sales tax d. Excise duty

Module 1 completed

Module 2

BUSINESSCYCLE

2.1Meaning of Business Cycle

The term business cycle is referred to the recurrent up sand downs in the level of economic activity that extend over a period of time. The business fluctuations occur in aggregate variable such as national income, employment and price level.

Business cycle is also called as“Trade Cycle”Business Cycle-MartinThomas

2.2 Characteristics of Business Cycle

1. Movement in Economic Activity :- A trade cycle is a wave-like movement in economic activity showing an upward trend and a downward trend in the economy.

2. Periodical:- Trade cycles occur periodically but they do not show the same regularity.

3. Different Phases :- Trade cycles have different phases such as Prosperity, Recession, Depression and Recovery.

4. Types:-There are minor and major trade cycles. Minor trade cycles operate for 3-4 years, while major trade cycles operate for 4-8 years or more. Though trade cycles different timing, they have a common pattern of sequential phases.

5. Duration:-The duration of trade cycles may vary from a minimum of 2years to a maximum of 12 years.

6. Dynamic :-Business cycles cause changes in all sectors of the economy. Fluctuations occur not only in production and income but also in other variables like employment, investment, consumption, rate of interest, price level, etc.

7. Phases are Cumulative :-Expansion and contraction in a trade cycle are cumulative, in effect, i.e. increasing or decreasing progressively.

8. Uncertainty to businessmen:- There is uncertainty in the economy, especially for the business means profits fluctuate more than any other typeof income.

9. International Nature:- Trade Cycles are international in character. For e.g. Great Depression of 1930s.

2.3 Types of Business Cycle

1. The Minor Cycle:- This is also known as Short Kitchin Cycle. This has gained popularity after the name of the British economist Joseph Kitchin in the year 1923. He made a research and came to this conclusion that a cycle takes place within duration of approximately 30 to 40 months.

2. The Major Cycle:-This has been emphasized as the fluctuation of business activity between successive crises. This is also known as “The Long Jugler Cycle.” A French economist Clement Jugler showed that the periods of prosperity, crisis and liquidation followed each other always within a span of the average of nine and half years.

3. The Very Long Period Cycle:-This is also known as Kondratieff Cycle. This was propounded by N. D. Kondratieff the Russian economist in the year 1925. He has written that there are longer waves of cycles of more than fifty years duration.

4. Kuznets Cycle:-This type of business cycle was propounded by the famous American economist Professor Simon Kuznet. His view was that the secular swing of the cycle generally occurs in between 7to 11 years and this canshow effect within that period.

5. Building Cycles:- Such cycles are associated with the name of two American economists namely Warren and Pearson. They expressed their views in World Prices and the Building Industry book in the year 1937. Their view was that business cycle occurs in the duration of an average of 18 years and the cost of such cycle has major effect on building construction and on the industrial development.

2.4Phases of Business Cycle

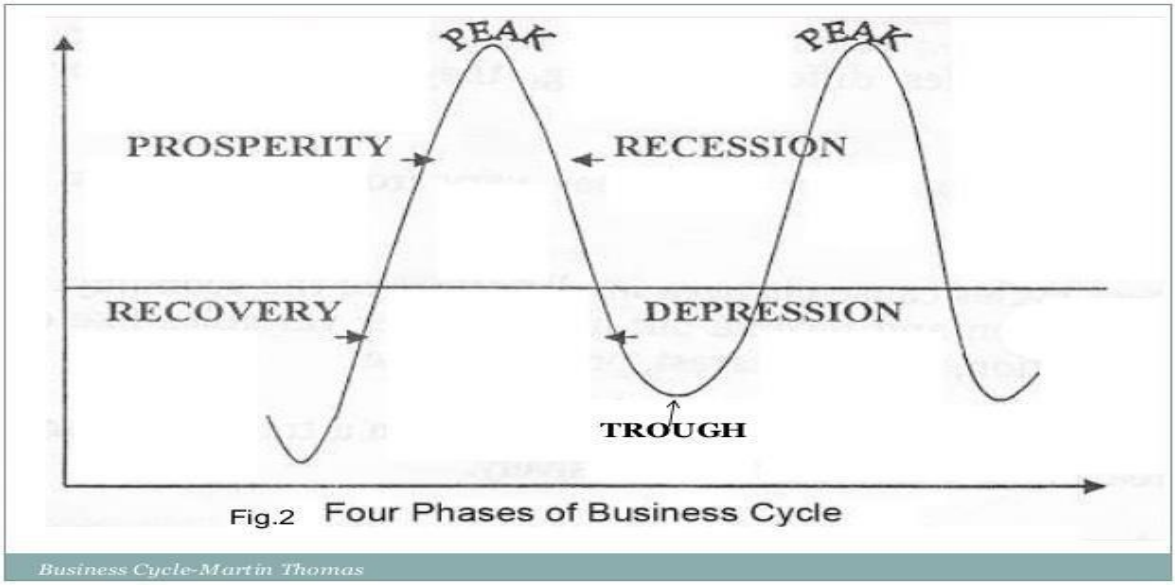


Fig.2 Four Phases of Business Cycle

Business Cycle-Martin Thomas

1. Prosperity: Expansion & Peak When there is an expansion of output, income, employment, prices and profits, there is also arise in the standard of living. This period is termed as Prosperity phase.

- Rise in the national output & trade
- Rise in consumer and capital expenditure
- Rise in the Price of raw materials and finished goods
- Rise in the level of income & employment Business Cycle-Martin Thomas.

2. Recession & Turning Point During a recession period, the economic activities slowdown. When demand starts falling, the over production and future

Investment plans a real so given up. There is a steady decline in the output, income, employment, prices and profits. Business Cycle-Martin Thomas

3. Depression& Trough When there is a continuous decrease of output, income, employment, prices and profits, there is a fall inthe standard of living and depression sets in.

During the phase of Depression:

- The growth rate become negative
- The level of national income and expenditure declines
- Price of consumer and capital goods decline
- Workers lose their job Business Cycle- MartinThomas

4. Recovery Phase As the recovery gathers momentum, some firms plan additional investment; some undertake renovation programmers, and some undertake both. These activities generate construction activities in both consumer & capital goods sector. As a result more employment is generated and wage rates moving upward. Business Cycle-Martin Thomas.

2.5 Causes of Business Cycle

I. Factors of Business Cycle

1. Wars:-In war days all the available resources are utilized for the production of weapons which greatly affect the product of both capital and consumer goods. This fall in production decreases income, profits which further create unemployment. These create contraction in the economic activity.

2. Postwar Period:- In the post war period the level of consumption and investment goes upward. Both the government and individuals involve the construction (houses, roads, bridges etc). All these activities increases the effective due to which the economic variables, output, income and employment goes upward.

3. Scientific Development:- Another cause of business cycle is scientific development. Every day new products come to the markets like mobile phone, laptops etc. These products require huge amount of investment through which new technology of production is adopted. All this increases income, employment and profit etc. and plays an important part in the revival of economy.

4. Gold Discoveries:- The discoveries of gold and mines stimulate the volume of international trade and help in adjusting trade deficit, loans etc. the rising income lead to expansion in economic activity.

5. Surplus, Exports and Foreign Aid:- Surplus, exports and foreign aid raises the level of consumption and investment spending which helps in increasing output, income and employment level.

6. Weather:- Weather is one of the causes of business cycle. It is an important factor which can cause economic activities. If in any year, weather is good the output of agricultural sector will goes upward.

7. Population Growth Rate:- Population growth rate is one the factors of business cycle. If the population growth rate is higher than the economic growth rate, income level and consumption expenditure and savings will be low.

II. Factors of Business Cycle

Internal causes of business cycle are those, which are built In with in economic system. These are the internal factors of business cycle:

1.Psychological Factors:- According to Pigou business cycle appears because of the optimistic and pessimistic mood of the entrepreneur. When entrepreneurs are in optimistic about future market conditions they take up investment. Here the expanses phase of business cycle starts which ultimately ends in a boom.

On the contrary, the pessimism reduces investment, production, employment and shifts to downward trend in business activity.

2.Money Supply:- Hawtrey and Friendman relate trade cycle to fluctuation in money and credit supply. If there is expansion in money and credit supply,

there will be raise in economic activity. If there is contraction there will be down fall in economic activity.

3.Over Investment:- Hayek relates business cycle to variation in capital goods industries. Excessive investment in capital goods industries brings upswing and downswing when there is a fall in investment.

4.Marginal Efficiency of Capital (MEC):-According to Keynes changes in the rate of marginal efficiency of capital are responsible for business cycle. When the rate of marginal efficiency of capital gets higher the expansion phase of tradecyclecommences.Thereisacontractionphasewhentherateofmarginal efficiency of capital is lower.

❖ Measures to Control Business Cycles or Stabilization Policies

Various measures have been suggested and put into practice from time to time to control fluctuations in an economy. They aim at stabilizing economic activity so as to avoid the ill-effects of a boom and a depression. The following three measures are adopted for this purpose.

1. Monetary Policy:-Monetary policy as a method to control business fluctuations is operated by the central bank of a country. The central bank adopts a number of methods to control the quantity and quality of credit. To control the expansion of money supply during a boom, it raises its bank rate, sells securities in the open market, raises the reserve ratio, and adopts a number of selective credit control measures such as raising margin requirements and regulating consumer credit. Thus the central bank adopts a dear money policy. Borrowings by business and trade become dearer, difficult and selective. Efforts are made to control excess money supply in the economy.

- **Limitations of Monetary Policy:**

To control are cession or depression, the central bank follows an easy or cheap monetary policy by increasing the reserves of commercial banks. It reduces the bank rate and interest rates of banks. It buys securities in the open market. It lowers margin requirements on loans and encourages banks to lend more to consumers, businessmen, traders, etc.

But monetary policy is not so effective as to control depression. If the boom is due to cost- push factors, it may not be effective in controlling inflation, aggregate demand, output, income and employment. So far as depression is concerned, the experience of the Great Depression of 1930s tells us that when there is pessimism among businessmen, the success of monetary policy is practically nil.

In such a situation, they do not have any inclination to borrow even when the interest rate is very low. Similarly, consumers who are faced with reduced income sand unemployment cut down their consumption expenditure. Neither the central bank nor the commercial banks are able to induce businessmen and consumers to raise the aggregate demand. Thus the success of monetary policy to control economic fluctuations is severely limited.

the monopolistic and oligopolistic firms raise the price level often more than proportionately. This is done to enhance the profit margins of the firm. If this process of; a hike in the price of the commodity following an increase in the wage money continues, then this is called as ‘profit-wage spiral.’

2.6 Meaning of CONTRACYCLICAL POLICY

The effects of the recent economic crisis have stretched policy frameworks in many OECD countries close to breaking point. Recent work by the OECD has examined how policies have interacted with the economic cycle over time and during the recent crisis. The main policy lessons are as follows:

• Policy-makers should take into account uncertainties about the functioning of the economy, the nature of economic shocks or the effects of policy and take their decisions accordingly.

• Policy in various areas will have to build in greater safety margins and to be more prudent during upswings.

• Appropriate fiscal rules can help prepare fiscal policy for the next downturn by leading to swifter consolidation during the upturn.

• The monetary and financial policy framework needs to achieve a better articulation between economic and financial stability.

• Financial policy needs to strengthen micro-prudential regulation, regulatory interventions may need to target emerging credit-driven bubbles and macro-prudential policies should address systemic risks.

• There may be a case for monetary policy leaning against the wind, if asset prices are driven by a credit boom and financial regulation is judged to be insufficiently robust.

• Changes to structural policy settings can improve the resilience of the economy to shocks and affect the degree of leverage households and firms take on.

2.7 Cycles were changing

Since the mid-1980s, business cycles have tended to become smaller in amplitude and longer during the expansionary phase with fewer recessions. This reduction in macroeconomic volatility was accompanied by greater asset price volatility, while economic and asset price cycles became more synchronised both within and across countries. The flip-side of the great moderation was greater risk- taking, which in combination with financial market innovations fuelled a considerable rise in private-sector debt, which proved to be a source of fragility in many countries. Furthermore, banking systems had become more pro-cyclical and banks became increasingly leveraged with their financing structure shifting away from deposits in many countries. As the pro-cyclicality of the banking sector amplifies cycles in the real economy, financial market instability can lead to severe downturns as demonstrated again by the recent economic and financial crisis.

Uncertainty complicates policy decisions

Deciding the appropriate policy in the face of an economic disturbance is complicated by pervasive uncertainties. Uncertainties may concern the structure of the economy and the nature of the shocks hitting the economy as well as how policy choices affect the economy.

• Shocks originating in financial and housing markets can be particularly costly and macroeconomic policy addressing the shock needs to be aggressive. However, empirical attempts to identify emerging asset price misalignments are prone to sounding false alarms; and the ratio of false alarms to correct predictions can be high, implying costs if policy reacted systematically to such alarms. Risk assessment tools, such as early warning systems, therefore need to be developed further.

• Government deficits are not only affected by economic activity, but also by house and stock price cycles. Policy that did not take into account asset price changes painted too rosy a picture during the upswing prior to the economic and financial crisis. Improved measures of the cyclically- adjusted balance as well as accounting for the impact of asset prices on revenues would improve fiscal policy by helping to ensure that revenue windfalls are not used for permanent tax cuts or spending increases.

• Financial market developments and greater international linkages have made the effects of monetary policy more capricious, making it harder to determine the strength and speed of the required monetary policy impulses. For example, asset price developments and low long-term interest rates helped keep financial conditions loose for some time, despite tighter monetary policy before the economic crisis.

Policies to address financial turmoil

In the financial sector, capital buffers of banks were too small to withstand the losses stemming from the crisis in many countries. Financial sector policy settings need to be reconfigured to damp unnecessary volatility and ensure robust micro-prudential regulation. Prior to the recent crisis, greater risk- taking, in combination with financial market innovations, fueled a considerable rise in private-sector debt, which proved to be a source of fragility in many countries, but not all (Figure 3). Indeed, the differing experiences of countries in the recent crisis suggest that robust micro-prudential regulation can help shield the financial sector from the worst effects, which has been the case in Canada, a country with low interest rates in the build-up to the crisis. Recent international initiatives suggest ways to reduce the pro-cyclicality of the financial system by raising its shock absorption capacity and dealing with incentive problems. The pro-cyclicality of the financial system can be reduced by:

• Aiming at higher, counter-cyclical and possibly contingent capital buffers to strengthen the banking sector's shock-absorption capacity.

• Implementing a system of provisioning for bad loans that provides sufficient buffers during a downturn.

• Better aligning incentives and remuneration packages with long-term shareholder interests.

• Addressing moral hazard problems for systemically important financial institutions that are deemed too important to fail through resolution mechanisms or adequate separation of their activities.

Without strong guidance about the likely direction of asset price movements, monetary policy should adopt a precautionary approach of guarding against an unnecessarily lax stance that may stoke misalignments as well as being prepared to deal with the aftermath of a bubble bursting. That said, detecting large asset price misalignments is feasible and this is particularly the case when exuberant credit growth is fuelling excessive asset price increases, a constellation that also tends to incur higher economic costs when the bubble bursts. A combination of policies would either mitigate some of the costs or help address directly emerging asset price booms:

• Sound financial market regulation and supervision should be the first line of defence.

• More targeted interventions, such as changing maximum loan-to-value ratios, may be warranted when there is concern that an asset price misalignment is emerging.

• In the absence of sufficiently robust financial market oversight, monetary policy will need to be vigilant. When an asset price boom is associated with strong credit growth, monetary policy can be effective through altering the price of leverage. In light of the costs of the recent crisis, consideration should be given to using monetary tools if micro and macro-prudential policies are insufficiently robust, even if these tools are not best suited to counteracting asset price bubbles. The need to avoid destabilising the economy and to maintain inflation expectations well- anchored nonetheless constrains such "leaning against the wind", which may be particularly circumscribed in small, open economies.

The financial crisis has highlighted that the regulatory and supervisory focus on individual institutions may not sufficiently take into account systemic risks. Adding oversight at the macro-prudential level as an overarching layer on

top of micro-prudential supervision of financial markets would help detect the building-up of vulnerabilities. Better macro-prudential oversight would draw different sets of policy makers together and foster a better dialogue between monetary policy makers and regulators and supervisors with a shared macro-prudential focus.

Let's sum up

Dear Learners , In this module we learn about Meaning of Business cycle, characteristics, Types of business cycle, Phases of Business cycle, causes of business cycle, Meaning of contra cyclical policy, cycles were changing.

Self-Assessment Questions

1. A variable that tends to move later than aggregate economic is called

a. A leading variable b. a coincident variable

c.a lagging variable d. a cyclical variable

2. During recession, the unemployment rate ---------- and output ----------.

a. rise; falls b.rises,; rises

c.falls; rises d. falls; rises

3. Which of the following is not an example of coincident indicator?

a. Industrial production b. Inflation

c. Retail sales d. New orders for plant and equipment

4. select odd out.

a. Expansion b. Boom

c. Upswing d. Thought

5.Greater depression suffered by an economy in which year

a. 1924 b. 1930

c. 2008 d.2009

Module 2 completed

Module 3

ECONOMIC POLICIES IN INDIA

3.1 Introduction

Economic policies of the government of India suggest the system for taxation, and also the budget of this county, not only that but also it includes the currency and the rate of interest. The market of labour and also the national ownership are an integral part of economic policies of India. India has various economic policies which are industrial policy, trade policy, monetary policy, fiscal policy, Indian agricultural policy, National agricultural policy, industrial policies, International trade policy in India, exchange rate management policy, EXIM policy.

The plan of the economic policies in India was first conducted in 1947. But after the advent of the economic crisis in 1991, the government of India reforms the policies of economics in India.

Industrial Policy

The stress of these policies is on the public sector of India in 1948. This policy is handled by the development and regulation act 1951. 1973's FERA handles the foreign investment in India. After the 1991's economic crisis these governments took strong steps in order to make the industries in India and also introduced the industry more competitive.

Trade Policy

The foreign trade policy of India focuses on enhancing the share of India in universal trade from 2.1% to 3.5%. Most importantly, the trade of this country India became $900 billion in the financial year of 2020.

Monetary Policy

This policy in India majorly deals with the monetary authority of this country and it includes the central bank. It handles the allocation and also the supply of money, rate of interest in order to present the high growth of the economy in India.

Fiscal Policy

This policy controls taxation and the decision of expenditure from the perspective of the government of India. This government takes strong steps to strengthen the control of the expenditure of this country. Through the initiative of this government, the contribution of the resources and the principles of the market have been improved.

Indian Agricultural Policy

This policy mainly includes the reformation of the land in India. The strategies regarding agriculture and the use of innovative technology in agriculture are also the concern of this policy. Most importantly, the policy of prices of the goods, security and safety of the foods, and also the public distribution system, service regarding non-firms are also an integral part of this policy.

National Agricultural Policy

Through this policy, the annual development rate regarding agriculture has been increased. Reformation of land includes reform of tenancy, advancement of land-lease markets, and the rights of women regarding land. This policy also aims to bring equal development regarding the agriculture of the country of India.

Industrial Policies

Regarding these policies, the industrial policy resolution was taken in 1948 to add democratic socialism to the structure of the economy in India. The new policies regarding industries suggest the expansion of the responsibilities of the states under India, decrease of the threats of nationalization and all.

International Trade Policy

This policy includes free trade in India. Free trade suggests the smooth trade of a country. In the mid 19th century, the government of India modified the trade international trade policies. The main aim of these policies is to make the economy of the country India strong.

Exchange Rate Management Policy

This policy is also known as the pegged exchange rate. This policy includes the flexibilities in the exchange rate. There is the upper and lower limit of the exchange rate. If the up and down rate is 1%, then the rate of exchange is in a normal state. The main purpose of these policies regarding exchange rate is to assure stability regarding foreign trade and capital movement.

EXIM Policy

EXIM policy suggests the export and import policies in India. Through these policies, the guidelines have been fixed regarding export and import. The government of this country India introduced these policies for five years in the control of the development and regulation act 1992 regarding foreign trade.

Conclusion

From the above discussion, it can be said that the economic policies are vital in the perspective of any country, especially in India in order to make the development of its economy. The condition of the economy depends on the trade of this country. In order to maintain international trade, it is important to introduce well-structured economic policies. India has followed this strongly in every perspective. Through the maintenance of these economic policies, this country tries to maintain its growth in the upcoming days.

3.2 Meaning of ECONOMIC PLANNING-

Economic planning is the process through which we can take the decisions of what and how it is to be produced through controlling and managing the economic activity. It is an economic programme speculated for the development of the regional economic system.

"Economic Planning is essentially a way of organizing and utilizing resources to maximum advantage in terms of social ends."

3.3 Characteristics or Features of Economic Planning-

The **features of economic planning** include various points such as:-

(A) A system of Economic Organization-

In this first **features of economic planning, it** consists of various comprehensive activities of production, consumption, distribution, exchange, and finance are planned and defined in a coordinated manner to attain various economic and social objectives.

(B) Determination of Target and Priorities-

In this, the economic and social targets are well defined in the process of economic planning. A certain priority is also determined for these targets.

(C) Central Planning-

All the activities of economic planning are performed by the central planning authority. This authority is known as the planning commission. All the decision are taken by this authority.

(D) Certain Period-

The process of economic planning involves the determination of economic plans for a certain or specific period. **For Example**– In India, an economic plan is purposed for 5 years. After completing one five year plan another plan is launched.

(E) Government Regulation and Control-

Economic planning is a government affair. All plans are determined, regulated, and controlled by the government (generally central government). All the major source of data (related to economy planning) is managed by the government and its team.

(F) Economic and Social Government-

The main motive of economic planning is economic development and social welfare. All possible efforts are made to achieve balanced growth.

3.4 Importance of Economic Planning-

The **importance of economic planning** is also known as the **scope of economic planning**. It includes various points such as:-

(A) Reliable Statistical Data-

Economic planning is dependent heavily on statistic so that there can be the proper fixation of targets and priorities.

(B) Suitable Economic Organization-

The Planning commission was set up in India with the desired objective of attaining economic stability and social welfare. This organization will streamline the production, consumption, distribution, and exchange mechanism to attain desired results.

(C) The existence of Strong and Stable Government-

The progress of the nation rests on the shoulders of the central government. A strong and progressive government will provide a sound infrastructure for economic planning.

(D) Maintenance of Proper Balance-

A proper balance between agriculture and industry, public and private sector, urban and rural areas, cotton and heavy industries should be maintained thus, resulting in economic progress.

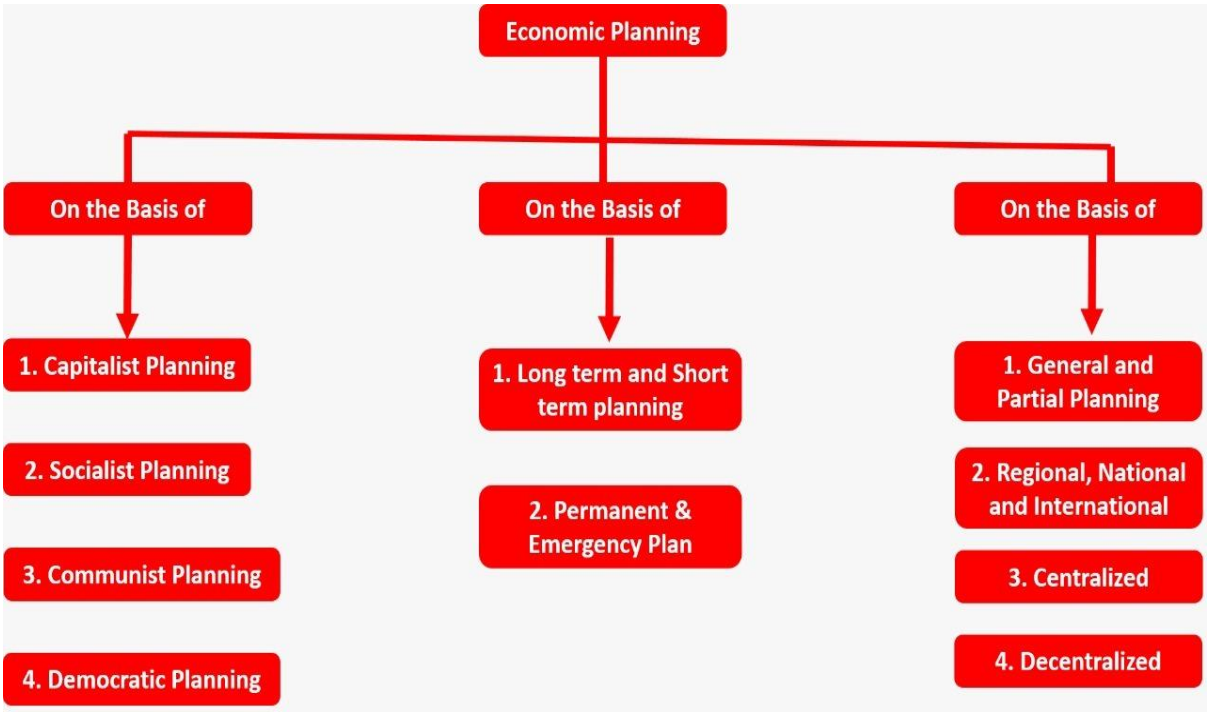
(E) Proper fixation of Target and Priorities-

Priorities are set up in the progress of economic planning. A certain priority order is determined for the attainment of these targets. The focus is on more economic and social targets.

(F) Efficient and Clear Administration-

Economic planning will be effective only when the administration is a sound one and free from the roots of corruption. All the policies should be progressive and should lay a lot of emphasis on human development.

3.5 Types of economic planning



types of economic planning are divided into three categories such as:-

1.On the basis of-

- Capitalist Planning
- Socialist Planning
- Communist Planning
- Fascist Planning
- Democratic Planning

2. On the basis of-

- Long Term & Short Term Planning
- Permanent & Emergency Plan

3. On the basis of-

- General & Partial Planning
- Regional, National, & International
- Centralized & Decentralized

On the basis of-

(A) Capitalist Planning-

It is planning adopted by the capitalist country. All the resources are managed, controlled, and regulated by private entrepreneurs or companies.

(B) Socialist Economy-

It is a specific way between capitalist planning and communist planning and also the resources are owned and regulated by the government (whether it is central or state).

(C) Communist Planning-

This **types of economic planning** are adopted by the communist countries. All the resources are owned, managed, and regulated by the government.

(D) Fascist Planning-

The planning is regulated, directed, and controlled by the individual. An individual is the head of the state to take efficient and important decisions.

(E) Democratic Planning-

This **type of planning** is adopted in mixed economies both the public and the private sector work under government rules & regulations in control. In this planning, the government provides the code of conduct to all companies for explaining the purpose of how to work in an economy.

On the basis of-

(A) Long Term & Short Term Planning-

When the plan is drafted for a long period of time. Say 5 to 10 years, it is called long term planning.

When the plan is drafted for a short period of time, say less than a year, it is regarded as short term planning.

(B) Permanent & Emergency Plan-

A permanent plan exists for a longer period of time and is fixed for a longer time period. **For Example**– 5-year plan.

Emergency planning is a plan which is used to deal with emergency situations such as floods, etc.

On the basis of other factors-

(A) General & Partial Planning-

It is planning for the economy as a whole and economic planning for a particular part of the economy is called partial planning.

(B) Regional, National, & International-

When the economic plan is drafted for a regional level is called Regional Planning. Similarly, the economic plan drafted for a national level is called as national planning and finally, an economic plan which is crossing the boundary of countries it is called international planning.

(C) Centralized & Decentralized-

The economic plan drafted by a central or head authority is known as centralized planning. While planning done by regional authority it is known as decentralized planning.

3.6 objectives of economic planning

3 main **objectives of economic planning** are classified as follows:-

1. Economic Objectives
2. Social Objectives
3. Political Objectives

1.Economic Objectives-

This is the first part of **objectives of economic planning** and it includes various sub-points such as:-

(A) Better Utilization of National Resources-

Economic planning ensures the better utilization of natural resources such as water resources, land resources, mineral resources, and forest resources.

(B) Full Employment-

Unemployment is the root cause of concern for any nation. Economic planning ensures full employment opportunities to prospective employees with desired skills and abilities.

(C) Promoting Balanced Development-

There should be balanced between agricultural and industrial development, rural and urban development, economic and social development, and so on.

(D) Minimizing Economic Inequalities-

Effective economic planning leads to minimization of inequalities that results in differences in the distribution of wealth and incomes. The ultimate **objectives of economic planning** are that wealth should be distributed equally among the masses.

(E) Maximum Production & Productivity-

Economic planning can result in better utilization of resources and appropriate use of technology to increase the production and enhancing the productivity of employees.

(F) Promoting Standard of Living-

Economic planning ensures a better quality of products is provided to the various members of the society ensuring a better standard of living.

(G) Attaining Self Reliance-

The best efforts are made to promote exports and to channelize industrial development of the country in such a manner that dependence on imports is minimized.

(H) Economic Security & Stability-

It ensures fair remuneration to workers, a fair return to investors, reasonable returns to entrepreneurs.

2. Social Objectives-

This is the second part of **objectives of economic planning** and it includes various sub-points such as:-

(A) Social Security-

It deals with old age, pensions, unemployment, allowances, accidental insurances, and so on.

(B) Social Welfare-

Economic planning ensures better facilities in education, accommodation, medical, recreation, transport facilities, and so on.

(C) Social Equality-

Equal opportunity for development is provided to way citizen of the country irrespective of the caste, religion, gender, and so on.

3. Political Objectives-

This is the third part of **objectives** and it includes various sub-points such as:-

(A) Promoting Defense-

Defense from for foreign attacks and aggression is an important objective of economic planning.

(B) Promoting Internal Peace-

Maintenance of law, order and internal peace is an essential condition for a social and economic department.

(C) Satisfying the Political Ego-

Economic planning has been adopted by different political parties as a tool to satisfy their political ego. There are various changes in economic plans and policies a change in government.

Let's sum up

Dear Learners , In this module we learn about Introduction to Economic Planning, Meaning, characteristics, Importance, types and Objectives of Economic Planning. .

Self-Assessment Questions

1. Who was the last deputy chairman of the planning commission?
   a. Shri R.P. Sinha
   b. Shri shyamal ghosh
   c. Shri vinay kohil
   d. Shri montek singh Ahluwalia
2. In which year was the 12th plan completed?
   a. 2016 b. 2015
   c.2017 d. 2014

3. what was brought in place of the planning commission in 2014?
a. NITI Aayag b. Stand Up India scheme
b. NABARD d. SEBI

4. When was first ive yer plan implemented?
a. 1928 b. 1922
c. 1924 d. 1926

5. What was the aim of the first five year plan?
a. Rebuild the country after partition
b. promote Industry and agriculture
c. Affordable healthcare and education
d. All of the above

UNIT SUMMARY

Dear learners in this unit we discussed about ,

- Introduction to Economic system, Types of Economic system,National Income –Introduction, Concept of National Income, Factors affecting the National Income, Methods of Measuring the National Income.
- Meaning of Business cycle, characteristics, Types of business cycle, Phases of Business cycle, causes of business cycle, Meaning of contra cyclical policy, cycles were changing

- Introduction to Economic Planning, Meaning, characteristics, Importance, types and Objectives of Economic Planning.
-

WEB RESOURCES:

1.https://www.nber.org/system/files/chapters/c8136/c8136.pdf

2.https://egyankosh.ac.in/bitstream/123456789/38007/1/Unit-1.pdf

Module 3 completed

UNIT – V

Commodity and Money Market

Commodity and Money Market: Demand and supply of Money – Money Marek Equilibrium – Monetary policy – Inflation – Deflation – Stagflation –Role of Fiscal Policies – Indian fiscal policies – Government policy towards foreign capital and foreign collaboration – globalization and its impact. Cashless Economy and digitalized cash transfer; Economic models and its steps; FEMA – GST- Industrial policy in India and its effects on growth.

Unit Module Structuring

1. Commodity and Money Market
2. Demand and Supply
3. Role of Fiscal Policy
4. Cashless Economy and Digitalized transfer

Self LearningMaterila Development – Stage 1

Table of content for the unit 5

2.9 Stagflation concept 2.10 Stagflation VS Inflation		
3 Role of fiscal policy 3.1 Introduction to Fiscal policy 3.2 Objectives 3.3 Techniques 3.4 Globalization and its impact 3.5 Government policy towards Foreign Capital and foreign collaboration	3	
4.Cashless Economy & Digitalized Cash Transfer 4.1 Introduction 4.2. Methods 4.3 characteristics 4.4 Government Initiatives 4.5 FEMA - Introduction 4.6 FEMA concept 4.7 GST –Industrial Policy in India 4.8 Structure of GST.	4	

Unit Objectives

- To identify and Analyze the commodity and Money market
- To understand the Demand and supply of the Money concept.
- To Understand the Fascial Policy Ideas.
- To Interpret the digitalized Money transfer concepts.

1.1 INTRODUCTION TO COMMODITY AND MONEY MARKET

A commodity market is a marketplace for buying, selling, and trading raw materials or primary products.

Commodities are often split into two broad categories: hard and soft commodities. Hard commodities include natural resources that must be mined or extracted, such as gold, rubber, and oil, whereas soft commodities are agricultural products or livestock, such as corn, wheat, coffee, sugar, soybeans, and pork.

A commodity market involves buying, selling, or trading a raw product, such as oil, gold, or coffee. There are hard commodities, which are generally natural resources, and soft commodities, which are livestock or agricultural goods.

Spot commodities markets involve immediate delivery, while derivatives markets entail delivery in the future.

Investors can gain exposure to commodities by investing in companies that have exposure to commodities or by investing in commodities directly via futures contracts.

The major U.S. commodity exchanges are ICE Futures U.S. and the CME Group, which holds four major exchanges: the Chicago Board of Trade, the Chicago Mercantile Exchange, the New York Mercantile Exchange, and the Commodity Exchange, Inc.

How Commodity Markets Work

Commodities markets allow producers and consumers of commodity products to gain access to them in a centralized and liquid marketplace. These market actors can also use commodities derivatives to hedge future consumption or production. Speculators, investors, and arbitrageurs also play an active role in these markets.

Certain commodities, such as precious metals, have been thought to be a good hedge against inflation, and a broad set of commodities as an alternative asset class can help diversify a portfolio. Because the prices of commodities tend to move in opposition to stocks, some investors also rely on commodities during periods of market volatility.

In the past, commodities trading required significant amounts of time, money, and expertise, and was primarily limited to professional traders. Today, there are more options for participating in the commodity markets.

History of Commodity Markets

Trading commodities goes back to the dawn of human civilization as tribal clans and newly established kingdoms would barter and trade with one another for food, supplies, and other items. Commodity trading predates that of stocks and bonds by many centuries. The rise of empires such as ancient Greece and Rome can be directly linked to their ability to create complex trading systems and facilitate the exchange of commodities across vast swaths via routes like the famous Silk Road that linked Europe to the Far East.12

Today, commodities are still exchanged throughout the world—and on a massive scale. Trading has also become more sophisticated with the advent of exchanges and derivatives markets. Exchanges regulate and standardize commodity trading, allowing for liquid and efficient markets.

Perhaps the most influential modern commodities market is the Chicago Board of Trade (CBOT), established in 1848. The CBOT originally traded only agricultural commodities such as wheat, corn, and soybeans in order to help farmers and commodity consumers manage risks by removing price uncertainty from those agricultural products.3

Today, it lists options and futures contracts on a wide range of products including gold, silver, U.S. Treasury bonds, and energy products. The Chicago Mercantile Exchange (CME) Group merged with the Chicago Board of Trade (CBOT) in 2007, adding interest rates and equity index products to the group's existing product agricultural offerings.4

Some commodities exchanges have merged or gone out of business. In the U.S., the Chicago Mercantile Exchange (CME) acquired three other commodity exchanges in the mid-2000s.

First, CME acquired the Chicago Board of Trade (CBOT) in 2007, and then in 2008 acquired the New York Mercantile Exchange (NYMEX) and the Commodity Exchange, Inc. (COMEX).56 All four exchanges make up the CME Group. Also in 2007, the New York Board of Trade merged with Intercontinental Exchange (ICE), forming ICE Futures U.S.
Intercontinental Exchange. "ICE Futures U.S."
Each exchange offers a wide range of global benchmarks across major asset classes.

1.2 TYPES OF COMMODITY MARKETS

Generally speaking, commodities trade either in spot markets or derivatives markets. Spot markets are also referred to as “physical markets” or “cash markets” where buyers and sellers exchange physical commodities for immediate delivery.

Derivatives markets involve forwards, futures, and options. Forwards and futures are derivatives contracts that use the spot market as the underlying asset. These are contracts that give the owner control of the underlying asset at some point in the future, for a price agreed upon today. Only when the contracts expire would physical delivery of the commodity or other asset take place, and often traders will roll over or close out their contracts in order to avoid making or taking delivery altogether.

Forwards and futures are generally the same, except that forwards are customizable and trade over-the-counter, whereas futures are standardized and traded on exchanges.

Examples of Commodities Markets

The major exchanges in the U.S., which trade commodities, are domiciled in Chicago and New York with several exchanges in other locations within the country. Commodities traded on the CBOT, for example, include corn, gold, silver, soybeans, wheat, oats, rice, and ethanol.9 The Chicago Mercantile Exchange (CME) trades commodities such as milk, butter, feeder cattle, cattle, pork bellies, lumber, and lean hogs.10

The New York Mercantile Exchange (NYMEX) trades commodities on its exchange such as oil, gold, silver, copper, aluminum, palladium, platinum, heating oil, propane, and electricity.11 Formerly known as the New York Board of Trade (NYBOT), ICE Futures U.S. commodities include coffee, cocoa, orange juice, sugar, and ethanol on its exchange.1213

The London Metal Exchange and Tokyo Commodity Exchange are prominent international commodity exchanges.

1.3 Commodity Market Requirements

In the U.S., the Commodity Futures Trading Commission (CFTC) regulates commodity futures and options markets. The CFTC's objective is to promote competitive, efficient, and transparent markets that help protect consumers from fraud and unscrupulous

practices. The CFTC and related regulations were designed to prevent and remove obstructions on interstate commerce in commodities by regulating transactions on commodity exchanges. For example, regulations look to limit, or abolish, short selling and eliminate the possibility of market and price manipulation, such as cornering markets.

The law that established the CFTC has been updated several times since it was created, most notably in the wake of the 2007-2008 financial crisis. The Dodd-Frank Wall Street Reform and Consumer Protection Act gave the CFTC authority over the swaps market, which was previously unregulated.14

Commodity Futures Trading Commission. "Data Repositories."

Commodity Market Trading vs. Stock Trading

For most individual investors, accessing commodities markets, whether spot or derivatives, is untenable. Direct access to these markets typically requires a special brokerage account and/or certain permissions. Because commodities are considered an alternative asset class, pooled funds that traded commodities futures, such as CTAs, typically only allow accredited investors. Still, ordinary investors can gain indirect access to commodities via the stock market itself. Stocks on mining or materials companies tend to be correlated with commodities prices, and there are various ETFs now that track various commodities or commodities indexes.

Investors looking to diversify their portfolio can look to these ETFs, but for most long-term investors stocks and bonds will make up the core of their holdings. Moreover, because commodity prices tend by more volatile than stocks and bonds, commodities trading is often most suited for those with higher risk tolerance and/or longer time horizon.

How Do I Find Out How the Commodity Markets Are Doing Today?

Many online financial portals will provide some indication of certain commodities prices such as gold and crude oil. You can also find prices on the websites of commodity exchanges.

What Do Commodities Traders Do?

Commodities traders buy and sell either physical (spot) commodities or derivatives contracts that use a physical commodity as its underlying. Depending on what type of trader you are, you will use this market for different purposes, for instance, buying or selling a physical product, hedging, speculating, or arbitraging.

Are Commodities a Good Investment?

Like any investment, commodities can be a good investment but also come with risks. To invest in commodities, an investor needs to understand the markets of the commodity they wish to trade in. For example, oil prices can fluctuate based on the political climate in the Middle East, so a trader should be well-versed in current events in that area.

The type of investment also matters. ETFs provide more diversification and lower risks, whereas futures are more speculative and the risks are higher because of margin requirements.

That being said, commodities can be a hedge against inflation, and gold, in particular, can be a hedge against a market downturn.

How Do Commodities Markets Work?

For spot markets, buyers and sellers exchange cash for immediate delivery of the physical product. In derivatives markets, buyers and sellers exchange cash for the right to future delivery of that product.

Oftentimes, derivatives holders will roll over or close out their positions before delivery can happen. Forwards trade over-the-counter and are customized between counterparties. Futures and options are listed on exchanges and have standardized contracts that are more highly regulated.

What Are Some Examples of Commodities?

There are several commodities available. Energy products include crude oil, natural gas, and gasoline. Precious metals include gold, silver, and platinum. Agricultural products include wheat, corn, soybeans, and livestock. Other commodities you can trade are coffee, sugar, cotton, and frozen orange juice.

Commercial Papers

- Commercial papers work more like the bill of exchange.
- They are specifically issued by businesses to meet their short-term money requirements.
- The commercial papers provide greater liquidity due to easy transfer from one individual to another in case of immediate requirement of cash.
- They usually have a validity of 7 days to one year from the date of issue.
- They are issued at a discount, with the difference between the face value and their price, bringing profits to the investor.

Certificate of Deposits

The Certificate of Deposits or CDs are a negotiable instrument referred to as term deposits. They are accepted by the commercial banks.

They are usually issued through a promissory note.

The CDs can be issued to trusts, person(s), corporations, etc. Besides, they can be issued by scheduled commercial banks at a discount as well.

The duration of the certificate of deposits varies between 1 year to 3 months. However, when they are issued by a financial institution, the certificate of deposits are valid from 1 year to 3 years.

Cash Management Bills

Since August 2009, the government of India, along with the RBI, decided to issue a new short term instrument, known as Cash Management Bills.

These bills intend to meet the temporary cash flow mismatches of the government.

The cash management bills are non-standard and discounted instruments issued for the maturities less than 91 days.

The bills have the generica character of treasury bills and are tradable. They qualify for ready forward facility, investment in it is considered as an eligible investment in the government securities by the banks for Statutory Liquidity Ratio (SLR).

Banker's Acceptance (BA)

It is a document that promises future payment which is guaranteed by the commercial banks.

The banker's acceptance is used in the money market funds and specifies the details of repayments like the amount to be paid, date of repayment, and details of the individual to whom the repayment is to be made.

Its maturity period ranges from 30 days to 180 days.

Repurchase Agreements (Repo)

- Also called Reverse Repo or simply Repo, they are loans of short duration which are agreed by the buyers and the sellers for the purpose of buying and repurchasing.
- These transactions are carried out only between the parties approved by the RBI.
- You might also be interested in: Cross-selling & Up selling in Banks study notes!

1.4 MONEY MARKET

Money market enables the trading of short-term debt investments at wholesale and retail levels.At wholesale level, it involves huge volume trades between traders and institutions. Whereas, at retail level, it includes money market mutual funds purchased by individual investors and bank customers who open money market accounts.

Money market comprises negotiable instruments like certificates of deposits, commercial papers, treasury bills, etc.

The market is considered as a safe haven for investment for the reason that it involves highly liquid securities.

Banking and finance aspirants can learn more about the money market in the following article. We shall explore more on the meaning, features, objectives, types, and instruments.

Overview

As per the Reserve Bank of India (RBI), the term Money Market is referred to as a market where short-term financial assets are traded. These assets have a maturity

period of either one year or less. The assets are a close substitute for money and enable money exchange in the primary and secondary markets.

The money market is a systemized framework which enables the borrowing and lending of instruments that are usually for a basis of less than a year.

Under the financial market, there are two categories of Money Market and Capital Market.

Typical features of the money market suggest that it bears high liquidity and short maturity. The components of the money market are non-banking finance corporations (NBFCs), acceptance houses, and commercial banks.

The dealings made are not of money or cash but other instruments like promissory notes, government papers, trade bills, etc.

The transactions in the money market do not take place through brokers. Rather, they are carried out through oral or written communication or formal documentation.

1.5 Objectives and Functions

Providing short term funds at reasonable prices to individual investors, government, etc.

Enabling lenders to turn their idle funds into a productive investment, benefitting both the lender and the borrower.

As the Reserve Bank of India regulates the money market, it in turn helps in regulating the levels of liquidity in the economy.

Providing necessary funds to organizations that are short on working capital requirements.

Financing the government sector for both national and foreign trade.

Money Market Functions

The money market significantly contributes to the stability and development of an economy by providing short-term liquidity to the commercial banks, large organizations, and the government.

Investors possessing excess money that they are no more in need of, can invest in the money market to derive interest and earn profits.

The main functions of the money market include:

Trade financing:

The money market provides finances to the local as well as international trades that are in urgent need of short term funds. It provides a benefit to discount bills of exchange, providing immediate financing to pay for the goods and/ or services.

Learn more about MCLR, here.

Central Bank Policies:

The central bank is entrusted for guiding the monetary policies of the country. It is also responsible for taking measures to make sure the financial system is working properly. Through the money market, the central bank is able to perform its policy-making functions in a proper and timely manner.

Enabling industrial growth:

The money market offers an easy framework to the businesses to obtain short-term loans to suffice their working capital needs. Although the money markets do not help in obtaining long-term loans, they can help businesses to obtain long-term financing. These activities enable industrial growth to a great extent.

Self-sufficiency to commercial banks:

The money markets help provide the commercial banks with a ready market to invest their excess funds and earn interest along with keeping with the liquidity. Short term investments in the form of bills of exchange can be easily converted into cash in order to support customer withdrawals.

1.6 Types of Money Market

The Money Market in India is not an integrated unit and has two segments:

Unorganized Money Market

Organized Money Market

Now, let us see about these two segments in more detail as below:

Unorganized Money Market

The unregulated non-banking financial intermediaries function in the form of chit funds, nidhis, and loan companies.

Indegenous bankers receive deposits and lend money to the extent of an individual or private firm. There are four such bankers in the country presently functioning as non-homogenous groups such as Gujarati Shroffs, Multani or ShikarpuriShroffs, Chettiars, and Marwari Kayas.

There are two forms of money lenders as:

The professional money lenders who lend their own money as a profession in order to derive income through interest.

The non-professional money lenders who might be businessmen and lend their money to derive interest income as a secondary business.

Organized Money Market

Following are the types of organized money markets in India:

- Treasury bill
- Cash management bills (CMBs)

- Certificates of Deposits (CDs)
- Commercial Papers (CPs)
- Commercial bills
- Money market mutual funds (SEBI)
- Repo/ Reverse Repo Market
- Discount & Finance House of India (DFHI)

The money market instruments are mostly regulated by the RBI, except for mutual funds. The mutual funds are regulated by the Securities and Exchange Board of India (SEBI).

Depending upon the tenures, within a year, the money market is classified into:

Overnight or call market: Transaction tenure of one working day.

Notice money market: Transaction tenure from 2 days to 14 days.

Term money market: Transaction tenure from 15 days to one year.

Types of Money Market Instruments in India

In this section we shall see the different types of money market instruments in India as listed above:

Treasury Bills

Treasury bills or TBs are known to be one of the safest money market instruments that are available. They are issued by the central government.

Treasury bills carry low or no risks, hence their returns are not attractive. However, they come with different maturity tenures like 3 months, 6 months, 1 year.

They are also circulated by the primary and secondary markets.

The interest earned by the buyer is the difference between the maturity value of the instrument and the buying price of the bill, which is decided with the help of biddings done through auctions.

Repurchase Agreements (Repo)

Also called Reverse Repo or simply Repo, they are loans of short duration which are agreed by the buyers and the sellers for the purpose of buying and repurchasing.

These transactions are carried out only between the parties approved by the RBI.

You might also be interested in: Cross-selling & Upselling in Banks study notes!

Let's sum up

Dear Learners , In this module we learn about Introduction to Commodity market, Types, Requirements. Introduction to Money market, Objectives and functions and types of money market.

Self Assessment Questions

1. SEBI was established in the year
   a. 1992 b. 1988
   b. 1990 d.1989
2. SEBI Act was passed in
   a. 1988 b. 1990
   c.1991 d. 1992

3. the objectives of SEBI include ----------

   a. to protect interest of inventors

   b. to regulate securities market

   c. to promote the development of the market

   d.all of the above

4. . the regulatory body of the securities market in India is ----------

   a. RBI b. SEBI

   c.IRDA d. Stock exchanges

5. who appoints the chairman of SEBI?

   a. Central govt b.Stock exchanges

   c. Brokers d.Investors

Module 1 completed

Module 2

Demand and Supply of Money

2.1 Introduction

Money offers liquidity, which generates a trade-off between both the liquidity benefit of money and the interest benefit of other assets

The quantity of money demanded varies in inverse proportion to the interest rate

Money supply is the total quantity of monetary assets accessible in an economy at any one time, whereas money demand is the desired holding of financial assets

Demand for money

Money is an asset and thus the demand for money exists because the public wants to own it. Of course, the reason for holding money and the time period for which it is held differs from person to person. The total amount of money demanded in an economy is

thus the total amount of money demanded by all individuals/households in that economy.

The supply of money in an economy at any point in time refers to the amount of money held by households and businesses for transactions and debt settlement. We exclude money held by the government and money held by the commercial banking sector from commonly accepted measures of money supply.

In economics, demand for money is commonly associated with cash or bank demand deposits. In general, the nominal demand for money increases with the level of nominal output and decreases with the nominal interest rate.

The demand for money is influenced by a variety of factors, including income level, interest rates, inflation, and future uncertainty.

The impact of these factors on money demand is typically explained in terms of the three motives for demanding money:

Transaction motive – It refers to the demand for money to meet the current needs of individuals and businesses.

Precautionary motive – It refers to people's desire to save money for various contingencies that may arise in the future.

Speculative motive – It refers to the motivation of individuals to hold cash in order to profit from market movements regarding future changes in the interest rate.

2.2 DEMAND AND SUPPLY OF MONEY: Motives

A Detailed Analysis:

Money is the most liquid of all assets and can be exchanged for other commodities very easily

On the other hand, it has an opportunity cost of the interest foregone, that could have been earned by putting that money into for instance a Fixed Deposit, instead of holding it in cash

While deciding on the amount of money to be held at a certain point of time, the consideration of the trade-off between the advantage of liquidity and the disadvantage of the foregone interest, has to be considered. As a result, demand for plutocratic equilibrium is sometimes referred to as liquidity preference.

Money is held for **two broad motives**: transaction motive and speculative motive.

Transaction Motive:

The top subject for holding a capitalist is to bear out deals.

The expenditure pattern generally does not meet our receipts, that is the time at which money is received and the time at which expenditure transactions are conducted from that amount of money, are different.

For instance, a salary of Rs.100 is received on the first day of the month, but expenditures from this amount are evenly spread throughout the month .

While transactions are conducted, money changes hands, that is, it moves from one entity to another .

The composition of times a unit of plutocrat fluxes hands during the unit period is called the haste of rotation of capitalist.

The total value of annual transactions in an economy includes transactions in all intermediate goods and services and is much greater than the nominal GDP.

Still, typically, there exists a stable, positive relationship between value of deals and the nominal GDP.

An addition in nominal GDP implies an increase in the total value of deals and hence a lesser sale demand for capitalists.

Sale demand for capitalists is appreciatively related to the real income of a frugality and also to its average price position.

Speculative Motive:

Speculation means the assumptions about the future value of a commodity/ asset etc

In case people in an economy have positive speculation about the future prices of an asset like say bonds etc. they would convert their current money holding into bonds, to make profits in the future

However, if they speculate that the prices of bonds will go down in the future, they will convert their current bond holdings into money, to prevent future losses.

Supply of Money:

The things that constitute money are as follows:

Currency notes and coins issued by the monetary authority of the country.

In India currency (notes) are printed by the Reserve Bank of India (RBI).

Coins are put out by the Government of India. In accordance with the Coinage Act, 1906, as modified from time to time, the Government of India is responsible for coinage.

The equilibration in savings, or current account deposits, held by the public in marketable banks is also considered plutocrat since cheques drawn on these accounts are used to settle deals.

Such deposits are called Demand Deposits, as they are available on demand of the account holder.

Deposits having a fixed period to maturity for example fixed deposits.

Legal Definitions of Money Supply:

The value of the currency notes and coins is derived from the guarantee provided by the issuing authority (the RBI)

The value of the paper itself in a Rs.100 note is negligible

Currency notes and coins are thus called edict capitalist. They don't have natural value like a gold or grey coin.

Currency notes and coins are also called legal tenders as they cannot be refused by any citizen of the country for agreement of any kind of sale.

Cheques drawn on savings or current accounts, still, can be refused by anyone as a mode of payment. Hence, demand deposits aren't legal tenders.

The full stock of capitalists in rotation among the public at a particular point of time is called plutocrat force (Stock Variable).

RBI publishes numbers for four indispensable measures of plutocrat force,

M1 = CURRENCY (NOTES PLUS COINS) HELD BY THE PUBLIC + NET DEMAND DEPOSITS HELD BY THE COMMERCIAL BANKS

Note: Only deposits of the public held by the banks are to be included in money supply

M2 = M1 + SAVINGS DEPOSITS WITH POST OFFICE SAVINGS BANKS

M3 = M1 + NET TIME DEPOSITS OF COMMERCIAL BANKS

M4 = M3 + TOTAL DEPOSITS WITH POST OFFICE SAVINGS ORGANISATIONS (EXCLUDING NATIONAL SAVINGS CERTIFICATES)

M1 and M2 are known as Narrow Money. M3 and M4 are also called as Broad Money

These measures from M1 to M4 are in the decreasing order of liquidity (M1 being the most liquid and M4 being the least liquid). M3 is the most generally utilised measure of capitalist supply.

Demonetisation:

It's a turn of calling off the legal tender status of a currency unit in rotation

The Government of India, in the year 2016, demonetized currency notes of Rs 500 and Rs 1000, with an aim to tackle the problem of corruption, black money, terrorism, and circulation of fake currency in the economy.

Some of the positive impacts of Demonetisation:

Improved tax compliance. Savings of more individuals were channelized into the formal financial system.

Banks have additional coffers at their disposal which can be used to give further loans at lower interest rates.

Demonstration of State's decision to put a check on black capitalist, showing that duty elusion will no longer be permitted.

Tax evasion will result in financial penalties and social condemnation. Tax compliance will ameliorate and corruption will drop.

Homes and enterprises have begun to shift from cash to electronic payment technologies.

Negative effects of Demonetization

Effects on GDP.

It affected the small-scale business and wage workers.

Inflation occurs as a result of increased market liquidity.

MONETARY POLICY

2.3 Concept

Monetary policy is adopted by the monetary authority of a country that controls either the interest rate payable on very short-term borrowing or the money supply. The policy often targets inflation or interest rate to ensure price stability and generate trust in the currency. The monetary policy in India is carried out under the authority of the Reserve Bank of India.

Monetary policy is an economic policy that manages the size and growth rate of the money supply in an economy. It is a powerful tool to regulate macroeconomic variables such as inflation and unemployment.

These policies are implemented through different tools, including the adjustment of the interest rates, purchase or sale of government securities, and changing the amount of cash circulating in the economy. The central bank or a similar regulatory organization is responsible for formulating these policy.

2.4 Objectives of Monetary Policy

The primary objectives of monetary policies are the management of inflation or unemployment and maintenance of currency exchange rates.

1. Inflation

Monetary policies can target inflation levels. A low level of inflation is considered to be healthy for the economy. If inflation is high, a contractionary policy can address this issue.

2. Unemployment

Monetary policies can influence the level of unemployment in the economy. For example, an expansionary monetary policy generally decreases unemployment because the higher money supply stimulates business activities that lead to the expansion of the job market.

3. Currency exchange rates

Using its fiscal authority, a central bank can regulate the exchange rates between domestic and foreign currencies. For example, the central bank may increase the money supply by issuing more currency. In such a case, the domestic currency becomes cheaper relative to its foreign counterparts

Simply put the main objective of monetary policy is to maintain price stability while keeping in mind the objective of growth as price stability is a necessary precondition for sustainable economic growth. In India, the RBI plays an important role in controlling inflation through the consultation process regarding inflation targeting. The current inflation-targeting framework in India is flexible.

What role does the Monetary Policy Committee play?

The Reserve Bank of India Act, 1934 (RBI Act) was amended by the Finance Act, 2016, to provide for a statutory and institutionalized framework for a Monetary Policy Committee, for maintaining price stability, while keeping in mind the objective of growth. The Monetary Policy Committee is entrusted with the task of fixing the benchmark policy rate (repo rate) required to contain inflation within the specified target level.

The Government of India, in consultation with RBI, notified the 'Inflation Target' in the Gazette of India dated 5 August 2016 for the period beginning from the date of publication of the notification and ending on March 31, 2021, as 4%. At the same time, lower and upper tolerance levels were notified to be 2% and 6% respectively.

What are the instruments of monetary policy?

Some of the following instruments are used by RBI as a part of their monetary policies.

Open Market Operations: An open market operation is an instrument which involves buying/selling of securities like government bond from or to the public and banks. The RBI sells government securities to control the flow of credit and buys government securities to increase credit flow.

Cash Reserve Ratio (CRR): Cash Reserve Ratio is a specified amount of bank deposits which banks are required to keep with the RBI in the form of reserves or balances. The higher the CRR with the RBI, the lower will be the liquidity in the system and vice versa. The CRR was reduced from 15% in 1990 to 5 % in 2002. As of 31st December 2019, the CRR is at 4%.

Statutory Liquidity Ratio (SLR): All financial institutions have to maintain a certain quantity of liquid assets with themselves at any point in time of their total time and demand liabilities. This is known as the Statutory Liquidity Ratio. The assets are kept in non-cash forms such as precious metals, bonds, etc. As of December 2019, SLR stands at 18.25%.

Bank Rate Policy: Also known as the discount rate, bank rates are interest charged by the RBI for providing funds and loans to the banking system. An increase in bank rate increases the cost of borrowing by commercial banks which results in the reduction in credit volume to the banks and hence the supply of money declines. An increase in the bank rate is the symbol of the tightening of the RBI monetary policy. As of 31 December 2019, the bank rate is 5.40%.

Credit Ceiling: With this instrument, RBI issues prior information or direction that loans to the commercial bank will be given up to a certain limit. In this case, a commercial bank will be tight in advancing loans to the public. They will allocate loans to limited sectors. A few examples of credit ceiling are agriculture sector advances and priority sector lending.

INFLATION

2.5 MeaningofInflation

The aggregate demand increases due to expenditure by the households, firms andgovernment(usuallyexcessivespendingbythegovernment).Thisincrease in demand due to expenditure by either government or households can be effectively controlled by fiscal measures. Thus, fiscal policy and budgetary measures are the effective weapons to control demand-pull inflation.

In case, government expenditure is the main cause behind the demand-pull inflation, then it can be controlled by cutting down the public expenditure. With a cut in public expenditure, the government demand for goods and services decreases along with a decrease in the private income and consumption expenditure. Incase, the demand rises due to the rise in private expenditure, taxing income is the most appropriate way to control inflation. The taxation on private income reduces the disposable income in hand, as a result of which the consumption expenditure also reduces. This results in the reduction in aggregate demand.

In case of a very high persistent inflation rate, the government may adopt both these measures simultaneously to control inflation. Such as along with the reduction in public expenditure the rate of taxation shall be raised on the private income to keep the demand under control. This kind of policy of using both the measures simultaneously is called as “Policy of Surplus Budgeting,” which says that “*government should spend less than the tax revenue.”*

2.6 Characteristics Of Inflation

1. Inflation is always associated with a rise in prices which is continuous and persistent. It should be distinguished from price rise which may occur temporarily or during a cyclical upswing.
2. Inflation is a dynamic process which can be observed over the long period.
3. Inflation is basically an economic phenomenon. It originates with in the economic system and is fostered by interaction of economic forces.
4. Excess of demand over the available supply is the hall mark of inflation. It is a condition of economic disequilibrium.
5. Inflation is generally considered a monetary phenomenon for it is normally characterized by an excessive money supply. Though all increases in the stock of money may not be inflationary yet a persistent rise in prices cannot be sustained unless the quantity of money rises as well.
6. Inflation may be caused by ‘demand-pull’ factors or‘costpush’factors or both working together.
7. Inflation is always cumulative in the sense that a mild inflation in the first instance gathers momentum leading to rapid price rises. Its effects on an economy depends on

how rapid it is.

2.7 Types of Inflation

1. Creeping Inflation: -'Creeping inflation occurs when there is a sustained rise in prices over time at a mild rate, say around 2 to 3 percent per year. It is also known as 'mild inflation'. This type of inflation is not much of a problem.
It is generally known as conducive to economic progress and growth. In this form the prices rise gradually over a long period.

2. Walking or Trotting Inflation:-When the rate of rise in inflation is of international range of 3 to 8 percent per annum, It is called walking or trotting inflation. It is an alarming signal for the government to control it before it worsens.

3. Running Inflation:-When the sustained rise in prices is over 8 percent and generally around 10 percent per annum, it is called running inflation. It normally shows two-digit inflation. Running inflation is a warning signal indicating the need for controlling it. It affects the poor and middle class people adversely.

4. Hyper or Galloping Inflation: - Hyperinflation occurs when monthly increase in prices is 20 percent to 30 percent or more. At this stage there is no limit to price rise, and price rise goes out of control. Money becomes almost worthless causing severe hardship to people. There is complete collapse of currency, the monetary system collapses and the economic and political life gets disrupted.

5. Open Inflation:- Inflation become open when there is no barrier to price rise. It occurs in the economy where there are no control and checks on price rise. Rising prices by large magnitude is the symptom of open inflation.

6. Suppressed Inflation: - Suppressed inflation refers to a situation when there exist inflationary pressures in the economy but prices are controlled by certain administrative measures, such as price-control and rationing. The increase in prices are suppressed (or repressed) here. However, prices rise by large magnitude after the price controls are removed.

The symptoms of suppressed inflation are long queues of buyers at government controlled ration shops and the existence of excess demand and black-markets. The control sensued by the government on the prices of essential commodities in times of war is an example of suppressed inflation.

❖ THEORIES OF INFLATION

The theories of inflation try to explain the causes of inflation and can be studied from the perspective of:

1. Demand-pull Inflation

Definition: The Demand-pull Inflation occurs when, for a given level of aggregate supply, the aggregate demand increases substantially. In other words, demand-pull inflation exists when the aggregate demand increases rapidly than the aggregate supply.

The increase in aggregate demand may be due to:

(i) Monetary Factors ,i.e., an increase in the supply of money
(ii) Real Factors ,i.e., an increase in the demand for real output

(i) Demand-pull Inflation due to Monetary factors: The increase in money supply more than the increase in potential output is one of the major reasons for demand-pull inflation. Let's see how the money supplies causes the demand-pull inflation. At a given level of output, when the monetary and real sectors are in equilibrium, then the economy is also in equilibrium. Since the economy is in general equilibrium, the general price level corresponding to it is called as equilibrium price level.

With an increase in the money supply, the other things remaining the same,the real stock of money at each price level increases. As a result, the interest rate decreases and the people's desire to hold money increases. With a decrease in the interest rates, the investment also increases, which leads to more income.

The increase in income causes an increase in the consumption expenditure and thus, a rise in investment and consumption expenditure increases the aggregate demand and aggregate supply, other things remaining the same. This increase in the aggregate demand is exactly proportional to the increase in the money stock. Thus, a rise in aggregate demand, for a given level of aggregate supply, leads to an increase in the general price level in the economy, which may be inflated.

(ii) Demand-pull Inflation due to Real Factors: The following are some of the real factors that cause demand-pull inflation in the economy:

I. Increase in government expenditure with out any change in the tax revenue.
II. Cut in the tax rates without any change in the government expenditure.
III. Upward shift in the Investment Function
IV. Downward shift in the Saving Function
V. Upward shift in the Export Function
VI. Downward shift in the ImportFunction.

The first four factors directly contribute towards an increase in the level of disposable income. Since the aggregate demand being the function of income, an increase in aggregate income leads to an increase in theaggregate demand, thereby causing the demand-pull inflation. Let's see how real factors cause demand-pull inflation.

Suppose, the government increases its spending financed through external borrowings from abroad. The rise in government expenditure generates additional demand and thus, the aggregate demand increases .Since it is assumed that there is full employment, then the additional resources can be acquired only by bidding a higher price. As a result, the prices rise while the output remains unchanged.

Thus, the transaction of demand for money increases and inorder to meet the increased demand for money people sell their financial assets such as bonds and securities. Eventually, the prices of bonds and securities go down and the rate of interest increases. In the product market, the price rises to such a level that the additional spending by the government is absorbed by such price rise. This shows that the real factors also cause inflation.

Cost-push Inflation

Definition: The Cost-Push Inflation occurs when the price rise due to the increase in the price of factors of production, Viz. Labor, raw materials, and other inputs which are essential for the final production of a product. As a result, the aggregate supply decreases, demand remaining the same, an increase in the price of commodities leads to an overall increase in the general price level.

Often, the cost-push inflation is caused by the monopolistic groups in the society such as labor unions and firms operating in monopolistic and oligopolistic market setting. The following are the major kinds of cost-push inflation:

1. Wage-push Inflation: The Strong labor unions force the money wages to go up, due to which the price increases. This kind of rise in the general price level iscalledaswage-pushinflation.Thepowerfulandwell-organizedlaborunions exercise their monopoly power and compel their employers to increase their wages above the competitive level irrespective of their productivity (output).

An increase in wage money brings a corresponding increase in the cost of production and this increase in the cost of production causes an aggregate supplycurvetoshiftbackward(aggregatesupplydecreases).Abackwardshift in the aggregate supply causes the prices level to go up. It is to be noted that every time a rise in the wage money is not considered to be inflationary. The following conditions supplement this:

I. Increase in wage rate due to an increase in the productivity.

II. Rise in wage rate due to inflation caused by other factors.

III. Rise in wage where the unionized wage bill is very small.

IV. Wage rises due to the shortage of labor.

III. Profit-push Inflation: The profit-push inflation is attributed to the monopoly power exercised by the firms under the monopolistic and oligopolistic market that tries to enhance their profit margins by keeping the prices relatively high.

The wage-push inflation and profit-push inflation goes hand-in-hand, which means as the labor unions force their employer to increase their wage money the cost of production also increases. And in order to meet the increased cost.

IV. Supply-Shock Inflation: This kind of cost-push inflation is caused due to an unexpected decline in the supply of major consumer goods and key industrial inputs. Such as the prices of food product shoots up due to a crop failureandthepricesofkeyindustrialinputsViz.Coal,iron,steel,etc.,increases because of the natural calamities, lockouts, labor strikes, etc.

Also,thepricesmayriseduetothesupplybottlenecksinthedomesticeconomy or international events (generally, war), thereby restricting the movement of internationally traded goods. As a result, the supply decreases and the import of industrial inputs increases.

❖ Measures to Control Inflation

I. Monetary Measures to Control Inflation

The monetary measures which are widely used to control inflation are:

1. Bank Rate Policy: The bank rate policy is used as an important instrument to control inflation. The Bank rate, also called as the Central Bank rediscount rate is the rate at which the central bank buys or rediscounts the eligible bills of exchange and other commercial papers presented by commercial banks to build the irreserves. Here, the central bank performs the function as “lender of the last resort”. The bank rate policy as a monetary measure to control inflation work in two ways:

During inflation, the central bank raises the interest rates due to which the borrowing costs go up. As a result, commercial bank borrowings from the central bank reduces. With the reduced borrowings from the central bank, the flow of money from the commercial bank to the public also gets reduced. This is how the bank credit decides the extent to which the inflation is controlled.

The bank rate sets the trend for general market interest rate, specifically in the short-run. As the central bank raises the interest rate with a view to curtailing the money supply in the market, the commercial banks also raise their commercial borrowing rates for the public, thereby making the borrowings dear. Other general market rate follows the suit and with the decreased borrowing capacity of individual, the inflation is controlled due to reduced money flows to the society.

2. Variable Reserve Ratio: The variable reserve ratio, also called as the Cash Reserve Ratio(CRR)is a certain proportion of total demand and time deposits thatthecommercialbanksarerequiredtomaintainintheformofcashreserves with the central bank.

The cash reserve ratio is often determined and imposed by the central bank with a view to controlling the money supply. When the central bank raises the CRR, the lending capacity of the commercial banks reduces due to which the flow of money from the banks to the public also decreases. Thus, it helps in controlling the rise in the price to the extent it is caused by the bank credit to the public.

3. Open Market Operations: The open market operations are characterized by the sale and purchase of government securities and bonds by the central bank. The central bank buys and sells the government securities and bonds to the public through commercial banks. The government securities are sold via commercial banks such that a certain amount of bank deposits is transferred to the central bank. As a result, the credit creation capacity of the commercial banks reduces. Thus, the flow of money from the banks to the public also gets reduced.

II. Fiscal Measures to Control Inflation

Definition: The Fiscal Measures to Control Inflation is comprised of government expenditure, public borrowings, and taxation. The Keynesian economists, also called as" Fiscalist" assert that the demand-pull inflation is caused due to an excess of aggregate demand over aggregate supply.

The aggregate demand increases due to expenditure by the households, firms and government (usually excessive spending by the government).This increase in demand due to expenditure by either government or households can be effectively controlled by fiscal measures. Thus, fiscal policy and budgetary measures are the effective weapons to control demand-pull inflation.

In case, government expenditure is the main cause behind the demand-pull inflation,thenitcanbecontrolledbycuttingdownthepublicexpenditure.With a cut in public expenditure, the government demand for goods and services decreases along with a decrease in the private income and consumption expenditure. Incase, the demand rises due to the rise in private expenditure, taxing income is the most appropriate way to control inflation. The taxation on private income reduces the disposable income in hand, as a result of which the consumption expenditure also reduces. This results in the reduction in aggregate demand.

In case of a very high persistent inflation rate, the government may adopt both these measures simultaneously to control inflation. Such as along with the reduction in public expenditure the rate of taxation shall be raised on the private income to keep the demand under control. This kind of policy of using both the measures simultaneously is called as "Policy of Surplus Budgeting," which says that ***"government should spend less than the tax revenue."***

❖ Effects of Inflation

Themaineffectsofinflationandhigherpricesin Indiaarediscussedbelow:

(I) Effect on Production:-During inflation, the producers and businessmen gain in the short-period. Usually the cost of production does not rise as fast as thepriceoftheirproductandsothereisanartificialmarginofprofit.Asagainst this, they may also be affected adversely in the long run. If the price level goes on increasing, the total consumption of their product would fall.
The reduced consumption will ultimately raise the cost of production per unit and reduce the profits.

1. **Misallocation of Resources and Disrupted Price Mechanism:**- Inflation disrupts the smoothness of price mechanism. It finally ends in mal-adjustments in production. Producers turn towards more production of luxury goods which are non-essential over essential commodities, from which they expect higher profits.

2. **Hoarding:-** In times of inflation, people, like traders hoard stocks of essential commodities with an idea to earn more profits in the near future. As a result, the available supply of goods in relation to increasing monetary demand, decreases. This results in black marketing, i.e., artificial scarcity of goods in the market.

3. **Encourages Speculation**:- A non-anticipated steep rise in prices creates a situation of uncertainty in the economy. People indulge more in speculative activities than in increasing production.

4. **Lack of Quality Control:-**Inflation tries to create a sellers' market. Sellers get a command on prices because of excessive demand in the market. In such conditions, the sellers overlook the quality of their goods, instead they concentrate more on earning great profits.

(II) EffectonDistributionofIncome:-Inflationredistributesincomebecause prices of all factors do not rise in the same proportion. Here, prices rise faster but incomes do not. There is an inequality in distribution of wealth. During inflation, producers and traders are the gainers. As a result, rich get richer and poor get poorer. It leads to concentration of wealth in the hands of a few rich people.

1. **Effect on the Working Class:-**Labour is the lowest paid class. This class is badly affected by inflation, especially if the prices of the basic necessities of life rise steeply. It adversely affects the family budget of the working class. Their consumption level goes down tolling upon their health and lowering their efficiency. It may also create unrest.

No doubt, through trade unions, workers may manage to get increased dearness allowance but this does not provide them with desired relief. Price hike generally precedes any increase in dearness allowance. In turn, the increased wages further push up the price level owing to an increased demand. A vicious circle is formed, resulting in wage-push or cost push inflation.

2. **Effect on Fixed Income Groups:-**This group includes pensioners, government servants, owners of government securities and promissory notes and others who get a fixed money income. They are known as renters. This class is worst affected by inflation because the purchasing power of their fixed income goes on decreasing with rising prices.

3. **Effect on Debtors and Creditors:-**Debtors gain when they pay back their debt during inflation. It is because the value of money was high when they borrowed but came down when they repaid their debts. As against this, the creditors are losers during inflation. However, if debtors take loans during inflationary period, the position is reversed. In that case, the debtors are losers and the creditors are gainers.

(III) Other Effects:

1. Cost Increases:- As prices increase, cost of projects both in private and public sectors goes-up. Consequently, the total outlay of each plan exceeds the one provided as per original plan yet physical targets are not fully achieved.

2. Effect on Economic Development and Reduction in Savings:-Due to rise in prices, economic development of a country has adverse effects on savings and investments.

3. Wage Spiral:-A rapid increase in prices is not suitable as workers demand more wages. Under such circumstances, wages are raised to compensate the workers. Thus, price spiral affects the economy.

4. Effect on Foreign Investment:-A rapid increase in prices has an adverse effectontheforeigninvestmentinthecountry.Foreigninvestorsdonotinvest their money in those countries where the value of money is falling on account of rise in prices. Value of money falls and the investors suffer losses.

5. Adverse Balance of Payment:- Price rise has an adverse effect on the export of the country. Exporters fail to increase the exports to the desired extent. Actually, our exportable become relatively expensive in the world market, resulting in the fall of export and our importable become relatively cheaper, this increases our imports. The demand for country's exports decreased and imports increased. Therefore, balance of payment continues to be unfavorable.

6. Lack of Confidence in the Currency:-Money stops functioning as money because people lose confidence in currency and do not like to hold it. In 1923, during hyperinflation in Germany people refused to accept 'Marc' as their unit of currency. Money was replaced by Barter system because people preferred goods over money.

7. Social and Moral Degradation:-Inflation leads to thefts and robberies because some people would like to get an income in undesirable ways so as to survive. Corruption breeds during inflation and moral ethical values take a down stride.

8. Effect on Political Stability: -Continued inflation results in shaking the foundationofanypoliticalsystem.Itevenresultsinthefallofanygovernment.

DEFLATION

2.8 Concept

Deflation is a decrease in the general price level of goods and services. Put another way, deflation is negative inflation. When it occurs, the value of currency grows over time. Thus, more goods and services can be purchased for the same amount of money.

Causes of Deflation

Economists determine the two major causes of deflation in an economy as (1) fall in aggregate demand and (2) increase in aggregate supply. The fall in aggregate demand

triggers a decline in the prices of goods and services. Some factors leading to a decline in aggregate demand are:

Fall in the money supply

A central bank may use a tighter monetary policy by increasing interest rates. Thus, people, instead of spending their money immediately, prefer to save more of it. In addition, increasing interest rates lead to higher borrowing costs, which also discourages spending in the economy.

Decline in confidence

Negative events in the economy, such as recession, may also cause a fall in aggregate demand. For example, during a recession, people can become more pessimistic about the future of the economy. Subsequently, they prefer to increase their savings and reduce current spending. An increase in aggregate supply is another trigger for deflation. Subsequently, producers will face fiercer competition and be forced to lower prices.

The growth in aggregate supply can be caused by the following factors:

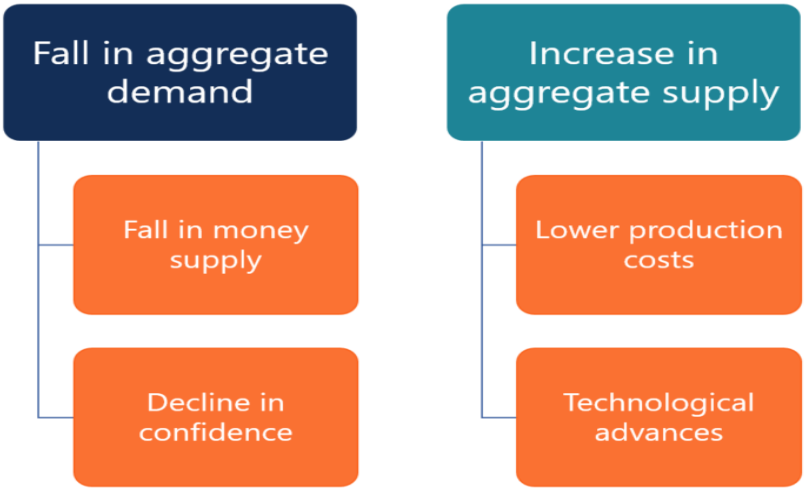
Lower production costs

A decline in price for key production inputs (e.g., oil) will lower production costs. Producers will be able to increase production output, which will lead to an oversupply in the economy. If demand remains unchanged, producers will need to lower their prices on goods to keep people buying them.

Technological advances

Advances in technology or rapid application of new technologies in production can cause an increase in aggregate supply. Technological advances will allow producers to lower

costs. Thus, the prices of products will likely go down.



Effects of Deflation

Frequently, deflation occurs during recessions. It is considered an adverse economic event and can cause many negative effects on the economy, including:

Increase in unemployment

- During deflation, the unemployment rate will rise. Since price levels are decreasing, producers tend to cut their costs by laying off their employees.
- Increase in the real value of debt
- Deflation is associated with an increase in interest rates, which will cause an increase in the real value of debt. As a result, consumers are likely to defer their spending.

Deflation spiral

This is a situation where decreasing price levels trigger a chain reaction that leads to lower production, lower wages, decreased demand, and even lower price levels. During a recession, the deflation spiral is a significant economic challenge because it further worsens the economic situation.

Additional Resources

For additional learning, CFI offers a wide range of online courses on economics, accounting, and financial analysis. To keep advancing your career, the following CFI resources will be helpful:

✓ Economic Indicators
✓ Gross National Product
✓ Market Economy
✓ Purchasing Power Parity

STAGFLATION

2.9 Stagflation concept

✓ Stagflation is an economic cycle characterized by slow growth and a high unemployment rate accompanied by inflation. Economic policymakers find this combination particularly difficult to handle, as attempting to correct one of the factors can exacerbate another.
✓ Once thought by economists to be impossible, stagflation has occurred repeatedly in the developed world since the 1970s oil crisis.
✓ In mid-2022, many were saying that the United States had not entered a period of stagflation, but might soon experience one, at least for a short period. In June 2022, Forbes magazine argued that a period of stagflation was likely because economic policymakers would tackle unemployment first, leaving inflation to be dealt with later.

Understanding Stagflation

The term stagflation was first used by British politician Iain Macleod in a speech before the House of Commons in 1965, a time of economic stress in the United Kingdom. He called the combined effects of inflation and stagnation a "'stagflation situation."

History of Stagflation

Stagflation was once believed to be impossible. The economic theories that dominated academic and policy circles for much of the 20th century ruled it out of their models. In particular, the economic theory of the Phillips Curve, which developed in the context of Keynesian economics, portrayed macroeconomic policy as a trade-off between unemployment and inflation.

As a result of the Great Depression and the ascendance of Keynesian economics, economists became preoccupied with the dangers of deflation and argued that most policies designed to lower inflation tend to increase unemployment, while policies designed to lower unemployment raise inflation.

The advent of stagflation across the developed world later in the 20th century showed that this was not the case. Stagflation is a great example of how real-world experience can run roughshod over widely accepted economic theories and policy prescriptions.

Since that time, inflation has proved to be persistent even during periods of slow or negative economic growth. In the past 50 years, every declared recession in the U.S. has seen a continuous, year-over-year rise in consumer price levels.

The sole, partial exception to this is the lowest point of the 2008 financial crisis—and even then the price decline was confined to energy and transportation prices while overall consumer prices other than energy continued to rise.

What Causes Stagflation?

There is no real consensus among economists about the causes of stagflation. They have put forth several arguments to explain how it occurs, even though it was once considered impossible.

(1) Blame Oil Price Shocks

One theory states that stagflation is caused when a sudden increase in the cost of oil reduces an economy's productive capacity.

The oil crisis of the 1970s is the prime example. In October 1973, the Organization of Petroleum Exporting Countries (OPEC) issued an embargo against Western countries. This caused the global price of oil to rise dramatically, therefore increasing the costs of goods and contributing to a rise in unemployment.

Because transportation costs rose, producing products and getting them to shelves became more expensive and prices rose even as people were laid off from their jobs.

Critics of this theory point out that sudden oil price shocks like those of the 1970s did not occur in connection with any of the simultaneous periods of inflation and recession that have occurred since the embargo.

(2) Blame Poor Economic Policies

Another theory is that the confluence of stagnation and inflation is the result of poorly made economic policy. Harsh regulation of markets, goods, and labor in an otherwise inflationary environment are cited as the possible cause of stagflation.

Some point to former President Richard Nixon's policies, which may have led to the recession of 1970—a possible precursor to other periods of stagflation. Nixon put tariffs on imports and froze wages and prices for 90 days in an attempt to prevent prices from rising. Once the controls were relaxed, the rapid acceleration of prices led to economic chaos.

While appealing, this is an ad-hoc explanation of the stagflation of the 1970s which does not explain later periods that showed a simultaneous rise in prices and unemployment.

(3) Blame the Loss of the Gold Standard

Other theories point to monetary factors that may also play a role in stagflation. Nixon removed the last indirect vestiges of the gold standard, bringing down the Bretton Woods system that had controlled currency exchange rates.

This decision removed commodity backing for the currency and put the U.S. dollar and most other world currencies on a fiat basis, ending most practical constraints on monetary expansion and currency devaluation.

STAGFLATION VS. INFLATION

2.10Concept

Whatever the explanation, we have seen inflation persist during periods of economic stagnation since the 1970s. Even before the 1970s, some economists criticized the notion of a stable relationship between inflation and unemployment. They argue that consumers and producers adjust their economic behavior to rising price levels either in reaction to—or in expectation of—monetary policy changes.

As a result, prices rise in response to expansionary monetary policy without any corresponding decrease in unemployment, while unemployment rates rise or fall based on real economic shocks to the economy.

This implies that attempts to stimulate the economy during recessions could simply inflate prices without promoting real economic growth.

Urbanist and author Jane Jacobs saw the disagreements between economists on the causes of the stagflation of the ‘70s as a misplacement of scholarly focus on the nation rather than the city as the primary economic engine. She believed that to avoid the phenomenon of stagflation, a country needed to provide an incentive to develop "import-replacing cities"—that is, cities that balance import with production. This idea, essentially the diversification of the economies of cities, was critiqued for its lack of scholarship by some, but held weight with others.

Let's sum up

Dear Learners , In this module we learn about Introduction to Demand and supply of Money, Motives, concept of Monetary policy, Objectives and Instruments of Monetary policy. Inflation concept, Characteristics, types of Inflation. Deflation concept, Stagflation concept and Stagflation VS Inflation.

Self Assessment Questions

1. Money supply increases when inflation rises in the economy.
    a. No change
    b. Decrease
    c. Increase
    d. None of these
2. -------- tries to compare inflation to robbers
    a. Professorbrahamand
    b. Professor key
    c. Amartya sen
    d. Professor jagdish
3. Which one of the following principles is the exact reverse of inflation
    a. Recession
    b. Stagflation
    c. Deflation
    d. None of the above
4. Whenever the market prices of services and goods are going to fall continuously, this phenomenon is known as ----------
    a. Inflation
    b. Stagflation
    c. Deflation
    d. None of the above
5. The mix of the inflation and stagnation is called as ----------
    a. Demand –pull-inflation
    b. Cost-push-inflation
    c. Devaluation
    d. stagflation

Module 2 completted

Module 3

FISCAL POLICY

3.1 Introduction to Fiscal policy

The term fiscal has been derived from the greek word fisc, meaning a basket to symbolize the public purse. Fiscal policy thus means the policy related to the treasury of the government.

Fiscal policy is a part of general economic policy of the government which is primarily concerned with the budget receipts and expenditures of the government. All welfare projects are completed under this policy. It also suggests measures to control economic

fluctuations which may become violent and create great upheavals in the socio-economic structure of the economy. It also outlines the influence of resource utilization on the level of aggregate demand through affecting the level of aggregate consumption and investment expenditure.

Definitions of Fiscal Policy

According to U. Hicks "Fiscal policy is concerned with the manner in which all the different elements of public finance, while still primarily concerned with carrying out their own duties, may collectively be geared to forward the aims of economic policy."

According to Arthur Smithies "Fiscal policy is a policy under which the government uses its expenditure and revenue programmes to produce desirable effects and avoid undesirable effects on the national income, production and employment."

According to Culbarston, "By fiscal policy we refer to government actions affecting its receipts and expenditures which ordinarily as measured by the government's receipts, its surplus or deficit."

3.2 Objectives of Fiscal Policy

There are following objectives of fiscal policy :

- **Development of Country:** Every country has to make fiscal policy for development of Country. With this policy , all work like govt. planning and proper use of funds for development functions is done. If govt. does not make fiscal policy, then it can happen that revenues are misused without targeted expenditure of Government.
- **Employment:** Getting the full employment is also the objective of fiscal policy. Govt. can take many actions for increasing employment. Government can fix certain amount which can be utilized for creation of new employment opportunities for unemployed people .
- **Inequality:** In developing country like India, we can see the difference one basis of earning. 10% of people are earning more than Rs. 100000 per day and other are earning less than Rs. 100 per day. By making a good fiscal policy, govt. can reduce this difference if govt makes it as its target.
- **Fixation of Govt. Responsibility:** It is the duty of Govt. to effective use of resources and by making of fiscal policy different minister's accountability can be checked.

3.3 Techniques of Fiscal Policy

1. Taxation Policy

It is one of the powerful instruments of fiscal policy in the hands of public authorities which greatly affects changes in disposable income, consumption and investment. Taxation policy is relating to new amendments in direct tax and indirect tax. Every year Govt. of India passes the finance bill. In this policy govt. determines the rate of taxes. Govt. can increase or decrease these tax rates and amend previous rules of taxation.

Govt.'s earning's main source is taxation. But more tax on public will adverse effect on the development of economy.

1. If Govt. will increase taxes, more burden will be on the public and it will reduce production and purchasing power of public.
2. If Govt. will decrease taxes, then public's purchasing power will increase and it will increase the inflation.

Govt. analyzes both the situation and will make his taxation policy more progressive .

2. Govt. Expenditure Policy

There are large number of public expenditure like opening of govt schools, colleges and universities, making of bridges, roads and new railway tracks. For the above projects govt has paid large amount for purchasing and paying wages and salaries, however all these expenditures are paid after making govt. expenditure policy. Govt. can increase or decrease the amount of public expenditure by changing govt. budget. So, govt. expenditure is technique of fiscal policy by using this, govt. use his fund first on very necessary sector and other will be done after this .

3. Deficit Financing Policy

If Govt.'s expenditures are more than his revenue, then govt. should have to collect this amount. This amount is deficit and it can be fulfilled by issuing new currency by central bank of country. But, it will reduce the purchasing power of currency. More new currency will increase inflation and after inflation value of currency will decrease. So, deficit financing is very serious issue in the front of govt. Govt. should use it, if there is no other source of govt. earning .

4. Public Debt Policy

If Govt. thinks that deficit financing is not sufficient for fulfilling the public expenditure or if govt. does not resort to deficit financing, then govt. can take loan from world bank, or take loan from public by the way of issuing govt. securities and bonds. But it will also increase the cost of debt in the form of interest which govt. has to pay on the amount of loan. So, govt. has to necessarily make solid budget for this and after taking into consideration the amount which is taken as debt. This policy can also use as the technique of fiscal policy for increase the treasure of govt. Internal sources of debt include market loans, compensation bonds, 15 year's annuity certificates, small private savings through various saving schemes. External sources includes in borrowing from the external market, from international institutions such as the World bank, IMF, IDA etc and the governments of other countries.

5.Budget

Fiscal policy operates through the budget. Thus it is also called budgetary policy. The term budget is derived from a French word "Bougette" which means a leather bag or a wallet used to carry financial papers. The budget of a nation is a useful instrument to

assess the fluctuations in an economy. Different budgetary principles have been formulated by the economists, prominently known as the annual budget, cyclical balanced budget and fully managed compensatory budget.

Stances of Fiscal Policy

The three possible stances of fiscal policy are neutral, expansionary and contractionary. The simplest definitions of these stances are as follows:

1. A neutral stance of fiscal policy implies a balanced economy. This results in a large tax revenue. Government spending is fully funded by tax revenue and overall the budget outcome has a neutral effect on the level of economic activity.
2. An expansionary stance of fiscal policy involves government spending exceeding tax revenue.
3. A contractionary fiscal policy occurs when government spending is lower than tax revenue.

However, these definitions can be misleading because, even with no changes in spending or tax laws at all, cyclical fluctuations of the economy cause cyclical fluctuations of tax revenues and of some types of government spending, altering the deficit situation; these are not considered to be policy changes. Thus, for example, a government budget that is balanced over the course of the business cycle is considered to represent a neutral fiscal policy stance.

Methods of Funding

Governments spend money on a wide variety of things, from the military and police to services like education and healthcare, as well as transfer payments such as welfare benefits. This expenditure can be funded in a number of different ways:

1. Taxation
2. Seigniorage, the benefit from printing money
3. Borrowing money from the population or from abroad
4. Consumption of fiscal reserves.
5. Sale of fixed assets (e.g., land).

All of these except taxation are forms of deficit financing.

Limitations of Fiscal Policy

- The fiscal policy has achieved a mixed success in mobilization of resources. The defective tax system, limited base of direct taxes, exemption of agriculture from direct taxation, evasion of taxes, inefficient and corrupt tax collection machinery are some of the causes of poor tax collection in the country. Another cause of poor resource mobilization is the low share of non-tax revenue in the total revenue receipts.
- Inflation of India is increasing rapidly after issuing new notes for payment of govt. of expenses and in this inflation, prices of necessary goods are increasing very fastly. Living of poor people has become difficult due to this. So, these signs show the failure of Indian fiscal policy.

- Govt. fiscal policy has failed to reduce the black money. Even large amount of past minister is in the form of black money which is deposited in Swiss Banks.
- After taking loan from world bank under the fiscal policy's debt technique, govt. has to follow the rules and regulations framed by world bank and IMF. These rules are more harmful for developing small domestic business of India. These organizations are inter related with WTO and they intend to stop Indian domestic Industry.
- After expending large amount for generating new employment under fiscal policy, rate of unemployment is increasing fastly and big lines on govt. employment exchange can be seen generally in working days. Database of employment exchanges are full from educated unemployed candidates .
- The direct taxes are the main instruments of the fiscal policy. The rise in the rates of direct taxes result in the reduction of the disposable income of the people. The indirect taxes contribute more than four-fifths of the tax revenue. Taxes on commodities, sales taxes ,excise duties, customs etc. add to the prices of commodities. Increase in the rates of sales taxes and excise duties immediately cause a rise in the price level.

3.4 GLOBALIZATION AND ITS IMPACT

Meaning

Globalization represents an ongoing phenomenon characterized by the growing connectedness and interdependence among nations, individuals, and businesses worldwide. This process involves the integration of economic, political, social, and cultural systems across borders, resulting in increased flows of goods, services, capital, people, and ideas.

Impacts of globalization on economic development?

The effects of globalization on economic development have been both positive and negative. Globalization has paved the way for new markets, enhanced trade and investment, and fostered cross-border technology and knowledge transfers. These developments have contributed to greater economic growth, improved productivity, and job creation in numerous areas worldwide. However, globalization has also given rise to intensified competition, income disparity, and environmental damage in certain regions.

Positive impacts of globalization on economic development

As mentioned above, the effects of globalization on economic development include a variety of positive impacts on economic development, including increased trade and investment opportunities, access to new markets and customers, greater efficiency and productivity, the spread of new technologies and knowledge, increased competition, and the potential for economic growth and development.

Increased trade and investment opportunities:

Globalization has created new opportunities for countries to trade and invest across borders. This has led to increased economic activity and higher levels of economic growth.

Access to new markets and customers:

Globalization has allowed businesses to expand their customer base and access new markets, which has helped to boost sales and profits.

Greater efficiency and productivity:

Globalization has increased competition among businesses, which has driven innovation and efficiency, leading to increased productivity.

Spread of new technologies and knowledge:

Globalization has facilitated the spread of new technologies and knowledge across borders, allowing countries to learn from one another and adopt best practices.

Increased competition:

Globalization has increased competition among businesses, which has led to lower prices and higher quality products for consumers.

Potential for economic growth and development:

Globalization has the potential to drive economic growth and development, particularly for developing countries that have been able to attract foreign investment and benefit from increased trade opportunities.

Negative impacts of globalization on economic development

The effects of globalization on economic development include both positive and negative impacts. Alongside the positive impacts of globalization on economic development, globalization has also brought about a range of negative impacts on economic development, including job losses and industry declines in some regions, widening income inequality, cultural homogenization, environmental degradation, dependence on foreign markets and investors, and vulnerability to global economic downturns.

Loss of jobs and industries in some regions:

Globalization has led to the relocation of industries and jobs to countries with lower labor costs, which has led to job losses and industry declines in some regions.

Widening income inequality:

Globalization has increased income inequality between and within countries, with some countries and individuals benefiting more than others.

Cultural homogenization:

Globalization has led to the spread of Western culture and values, which has resulted in the homogenization of cultures and the loss of traditional cultures.

Environmental degradation:

Globalization has contributed to environmental degradation, with increased trade and economic activity leading to higher levels of pollution, deforestation, and climate change.

Dependence on foreign markets and investors:

Globalization has led to increased dependence on foreign markets and investors, which can leave countries vulnerable to economic shocks and downturns.

Vulnerability to global economic downturns:

Globalization has increased the interconnectedness of economies, making them more vulnerable to global economic downturns and crises.

Strategies for governments and businesses to adapt to and take advantage of a globalized economy

Undoubtedly, globalization has generated both favorable and adverse effects on economic development. To capitalize on these outcomes, governments must adjust and seize the opportunities presented by a globalized economy.

There are several strategies that governments and businesses can implement to adapt to and take advantage of a globalized economy, such as investing in education and training, diversifying industries, developing infrastructure, supporting Small and Medium-sized Enterprises (SMEs), implementing environmental and social standards, promoting foreign investment, and finally promoting networking and collaboration.

Investment in Education and Training:

Governments and businesses can invest in education and training to improve the skills of their workforce and increase their competitiveness in a globalized economy. This can include providing training programs for employees, supporting vocational and technical education, and investing in research and development.

Diversification of Industries:

Governments and businesses can diversify their economies and industries to reduce their reliance on a single industry or market. This can help to reduce the impact of economic shocks and increase resilience to global economic trends.

Infrastructure Development:

Governments can invest in infrastructure such as roads, ports, and airports to facilitate trade and attract foreign investment. This can help to improve the efficiency and competitiveness of local businesses, increase trade flows, and create employment opportunities.

Support for Small and Medium-sized Enterprises (SMEs):

Governments can provide support for SMEs to help them compete with larger firms in a globalized economy. This can include providing access to finance, facilitating market access, and providing training and advisory services.

Implementation of Environmental and Social Standards:

Governments and businesses can implement environmental and social standards to ensure sustainable economic development. This can include implementing environmental regulations to reduce pollution and waste, promoting sustainable resource use, and protecting workers' rights.

Promotion of Foreign Investment:

Governments can promote foreign investment by offering incentives such as tax breaks, low-interest loans, and simplified regulations. This can help to attract foreign investment and create new employment opportunities. Learn more about promoting foreign investment to your region here.

Collaboration and Networking:

Governments and businesses can collaborate and network with other countries and industries to share knowledge, expertise, and best practices. This can help to improve competitiveness, access new markets, and create new business opportunities.

How to balance the opportunities and challenges of globalization for economic development?

- Overall, globalization has brought about a range of both positive and negative impacts on economic development in a variety of regions and industries. Governments and businesses need to adapt to and take advantage of a globalized economy while also ensuring that they can balance the opportunities and challenges of globalization for economic development.
- Balancing the opportunities and challenges of globalization for economic development is essential for taking advantage of the opportunities of globalization while also mitigating its negative impacts on society and the environment. This balance will require a comprehensive approach that addresses the various aspects of the globalized economy.
- Governments and businesses must utilize a comprehensive approach that prioritizes inclusive economic growth, fosters innovation and technological advancements, promotes sustainable development, focuses on international cooperation, invests in education and skills development, and implements effective regulatory frameworks.

3.5 GOVERNMENT POLICY TOWARDS FOREIGN CAPITAL AND FOREIGN COLLABORATION

Meaning

Globalization represents an ongoing phenomenon characterized by the growing connectedness and interdependence among nations, individuals, and businesses worldwide. This process involves the integration of economic, political, social, and cultural systems across borders, resulting in increased flows of goods, services, capital, people, and ideas.

impacts of globalization on economic development?

The effects of globalization on economic development have been both positive and negative. Globalization has paved the way for new markets, enhanced trade and investment, and fostered cross-border technology and knowledge transfers. These developments have contributed to greater economic growth, improved productivity, and job creation in numerous areas worldwide. However, globalization has also given rise to intensified competition, income disparity, and environmental damage in certain regions.

This article will not only analyze the positive and negative impacts of globalization on different regions and industries, but we will also discuss the strategies that governments and businesses can use to adapt to and take advantage of a globalized economy.

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- Balancing the opportunities and challenges of globalization for economic development is essential for taking advantage of the opportunities of globalization while also mitigating its negative impacts on society and the environment. This balance will require a comprehensive approach that addresses the various aspects of the globalized economy.
- Governments and businesses must utilize a comprehensive approach that prioritizes inclusive economic growth, fosters innovation and technological advancements, promotes sustainable development, focuses on international cooperation, invests in education and skills development, and implements effective regulatory frameworks.

GOVERNEMNT POLICY TOWARDS FOREIGN CAPITAL AND FOREIGN COLLABORATION:

Foreign direct investment (FDI) is an investment from a party in one country into a business or corporation in another country with the intention of establishing a lasting interest. Lasting interest differentiates FDI from foreign portfolio investments, where investors passively hold securities from a foreign country. A foreign direct investment

can be made by obtaining a lasting interest or by expanding one's business into a foreign country.

Element of Control

- An investment into a foreign firm is considered an FDI if it establishes a lasting interest. A lasting interest is established when an investor obtains at least 10% of the voting power in a firm.
- The key to foreign direct investment is the element of control. Control represents the intent to actively manage and influence a foreign firm's operations. This is the major differentiating factor between FDI and a passive foreign portfolio investment.
- For this reason, a 10% stake in the foreign company's voting stock is necessary to define FDI. However, there are cases where this criterion is not always applied. For example, it is possible to exert control over more widely traded firms despite owning a smaller percentage of voting stock.

Methods of Foreign Direct Investment

- An investor can make a foreign direct investment by expanding their business in a foreign country. Amazon opening a new headquarters in Vancouver, Canada would be an example of this.
- Reinvesting profits from overseas operations, as well as intra-company loans to overseas subsidiaries, are also considered foreign direct investments.
- Finally, there are multiple methods for a domestic investor to acquire voting power in a foreign company. Below are

some examples:

- Acquiring voting stock in a foreign company
- Mergers and acquisitions
- Joint ventures with foreign corporations
- Starting a subsidiary of a domestic firm in a foreign country
- Learn more about mergers and acquisitions with CFI's mergers & acquisitions (M&A) modeling course!

Benefits of Foreign Direct Investment

Foreign direct investment offers advantages to both the investor and the foreign host country. These incentives encourage both parties to engage in and allow FDI.

- Market diversification
- Tax incentives
- Lower labor costs
- Preferential tariffs
- Subsidies

The following are some of the benefits for the host country:

- Economic stimulation
- Development of human capital
- Increase in employment
- Access to management expertise, skills, and technology
- For businesses, most of these benefits are based on cost-cutting and lowering risk. For host countries, the benefits are mainly economic.

Disadvantages of Foreign Direct Investment

Despite many benefits, there are still two main disadvantages to FDI, such as:

- Displacement of local businesses
- Profit repatriation

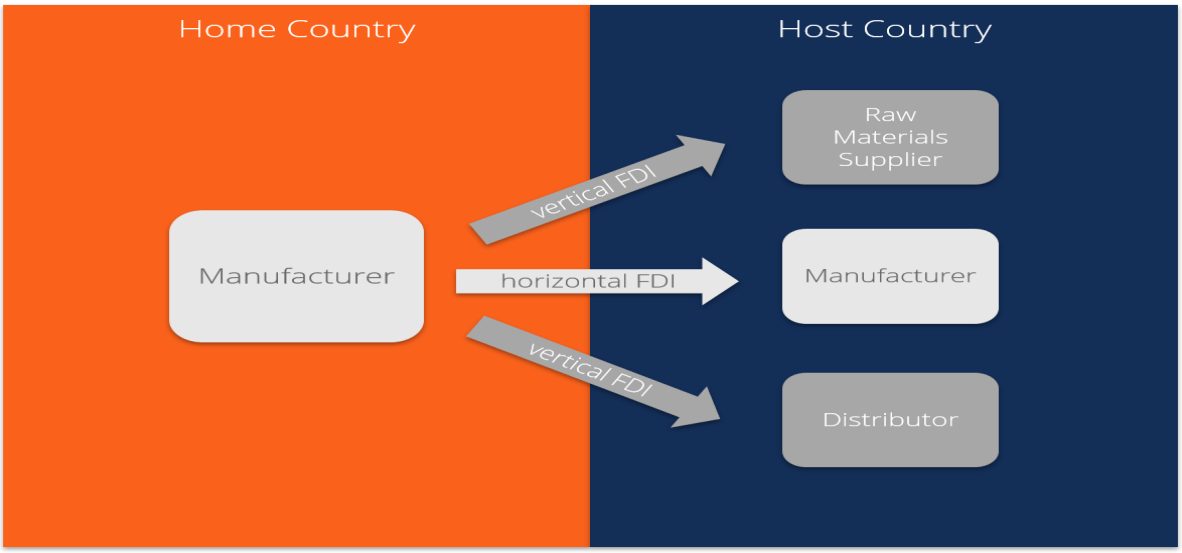
The entry of large firms, such as Walmart, may displace local businesses. Walmart is often criticized for driving out local businesses that cannot compete with its lower prices. In the case of profit repatriation, the primary concern is that firms will not reinvest profits back into the host country. This leads to large capital outflows from the host country. As a result, many countries have regulations limiting foreign direct investment.

Types and Examples of Foreign Direct Investment

Typically, there are two main types of FDI: horizontal and vertical FDI.

Horizontal: a business expands its domestic operations to a foreign country. In this case, the business conducts the same activities but in a foreign country. For example, McDonald's opening restaurants in Japan would be considered horizontal FDI.

Vertical: a business expands into a foreign country by moving to a different level of the supply chain. In other words, a firm conducts different activities abroad but these activities are still related to the main business. Using the same example, McDonald's could purchase a large-scale farm in Canada to produce meat for their restaurant.



However, two other forms of FDI have also been observed: conglomerate and platform FDI.

Conglomerate: a business acquires an unrelated business in a foreign country. This is uncommon, as it requires overcoming two barriers to entry: entering a foreign country

and entering a new industry or market. An example of this would be if Virgin Group, which is based in the United Kingdom, acquired a clothing line in France.

Platform: a business expands into a foreign country but the output from the foreign operations is exported to a third country. This is also referred to as export-platform FDI. Platform FDI commonly happens in low-cost locations inside free-trade areas. For example, if Ford purchased manufacturing plants in Ireland with the primary purpose of exporting cars to other countries in the EU.

Let's sum up

Dear Learners , In this module we learn about Introduction to Fiscal policy, Objectives of Fiscal policy, Techniques of Fiscal policy, Globalization and its impact, Government policy towards foreign capital and foreign collaboration.

Self Assessment Questions

1. Which of the following organization does not handle the globalization process?
   a. World Bank b. WTO
   c.IMF d.Asian bank

2. where was the first plant of ford motors setup in India?
   a. Mumbai b. Kolkata
   c. Delhi d.Chennai

3. which Industries was affected by foreign competitions after globalization?
   a. leather industry b.diary products
   c.Vehicle industry d.clothing industry

4. When did the Indian govt decide to waive foreign investment and trade restrictions?
   a. 1990 b. 1991
   c.1993 d. 1992

5. what is another name referred to the world bank?
   a. IDA b.IBRD
   c.IFC d. all of the above

Module 3 completed

Module 4

CASHLESS ECONOMCY AND DIGITALIZED AHS TRANSFER

4.1 Meaning

A cashless economy is where transactions occur via cards, payment wallets and other digital modes, replacing traditional payment modes such as cash or coins.

In other words, the concept of a cashless economy is where the flow of money is facilitated via digital means (mobile wallets, debit cards, credit cards, or net banking) without using cash. Thereby, the types of cashless economy in every country will be based on the dominant digital payment method used in the country.

The government's demonetization initiative taken in 2016 paved the way for a cashless economy in India. Soon after, when the world was grappling with the pandemic, the government launched Unified Payment Interfaces (UPI) and rapidly established e-payment startups. The onset of the pandemic led to a paradigm shift in the mindset of the people to leverage the technology at hand by embracing a cashless mindset.

4.2 Cashless Payment Modes

To switch to a digital and cashless economy, one of the most important things is the different modes of payment that one will rely on, in place of cash. Let's explore the various channels:

Mobile Wallet
There are several examples of a mobile wallet used by people in general. As of today, most of us have used them, and are aware of its functionalities. A mobile wallet is a virtual wallet that you can access with the help of your smartphone, and it acts as a payment gateway for all your payment transactions.A wallet is as widely accepted as other means of payment and eliminates the need for cards and other mediums to initiate a transaction.

Plastic Money
Plastic money is one of the most common and relied-upon cashless payment modes that people have been using for a long time now. It includes different categories of cards, such as debit cards, credit cards, and prepaid cards, in both physical and virtual forms. Capitalist economies in the world have been thriving on it for years now.

The use of plastic money is economical since it helps minimize the use of paper. Moreover, with plastic money, you can easily track your accounting history and reduce your dependency on cash.

Net Banking
Net banking is different from how cards and wallets work; it is a mode of transfer of money from one bank account to another. Before using wallets and UPIs, net banking was a popular way to transfer funds, and is still widely used.

With net banking, you can log on to your bank account online and initiate funds via Real-Time Gross Settlement (RTGS), National Electronic Funds Transfer (NEFT), or Immediate Payment Service (IMPS). All these options can be conducted with net banking at a minimal cost.

Advantages of a Cashless Economy

Cashless economy is a relatively new concept in India; it has emerged recently, and despite initial challenges, it has witnessed high acceptance. Let's look at the advantages that have helped people shift towards going cashless.

Transparency in the system

Digital transactions have one major benefit: they bring transparency and accountability to the monetary system. Digitizing monetary transactions helps banks recognize customers and track money flow. This helps to reduce financial fraud and crimes such as tax evasion and counterfeit money in the economy.

C**onvenience**

The entire process of cashless systems ensures easier payments anytime and anywhere. For instance, if you want to send money to your family residing in another city, you don't have to go through the hassle of visiting the bank to initiate the transaction. A simple NEFT or IMPS from your phone does the job.

Reduced cash-related crimes

One of the primary reasons the government decided on demonetization was to restrict the use of counterfeit money. Moreover, digital transactions always help curtail black money practices that negatively impact the country's growth. The chances of flow of black money and illegal transactions are reduced when a transparent and rigid digital system is established.

Ease of international transactions

Earlier, engaging in international transactions was troublesome due to the absence of facilities such as net banking and plastic money. Government initiatives to regulate digital payments, have eased up the process of international transactions for people living within and outside the country.

Reduced cost on currency production

As the country shifts to digital payments, production costs for currency reduce significantly, eliminating additional payouts required by the government. This also eases statutory burden for Reserve Bank of India (RBI), as the regulatory authority.

Disadvantages of a Cashless Economy

Let's look at some disadvantages of a cashless economy:

Cyber security

With increasing reliance on the internet, the ease of transactions has increased. However, digital payment methods have also opened avenues for online frauds. A recent report by Microsoft revealed that on an average, an Indian consumer lost Rs. 15,334 by falling prey to online scams in 2021. The most common payment channels for these consumers were bank transfers and credit cards.

As of now, there are no stringent laws or legal processes that can help eliminate online fraud. Add to this, the risk of data theft that banks can face, which can uncover financial information of thousands of users, and can lead to massive security breaches.

Rise in public expenditure
The convenience that a cashless transaction system brings may become addictive. People and enterprises tend to overspend when making digital payments, which can lead to spending traps, especially for the younger population. Eventually, this may also increase public expenditure rates significantly.

Identity thefts
Lack of financial knowledge is causing an increase in identity thefts in the country. Those who leverage cashless payment modes, but do not have enough knowledge in the segment, may lose confidential information along with hard-earned money.

Illiteracy
In India, financial illiteracy and the hesitance to digitize are the biggest barriers towards transitioning to cashless payment transactions.

The internet and smartphone penetration in the country is still catching up. Most of the population in tier 3 towns and villages are not tech-savvy enough to easily navigate digital payment functions. Switching from a cash-based to a digital medium can be difficult for people, who require a deeper financial understanding and more time to adapt to such transactions.

4.3 Challenges in Transitioning Into a Cashless Economy

Although advantages of a cashless economy outnumber the disadvantages in the larger scheme, there are several challenges to overcome, for transitioning to a cashless economy. The country's population, poverty graph and other demographic factors play a key role in this journey. We have listed a few challenges to understand these better:

Extreme dependency on cash
Decades ago, since the barter system faded away, people have been leveraging the cash-based system and currencies have come into the picture. Giving up such a strong habit is not easy, even if people are convinced of the advantages of using digital payments.

Flawed digital infrastructure
The increasing number of scams and frauds in cashless transactions across different channels such as banks, ATMs, internet connectivity, and smartphones, is indicative of a vast scope of improvement in our digital payments infrastructure. This prevents people from trusting the government's initiatives to transition to a digital world. Therefore, a secure and well-regulated digital infrastructure is the need of the hour.

Unconvinced population
The government runs several campaigns to educate and inform people of digitization benefits; yet a large percentage of the population lacks faith in the cashless financial system. Convincing this section of citizens to go completely cashless is an uphill task.

Fear of losing control
One of the primary reasons people don't prefer going completely digital is the fear that they will lose control over their finances. For decades, cash transactions have created an assurance for businesses that they fear not having with virtual and cashless transactions.

Connectivity
Even though connectivity technologies in the country have improved significantly, the penetration of high-speed broadband is still weak in many regions across the country. Most metropolitan cities also face connectivity issues, let alone rural areas.

Lack of digital literacy
Being literate with respect to transacting digitally, means that one is aware of the various factors and risks involved with digital payments. Lack of digital literacy may also be attributed to generation gaps, as they pose a major hurdle in the process of digitizing transactions in India.

4.4 Government Initiatives for Cashless Economy in India

The government is taking several steps to overcome the above challenges and establish a cashless economy. Let's understand more about these initiatives:

Demonetization
The government implemented demonetization in 2016 to curb the circulation of black money. Demonetization was one of the most radical steps taken in this direction. This initiative significantly reduced availability of liquid cash and pushed people towards opting cashless modes of payments. It led to greater use of payment modes like plastic money, digital wallets, and also led to a sharp spike in online sales.

Pradhan Mantri Jan DhanYojana
Financial inclusion is one of the primary reasons why India is unable to develop rapidly. Addressing this cause, the Pradhan Mantri Jan DhanYojana was one of the most renowned and successful initiatives by the government, to eliminate the challenges of financial inclusivity across the country. The aim was to offer banking to each household, by allowing them access to all services such as bank accounts, credit facilities, pensions, and more.

Direct Benefit Transfer (DBT)
The DBT scheme was launched to provide financial benefits to individuals, such as subsidies directly in the beneficiaries' bank accounts. This included benefits such as LPG subsidies, old age pensions, and scholarships, helping the rural population to move towards the digital system efficiently. This encouraged people to entrust banks with their money, while also addressing concerns of financial knowledge and literacy.

Unified Payment Interface (UPI)
A Unified Payment Interface is a highly efficient system that allows people to link multiple bank accounts via a single platform and merges different banking features on a single unified platform. This further helps individuals rely on a centralized, convenient measure of cashless mode of transactions.

Aadhar Enabled Payment System (AEPS)
Another government-launched digital payment mode is the Aadhaar Enabled Payment System. This leverages the Unique Identification Authority of India (UIDAI) number of individuals, to help them transfer money seamlessly. It enables people with Aadhar Cards to easily perform financial transactions at point of sale centers.

Financial Literacy Centres
Lastly, as part of the Pradhan Mantri Jan DhanYojna, financial education programs were also held in government-led literacy centers. These centers aimed to educate more people in the country regarding the benefits of a cashless economy for the community.

These government initiatives combined, have helped the country reach noteworthy milestones in terms of financial digitization and the national goal of a cashless economy.

Is India Ready for a Cashless Economy?

- The government's initiatives have contributed to equipping people to leverage several fintech solutions over the years. But although India has achieved significant progress towards going completely digital, we still have a long way to go. In addition to literacy centers and digital banking awareness, the government must undertake continuous and widespread digital education drives. This will further the cause of spreading information about e-transactions and virtual money.

- Digital banking must be simplified further, and transaction fees levied must be controlled. These factors will ensure that people are not hesitant to switch to digital-based transactions in their day-to-day lives.

- Becoming a cashless economy may have certain challenges and concerns, but they do not outweigh the positive points. With the right strategies and implementation, India can easily pace up to becoming an efficient cashless economy.

Transforming India by Embracing a Cashless Economy
Advancement of fintech solutions have significantly eased the process of how we handle our money and conduct payments. Today, more Indian citizens are inclined to use fintech apps and platforms that ease transacting as a process.

This positive pattern is catching up with the larger population across age groups, leading to a constructive impact on the country's overall growth. It's only a matter of time before we see the impact of a digital economy in India, as black income sources are curtailed, risks of liquid cash are minimized and the monetary system in India becomes more transparent and accountable.

Cashless Economy
1. **What is digital rupee?**
The digital rupee is a digital currency that would be issued by the RBI, the central bank and regulatory body of the Indian banking system. It would be a type of digital currency that could be used for transactions between individuals and businesses, as well as for

government services. A digital rupee may be similar to other digital currencies, such as Bitcoin, but it would be backed by the government and regulated by the RBI.

2. **Which country has a cashless economy?**
Many countries across the globe today have become cashless including Sweden, Finland, Hong Kong, New Zealand, and more.

3. **Which country is a leader in digital payment**?
A recent Forbes article provided factual insights on why India is the leader in digital finance. Solutions like UPI and Aadhar have enabled India to become the largest real-time market for digital payments, strengthening India's foothold as a digital payments leader. Digital transactions across the globe have also grown significantly, and this upsurge has only been magnified by the pandemic where contactless payments increased exponentially. As per a recent McKinsey report, the fastest growth in noncash retail payment transactions was seen in emerging markets of Asia and Africa between 2018 and 2021.

4.5 ECONOMIC MODELS AND ITS STEPS: FEMA

The Central Government of India formulated an act to encourage external payments and across the border trades in India known as the Foreign Exchange Management Act. FEMA (Foreign Exchange Management Act) was introduced in the year 1999 to replace an earlier act FERA (Foreign Exchange Regulation Act). FEMA was formulated to fill all the loopholes and drawback of FERA (Foreign Exchange Regulation Act) and hence several economic reforms (major reforms) were introduced under the FEMA act. FEMA was basically introduced to de-regularize and have a liberal economy in India.

Objectives of FEMA

The main objective for which FEMA was introduced in India was to facilitate external trade and payments. In addition to this, FEMA was also formulated to assist orderly development and maintenance of the Indian forex market.

FEMA outlines the formalities and procedures for the dealings of all foreign exchange transactions in India. These foreign exchange transactions have been classified into two categories — Capital Account Transactions and Current Account Transactions.

Under the FEMA Act, the balance of payment is the record of dealings between the citizen of different countries in goods, services and assets. It is mainly divided into two categories, i.e. Capital Account and Current Account.

Capital Account comprises all capital transactions whereas Current Account comprises trade

of merchandise. Current Account transactions are those transactions that involve inflow and

outflow of money to and from the country/countries during a year, due to the trading/rendering of commodity, service, and income.

The current account is an indicator of an economy's status. As mentioned above the balance of payment comprises current and capital accounts, the remainder of the Balance of Payment is Capital Account, which consists the movement of capital in the economy due to capital receipts and expenditure. Capital account recognises domestic investment in foreign assets and foreign investment in domestic.

4.6 Applicability of FEMA Act

FEMA (Foreign Exchange Management Act) is applicable to the whole of India and equally applicable to the agencies and offices located outside India (which are owned or managed by an Indian Citizen). The head office of FEMA is situated in New Delhi and known as Enforcement Directorate. FEMA is applicable to:

- Foreign exchange.
- Foreign security.
- Exportation of any commodity and/or service from India to a country outside India.
- Importation of any commodity and/or services from outside India.
- Securities as defined under Public Debt Act 1994.
- Purchase, sale and exchange of any kind (i.e. Transfer).
- Banking, financial and insurance services.
- Any overseas company owned by an NRI (Non-Resident Indian) and the owner is 60% or more.
- Any citizen of India, residing in the country or outside (NRI).

The Current Account transactions under the FEMA Act has been categorized into three parts which, namely-

- Transactions prohibited by FEMA,
- The transaction requires Central Government's permission,
- The transaction requires RBI's permission.

Prohibition on Drawal of Foreign Exchange

- Any kind of remittance out of winning the lottery.
- Any kind of remittance from the income on racing/riding etc,
- Any remittance for buying of a lottery ticket, football pools, sweepstakes, banned/prescribed magazines etc.,
- Commission payment on exports towards equity investment of Indian Companies in Joint ventures/wholly owned subsidiaries abroad.
- Remittance of dividend by any company. However, this clause is applicable only if the requirement of dividend balancing is applicable.
- Commission payment on exportation under Rupees State Credit Routes except commission up to 10% of invoice value of export of tea and tobacco.
- Payment regarding " Call back Services" of telephones.
- A travel to Bhutan and/or Nepal.
- Remittance of interest income on funds held in NRSR Account i.e. Non-resident Special Rupees Scheme account.
- A transaction with a resident of Bhutan or Nepal.
- Route for Drawal of Foreign Exchange

- According to the Reserve Bank of India, Foreign Exchange can be drawn from any authorized dealer by the Prior Approval Route or General Permission Route.

Transactions for which Central Government prior approval is required for Drawl of foreign exchange –

Cultural tours.

Advertisement in print media of a foreign country for any purpose other than promoting tourism, international bidding and foreign investments (exceeding 10000 US Dollar) by a State Government and its Public Sector Units.

Payment of importation by a Public Sector Unit or a department of government on c.i.f. basis only for importation through ocean transport.

Remittance of freight of vessels chartered.

- Remittance of detention charges of container exceeding the DGS's (Director General of Shipping) prescribed rate.
- Remittance of Prize money/sponsorship of any activity of sport outside India by a person other than national/ international/street level sports bodies, if the amount of the prize money/sponsorship exceeds 1,00,000 US Dollars.
- Remittance of hiring charges of transponders.
- Internet Service Providers.
- TV channels.
- Remittance for P&I Club ministry's membership.
- Remittance by Multi-model transport operators to their agents in abroad.

Penalties Under FEMA

If any person contravenes the provisions of FEMA or any rule, direction, regulation, order or notification issued under FEMA, he shall be liable to pay a penalty up to thrice the sum involved in such contravention or up to Rs.2 lakh. Where such contravention is a continuing one, he shall be liable to pay a further penalty which may extend to Rs.5,000 for every day during which the contravention continues.

4.7 GST INDUSTRIAL POLICY IN INDIA ND ITS EFFECT ON GROWTH

GST (GOODS AND SERVICE TAX)

GST is the most ambitious and remarkable indirect tax reform in India's post-Independence history. Its objective is to levy a single national uniform tax across India on all goods and services. GST has replaced a number of Central and State taxes, made India more of a national integrated market, and brought more producers into the tax net. By improving efficiency, it can add substantially to growth as well as government finances. Implementing a new tax, encompassing both goods and services, by the Centre and the States in a large and complex federal system, is perhaps unprece- dented in modern global tax history.

GST is a tax on goods and services with comprehensive and continuous chain of set-off benefits up to the retailer level. It is essentially a tax only on value addition at each stage, and a supplier at each stage is permitted to set-off, through a tax credit mechanism, the GST paid on the purchase of goods and services. Ultimately, the burden of GST is borne by the end-user (i.e. final consumer) of the commodity/service.

Thith the introduction of GST, a continuous chain of set-off from the original producer's point and service provider's point up to the retailer's level has been established, eliminating the burden of all cascading or pyramiding effects of an indirect tax system. This is the essence of GST. GST taxes only the final consumer. Hence the cascading of taxes (tax-on-tax) is avoided and production costs are cut down.

As already noted, prior to the introduction of GST, the indirect tax system of India suffered from various limitations. There was a burden of tax-on-tax in the pre-GST system of Central excise duty and the sales tax system of the States. GST has taken under its wings a profusion of indirect taxes of the Centre and the States. It has integrated taxes on goods and services for set-off relief. Further, it has also captured certain value additions in the distributive trade. There is now a continuous chain of set-offs which would eliminate the burden of all cascading effects.

Presently, services sector in India constitutes a tax base with vast potential which has not been exploited as yet. It is in this context that GST is justified as it has subsumed under it almost all the services for the purpose of taxation. Since major Central and State indirect taxes have got subsumed under GST, the multiplicity of taxes has been substantially reduced which, in turn, would decrease the operating costs of the country's tax system. The uniformity in tax rates and procedures across the country will go a long way in reducing compliance costs.

In a nutshell, GST is a comprehensive indirect tax levy on manufacture, sale and consumption of goods as well as services at the national level. GST is an indirect tax for the whole of India to make it one unified common market. GST is designed to give India a world class tax system and improve tax collections. It would end the long-standing distortions of differential treatment of manufacturing sector and services sector. GST will facilitate seamless credit across the entire supply chain and across all States under a common tax base.

Evolution of GST in India

In 2000, the Vajpayee Government started discussion on GST by setting up an Empowered Com- mittee, headed by AsimDasgupta (Thest Bengal Finance Minister) to design the GST model. There- after, the Task Force on Implementation of the Fiscal Responsibility and Budget Management Act, 2003 (Chairman: Vijay Kelkar) recommended the removal of all inefficient and distortionary taxes so that India obtains the efficiencies of a single national tax, and suggested a comprehensive GST based on VAT principle. The idea of moving towards a GST was proposed in 2005 by the then

Union Finance Minister, P. Chidambaram in his budget speech for the year 2005-06 where he observed that the entire production-distribution chain should be covered by a goods and services tax that encompasses both the Centre and the States. He reiterated his idea in 2006-07 budget speech and proposed April 1, 2010 as the date for introducing GST. Towards this objective, an Empowered Committee (EC) of State Finance Ministers was to work with the Central Government to prepare a roadmap for introduction of GST. The final version of the report of EC was presented in the form of 'A Model and Roadmap for Goods and Services Tax in India' on April 30, 2008.

After receiving comments on the report from Government of India and concerned officials of the State Governments and taking into account their recommendations, the EC released the First Discussion paper on Goods and Services Tax in India on November 10, 2009 to obtain the inputs of industry, trade bodies, and people at large. on 22nd March 2011, the Constitution (115th Amendment) Bill was introduced in the Lok Sabha to operationalize the GST and enable Centre and States to make laws for levying of GST. However, the Bill lapsed with the dissolution of the 15th Lok Sabha. There- after, on 19th December, 2014 the Constitution (122nd Amendment) Bill, 2014 was introduced in the Lok Sabha to address various issues related to GST. It is noteworthy that the introduction of GST required a Constitutional amendment as the Constitution did not vest express power either in the Central Government or State Government to levy tax on the 'supply of goods and services'. Thhile the Centre was empowered to tax services and goods up to the production stage, the States had the power to tax sale of goods. Since the GST regime requires goods and services to be simultaneously taxed by both the Central and State Governments, a Constitutional amendment was needed.

The Constitution (122nd Amendment) Bill, 2014 was passed by the Lok Sabha on 6th May, 2015 after which the Rajya Sabha passed the Bill with 9 amendments on 3rd August, 2016. The Lok Sabha then passed the modified Bill on 8th August, 2016. After getting approval of half of the States, it was sent to the President for his assent which was given on 8th September, 2016. Thus the road to GST rollout was cleared and the process of enactment was completed.

Salient features of GST IN India

The salient features of GST in India have been highlighted below:

1. supply as the base: GST would be applicable on "supply" of goods or services as against the erstwhile concept of tax on the manufacture of goods or on sale of goods or on provision of services.

2. Destination-based tax: As opposed to the previous principle of origin-based taxation, GST would be based on the principle of destination-based consumption taxation.

3. Dual GsT: The Centre and the States would simultaneously levy tax on a common base. The GST to be levied by the Centre would be called Central GST (CGST) and the GST to be levied by the States (including Union territories with legislature) would be called State GST (SGST). Union territories without legislature would levy Union territory GST (UTGST).

4. inter-state supply: An integrated GST (IGST) would be levied on inter-State supply of goods or services. This would be collected by the Centre so that the credit

chain is not disrupted. Imports of goods and services would be treated as inter-State supplies and would be subject to IGST. (This would be in addition to applicable customs duties).

5. Central taxes subsumed: GST would subsume the following taxes that were levied and collected by the Centre: Central excise duty; Additional duties of excise; Additional duties of customs (commonly known as countervailing duty); special additional duty of customs (SAD); service tax; and cesses and surcharges insofar as they relate to supply of goods or services.

6. state taxes subsumed: GST would subsume the following taxes that were levied and collected by the State: State VAT; Central Sales Tax; purchase tax; luxury tax; entry tax; entertainment tax (except those levied by the local bodies); taxes on advertisements; taxes on lotteries, betting and gambling; and State cesses and surcharges insofar as they relate to supply of goods or services.

7. applicability: GST would apply to all goods and services except alcohol for human consump- tion. GST on five specified petroleum products (crude, petrol, diesel, aviation turbine fuel, natural gas) would be applicable from a date to be recommended by the GST Council.

8. Threshold for GsT: A common threshold exemption would apply to both CGST and SGST. Taxpayers with an annual turnover of ` 20 lakh (` 10 lakh for special category States (ex- cept J&K) as specified in article 279A of the Constitution) would be exempt from GST. A compounding option (i.e. to pay tax at a flat rate without credits) would be available to small taxpayers (including to manufacturers other than specified category of manufacturers and service providers) having an annual turnover of up to ` 1 crore (` 75 lakh for special category States (except J&K and Uttarakhand) enumerated in article 279A of the Constitution). The threshold exemption and compounding scheme is optional.

9. Exports: All exports and supplies to Special Economic Zones (SEZs) and SEZ units would be zero-rated.

10. input tax credit: Credit of CGST paid on inputs may be used only for paying CGST on the output and the credit of SGST/UTGST paid on inputs may be used only for paying SGST/ UTGST. In other words, the two streams of input tax credit (ITC) cannot be cross utilized, except in specified circumstances of inter-State supplies for payment of IGST. (For details, see the Chapter on Input Tax Credit).

11. Electronic filing of returns: There will be electronic filing of returns by different class of persons at different cut-off dates. Various modes of payment of tax available to the taxpay- er including internet banking, debit/credit card and National Electronic Funds Transfer (NEFT)/Real Time Gross Settlement (RTGS).

12. Tax deduction on payment made: Thhile the provision for TDS has not been notified yet, it is obligatory on certain persons including government departments, local authorities and government agencies, who are recipients of supply, to deduct tax at the rate of 1% from the payment made or credited to the supplier where total value of supply, under a contract, exceeds ` 2,50,000.

13. Tax collection at source by E-commerce operators: Thhile the provision for TCS has not been notified yet,it is obligatory for electronic commerce operators to collect ‘tax at source’, at such rate not exceeding 2% of net value of taxable supplies, out of payments to suppliers supplying goods or services through their portals.

14. refund: Refund of tax can be sought by taxpayer or by any other person who

has borne the incidence of tax within two years from the relevant date. Refund is to be granted within 60 days from the date of receipt of complete application and interest is payable if refund is not sanctioned within 60 days.

15. anti-profiteering clause: An anti-profiteering clause has been provided in order to ensure that business passes on the benefit of reduced tax incidence on goods or services or both to the consumers.

PROPOSED BENEFITS OF GST

The implementation of GST is expected to bring in various benefits as discussed below:

1. Dynamic common market: GST would make India a dynamic common market and result in generation of positive externalities. By ensuring uniformity of indirect tax rates across the country, it will substantially improve the ease of doing business.

2. Elimination of cascading effect: Under GST, provision of seamless input tax credit across transactions will avoid tax cascading, eliminate double taxation and improve resource allo- cation.

3. Efficiency: Subsuming of all major indirect taxes will result in the removal of inefficient taxes. Thith as single tax to be paid, manufacturers will become more competitive and this could lead to growth in exports.

4. Reduced compliance costs: Harmonisation of tax rates and laws along with seamless input tax credits and a sound IT infrastructure is expected to lead to reduced compliance costs. As all the taxpayer services like registrations, payments, returns etc. will be available online, the compliance process would become simpler.

5. Reduction in tax evasion: Uniform rates of taxation would reduce the incentive for tax evasion by eliminating rate arbitrage opportunities between neighbouring states and that between intra-State and inter-State sales.

6. improved collection efficiency: GST is also desirable from the point of view of tax policy and collection. Even if the taxes are lowered, the revenue of the Union and the states is expected to be buoyant due to less evasion. A single rate across all goods and services will eliminate classification disputes and make tax assessment more predictable. Harmonisation of tax assessment, levy and collection procedures across states will reduce compliance costs, limit evasion, enhance transparency and improve collection efficiency.

7. Revenue generation: By controlling tax leakage from the system and having a wider base, GST would generate more tax revenues for both the Central and State Governments.

8. Encourages savings and investment: As GST is a tax on consumption and not on income, so the tax system inherently encourages savings and investments instead of consumption. Further, input tax credit would lead to a decrease in the cost of capital goods and provide boost to investments.

9. improved efficiency of logistics : Due to GST implementation, the restriction on inter-State movement of goods is likely to be lessened and the logistics sector is anticipated to start con- solidating warehouses across the country. In the erstwhile indirect tax structure, decisions related to logistics and distribution centres were based on tax considerations as opposed to operational efficiency. Thith GST in place, these decisions will now be based on operational efficiency and warehouses would be set up at locations that would help in reaching custom- ers faster and reduce costs.

10. Regulation of the unorganized sector : For a large unorganized sector that exists in business, GST has provisions for online compliances and payments, and availing of input credit only when the supplier has accepted the amount, thereby bringing accountability and regulation to these businesses.

11. Export competitiveness :Thith GST in place, the export industry in India would be able to have internationally competitive prices due to the smooth process of claiming input tax credit and the availability of input tax credit on services. The exports of goods or services would be a zero rated supply under GST implying that GST would not be levied on export of goods or services. All this, in turn, would provide a push to government's 'Make in India' campaign.

12. higher threshold for registration: As per the current VAT structure, any business with a turnover of more than ` 5 lakh (in most states) is liable to pay VAT (different rates in dif- ferent states). Similarly, for service tax, service providers with turnover less than ` 10 lakhs are exempted. Under GST this threshold has been increased to ` 20 lakhs thus exempting many small traders and service providers.

13. Composition scheme for small businesses: The composition scheme under the GST regime is a method of levy of tax designed for small taxpayers whose turnover is up to ` 1 crore (` 75 lakhs in case of 9 Special Category States). Those who opt for this scheme can file returns on a quarterly basis unlike the others who have to file returns on a monthly basis. Under the scheme, small businesses, manufacturers and restaurants will be subject to a GST rate of 0.5%, 1% and 2.5% respectively on turnover. The Composition scheme has been designed to simplify and reduce the burden of compliance for smaller taxpayers.

14. benefits to consumers: The final price of goods is expected to be lower due to seamless flow of input tax credit between the manufacturer, retailer and supplier of services. Average tax burden on companies is likely to come down which is expected to reduce prices and hence benefit the consumer.

CONCERNS REGARDING GST

1. lack of preparedness: The understanding of the provisions of GST is still at a nascent stage for many people engaged in business. They are still trying to assess the mandated GST compliance provisions that their relevant functional departments (such as IT Department, Legal department) need to adhere to.

2. Compliance related issues: Businesses need to file multiple returns which may increase manifold in accordance with business models. Clients will need to ensure timely compliance by registered suppliers to ensure there is no loss of input credit. This will necessitate correct data and reports to fill accurate GST returns.

3. increased costs due to software purchase: Businesses have to either update their existing accounting or ERP software to a GST-compliant software or buy a GST software so that they can keep their business going. Both the options lead to increased cost of software purchase and training of employees for an efficient utilization of the new billing software.

4. small businesses: Small and medium-sized enterprises (SMEs) who have not yet signed for GST have to quickly grasp the nuances of the GST tax regime. They will have to issue GST-complaint invoices, be compliant to digital record-keeping, and of course, file timely returns. This means that the GST-complaint invoice issued must have mandatory details such as GSTIN, place of supply, HSN codes, and others.

5. lack of skilled resources and re-skilling existing workforce: As GST has been introduced recently, skilled staff with complete and updated subject knowledge of GST is not easily available. This has resulted in an urgent need for adequate skilled human resources well- versed with GST to ensure swift implementation. In addition, businesses will need to re-train their employees in GST compliance, further increasing their overhead expenses.

6. Multiple rate structure: The GST presently has a four slab structure with tax rates kept at 5%, 12%, 18% and 28%. The multiple tax structure has been justified on the ground that necessary items of mass consumption should be taxed at a lower rate while luxury items should be taxed at higher rates. However, multiple rates are likely to increase administra- tive complexity as well as create classification disputes. Such a system makes it difficult to evaluate the overall effects of the tax design.

4.8 STRUCTURE OF GST

There are four categories of indirect taxes under GST:

16. Central Goods and Services Tax (CGST).

17. State Goods and Services Tax (SGST).

18. Union Territory Goods and Services Tax (UTGST).

19. Integrated Goods and Services Tax (IGST).

Central Goods and Services Tax (CGST)

GST levied by the Centre on intra-State supply of goods or services or both is called CGST. It is levied under Central Goods and Services Tax (CGST) Act, 2017 which makes provisions for the levy and collection of tax on intra-State supply of goods or services or both by the Central Government. The Act is divided into 21 chapters which deal with matters connected with the levy, collection and administration of GST.

As regards the levy and collection of the tax, Section 9 of the Act reads as follows:

"(1) Subject to the provisions of sub-section (2), there shall be levied a tax called the central goods and services tax on all intra-State supplies of goods or services or both, except on the supply of alco- holic liquor for human consumption, on the value determined under section 15 and at such rates, not exceeding twenty per cent, as may be notified by the Government on the recommendations of the Council and collected in such manner as may be prescribed and shall be paid by the taxable person.

(2) The central tax on the supply of petroleum crude, high speed diesel, motor spirit (commonly known as petrol), natural gas and aviation turbine fuel shall be levied with effect from such date as may be notified by the Government on the recommendations of the Council.

(3) The Government may, on the recommendations of the Council, by notification, specify categories of supply of goods or services or both, the tax on which shall be paid on reverse charge basis by the recipient of such goods or services or both and all the provisions of this Act shall apply to such recipient as if he is the person liable for paying the tax in relation to the supply of such goods or services or both.

(4) The central tax in respect of the supply of taxable goods or services or both by a supplier, who is not registered, to a registered person shall be paid by such person

on reverse charge basis as the recipient and all the provisions of this Act shall apply to such recipient as if he is the person liable for paying the tax in relation to the supply of such goods or services or both.

(5) The Government may, on the recommendations of the Council, by notification, specify categories of services the tax on intra-State supplies of which shall be paid by the electronic commerce op- erator if such services are supplied through it, and all the provisions of this Act shall apply to such electronic commerce operator as if he is the supplier liable for paying the tax in relation to the supply of such services:

Provided that where an electronic commerce operator does not have a physical presence in the taxable territory, any person representing such electronic commerce operator for any purpose in the taxable territory shall be liable to pay tax:

Provided further that where an electronic commerce operator does not have a physical presence in the taxable territory and also he does not have a representative in the said territory, such electronic commerce operator shall appoint a person in the taxable territory for the purpose of paying tax and such person shall be liable to pay tax."

State Goods and Services Tax (SGST)

GST levied by the States on intra-State supply of goods or services or both under their respective SGST Acts is called SGST. Union territories with legislature (Delhi and Puducherry) are covered

Let's sum up

Dear Learners , In this module we learn about Introduction to Cashless economy and Digitalized cash transfer, Methods of cash payments, Challenges, concept bout government initiatives for cashless economy in India, concept of FEMA, concept about GST- Industrial policy in India, Structure of GST.

Self Assessment Questions

1. When was the first 5 year plan introduced in India?
   a. 1951 b. 1956
   c.1958 d. 1952

2. IGST is build us soon as the stock is ----------
   a. federal b. intra-UT
   c. intra-state d. all of the above

3. the highest CGST rate legally permitted for intrastate supplies is ----
   a. 18% b. 40%
   c.20% d.28%+cess

4. which of the below import port duties would be imposed?
   a. CGST b.SGST
   c.IGST d.CGST& SGST

5. Which one of the below will not be added to supply value?

a. GST b. interest

c.late fee d. commission

UNIT SUMMARY

Dear learners, In this unit we discuss about,

- introductionto commodity market, types and requirements and money market –introduction, objectives and types
- Introduction to Demand and supply of Money, Motives, concept of Monetary policy, Objectives and Instruments of Monetary policy. Inflation concept, Characteristics, types of Inflation. Deflation concept, Stagflation concept and Stagflation VS Inflation
- Introduction to Fiscal policy, Objectives of Fiscal policy, Techniques of Fiscal policy, Globalization and its impact, Government policy towards foreign capital and foreign collaboration
- Introduction to Cashless economy and Digitalized cash transfer, Methods of cash payments, Challenges, concept bout government initiatives for cashless economy in India, concept of FEMA, concept about GST- Industrial policy in India, Structure of GST

Web resources :

1. https://egyankosh.ac.in/bitstream/123456789/23549/1/Unit-5.pdf
2. https://cbic-gst.gov.in/hindi/pdf/ovw-short.pdf

Module 4 completed