Introduction

Introductions to Economics, Positive and Normative Economics

Objective

The basic objective of this chapter is to get an overview of what economics is all about. The flow of this chapter is as follows:

- We and Economics- The Introduction
- Need to Study Economics
- Positive Economics and Normative Economics
- Subject Matter of Economics
- Difference between Microeconomics and Macroeconomics

We and Economics-The Introduction

Think of our day to day activities. We all go to a market to buy various products, where we interact with the sellers who sell us the products. Have you ever thought of what goes in the mind of a purchaser when he/she is purchasing something? Yes, some of the important points are price of the product, usefulness of the product, worth for money, his/her preferences, etc.

Similarly, let us think about the behaviour of a seller. What a seller thinks while making his/her selling decisions? What and how much should he/she sell? What should be the selling price? Where to sell? How many sellers exist in the market? How useful is his product for the consumers? etc.

We can conclude that in both the above examples, we are concerned about the human behaviour. That is, how human beings as individuals or as a group behave under different situations, having different motives and resources. Thus, broadly, we can say that economics is a study of human behaviour.

Definition of Economics

Economics is a branch of social science which primarily focuses on various ways of maximising satisfaction, enhancing welfare both at individual and society level. It also provides us the framework to take various decisions rationally and logically in the face of unlimited wants and limited endowment of resources.

In the words of **Robbins**

"Economics is a science which studies human behaviour as a relationship between ends and scarce means which have alternative uses."

In the words of **Samuelson**

" Economics is the study of how men and society choose, with or without use of money, to employ scarce productive resources which could have alternative uses, to produce various commodities overtime and distribute them for consumption now and in future among various people and groups of society."

Need For Economics (Scarcity of Resources and Unlimited Wants)

A unique feature of human behaviour is never-ending or unlimited wants. The fulfilment of these wants needs resources (such as, money, natural resources, etc.). However; these resources are always scarce in relation to the unlimited human wants. For example, with Rs 40,000, a consumer can either purchase a T.V or a Laptop.

Thus, he/she faces the constraint of limited availability of money. Similarly, a producer faces the limited availability of resources for making his/her production decisions. Hence, the basic concern of economics is to allocate the scarce resources to the best possible use in the face of unlimited wants.

The need of economics stems from the basic problem of scarcity and choice. Every society is endowed with limited resources that can be used to enhance the welfare and development of a society as a whole.

Economics is about how an individual or a particular society makes these decisions regarding choices. It provides us with a basic framework which assists a particular society to make decisions by assessing costs and benefits of a particular decision.

Positive Economics and Normative Economics

Till now, we know that the basic economic problem exists because of the problem of scarcity of resources and parallelly unlimited wants. There may be different alternative solutions to solve a particular economic problem. These different alternatives may lead to different allocation mix of available resources and also lead to different distribution pattern of final output.

Whenever, we try to understand and solve an economic problem such as poverty, unemployment, etc, we often come across various statements or suggestions which may or may not be subjected to verifications.

Depending on the nature of statements, i.e. whether these statements can be verified or not, the statements can be classified into following two categories.

1. Positive Statements
2. Normative Statements

Positive Statements are the factual statements and describe what was, what is and what would be. These statements can be tested, proven or disproven. These statements do not involve any personal value judgment. For example, if one says that it is raining outside, then the truth of this statement can be checked out by going outside.

Normative Statements describe what should be or what ought to be. These statements cannot be tested and verified. Unlike positive statements, normative statements involve personal value judgments.

Usually, these statements are debatable in nature. For example, if one say that he/she prefers tea over coffee, then such statement reflects his/her personal ideas, preferences, thereby, cannot be proven or disproven.

Thus, it can be said that while the positive statements are objective statements, the normative statements are subjective statements. For example, Indian Stock Market has boomed in recent years, is an example of positive statements; whereas, Indian government should make the legal formalities for the foreign investors less-stringent is an example of normative statements.

Difference between Positive and Normative Economics

	Positive Economics	**Normative Economics**
1.	Positive Economics deals with factual situations i.e. they describe the actual situation of what was what is and what would be.	Normative Economics deals with the ideal situations of what should be or what ought to be.
2.	It does not involve any personal value judgement	It involves the personal value judgement.
3.	Such situations/descriptions can be verified.	Such situations/descriptions cannot be verified and are debatable in nature.
4	Example- The rate of inflation at present is 4%.	Example- What should an ideal rate of inflation be?

Subject Matter of Economics- Microeconomics and Macroeconomics

The subject matter of economics is sub-divided into two core branches, Micro Economics and Macro Economics. This division came into existence only after 1930 as per the suggestion by Ragnar Frisch.

Microeconomics- In Microeconomics, we study about the issues pertaining to individual economic units, basically consumers, and firms, that interact in the market of different good and services. We study how consumers make their consumption choices and decisions given their money income and the prices of goods and services.

We analyse how the firms decide how much to produce and by different input combinations. We also study how prices are determined in both commodity market as well as in the factor market based on the demand and supply analysis. Thus, in other words, microeconomics is a study that basically focuses on behaviour of individual consumer and producer.

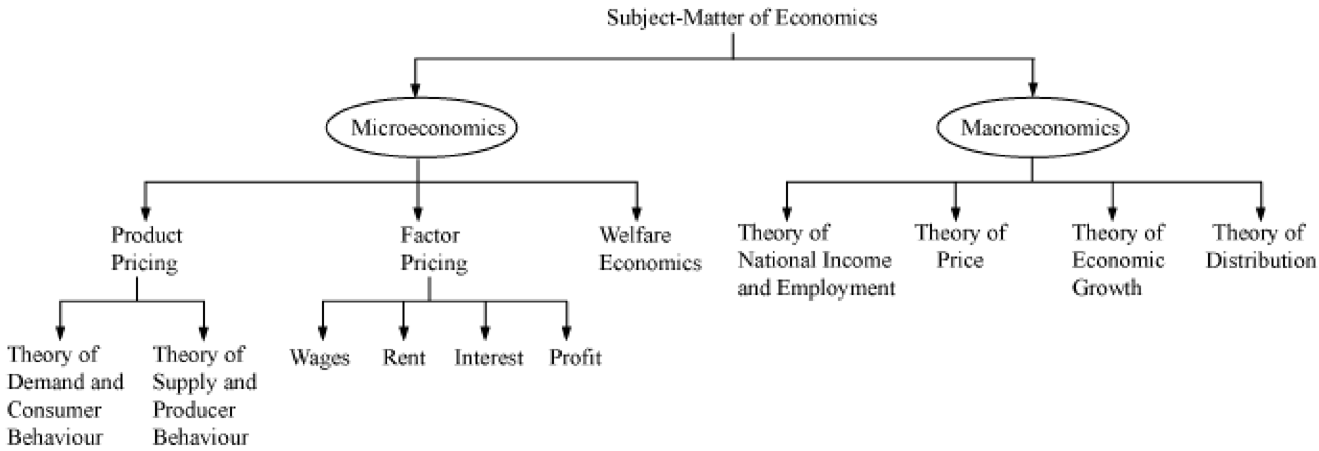
It is also called the *Price theory* as it primarily focuses on how prices are determined both in commodity and factor markets. Microeconomics is a microscopic extension of macroeconomics. The following are the important theories that fall under the domain of Microeconomics.

1. Theory of Consumer's Behaviour and Demand- (***Chapter- 2***)
2. Theory of Producer's Behaviour and Supply- (***Chapter- 3***)
3. Theory of Price Determination under different markets conditions (***Chapter- 4, 5, 6***)
4. Theory of Factor Pricing **
5. Theory of Welfare Economics**

Macroeconomics- In Macroeconomics, we study how an economy as a whole operates. It focuses on the aggregate measures such as, Aggregate Demand, Aggregate Supply, Aggregate Price Level, etc. It studies how these variables are determined and how they change over time. It helps us in understanding various economic relationships and economic problems at the economy or aggregate level.

It is also known as the *Theory of Income and Employment* as its main focus is on how income and employment levels are determined. In Macroeconomics, we confront major problems such as poverty, unemployment, inflation, BOP disequilibrium, etc. The following are the important Macroeconomic theories.

1. Theory of National Income
2. Theory of Employment
3. Theory of Money
4. Theory of General Price Level
5. Theory of International Trade
6. Theory of Economic Growth **



Difference between Microeconomics and Macroeconomics

Points of Difference	Microeconomics	Macroeconomics
1 Study matters	It studies about individual economic units like households, firms, consumers, etc.	It studies about an economy as a whole.
2 Deals with	It deals with how consumers or producers make their decisions depending on their given budget and other variables.	It deals with how different economic sectors such as households, industries, government and foreign sector make their decisions.
3 Method	It uses the method of partial equilibrium, i.e. equilibrium in one market.	It uses the method of general equilibrium, i.e. equilibrium in all markets of an economy as a whole.
4 Variables	The major microeconomic variables are price, individual consumer's demand, wages, rent, profit, revenues, etc.	The major macroeconomic variables are aggregate price, aggregate demand, aggregate supply, inflation, unemployment, etc.
5 Theories	Various theories studied are: 1.Theory of Consumer's Behaviour and Demand 2. Theory of Producer's Behaviour and Supply 3. Theory of Price Determination under Different Market Conditions 4. Theory of Factor Pricing 5. Theory of Welfare Economics	Various theories studied are: 1.Theory of National Income 2. Theory of Money 3. Theory of General Price Level 4. Theory of Employment 5. Theory of International Trade

Central Problems of an Economy and the Concept of Production Possibility Frontier

Objectives

After going through this chapter you shall be able to understand the following concepts

- Scarcity of Resources and Problem of Choice
- Central Problems of an Economy
- Production Possibility Curve
- Opportunity Cost/Economic Cost
- Shift and Movement of Production Possibility Curve

Introduction

As we know, the need for economics stems from the basic problem of scarcity and choice. Similar to an individual every economy also confronts these problems. It is because of this problem of scarce resources and the problem of choice that an economy is pushed to face the central problems.

Before studying the central problems of an economy, let us understand the problem of scarcity and the problem of choice carefully.

Scarcity of Resources and Problem of Choice

No matter, how well a particular economy is endowed with resources, these resources will be relatively scarce to fulfil its unlimited wants. Moreover, these scarce resources have alternative uses and can be allocated to the production of different goods and services. Allocation of resources to any particular use involves a cost in terms of sacrifice of the other possible uses.

To allocate the scarce resources in the best possible manner, an economy needs to analyse the cost (i.e. the opportunity cost) of allocating the resources to one use while sacrificing the other uses. For example, a piece of land can be used in a number of ways such as to grow crops, for building houses, for putting up industries, etc.

Therefore, the question here arises that to which particular use the piece of land should be allocated. It depends on the economy to analyse what is presently more important (or need as per the present scenario) and which use of land will be most beneficial for the economy as a whole.

Thus, it is due to the scarce availability of resources (having alternative uses) to fulfil the different and competing unlimited wants that an economy faces the problem of choice. From this discussion, we can conclude that the problem of choice is a consequence of the problem of scarcity of resources.

Hence, the following are the three main causes that give rise to the central problems in an economy.

1. ***Unlimited Human Wants***- Human wants are never-ending and new wants keep arising.

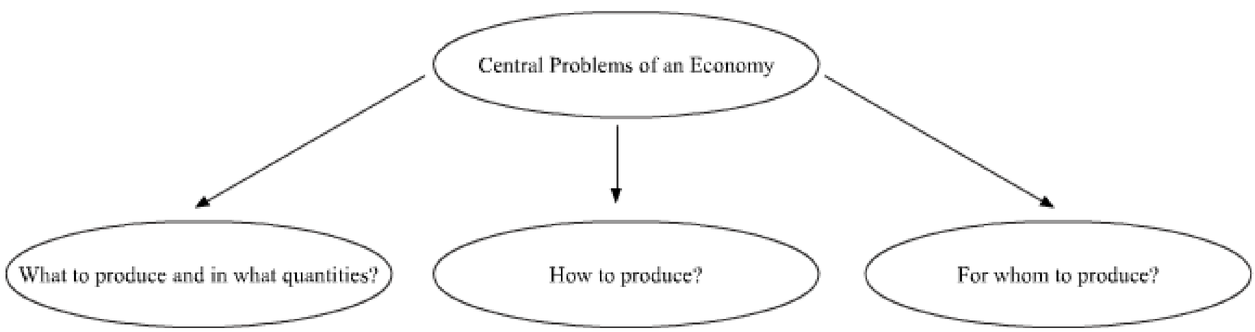
2. ***Limited Economic Resources***- In relation to the unlimited wants, the resources required to satisfy them are relatively scare and limited in supply.

3. ***Alternative Use of Resources***- Resources are not only scarce but also have alternative uses. This implies that a choice has to be made among the various alternative uses of resources.

Central Problems of an Economy

Due to allocative problems of scarce resources to alternative uses and the problem of choice every economy faces mainly three central problems. These are:

1. What to produce and in what quantities?
2. How to produce?
3. For whom to produce?



1. ***What to Produce and in What Quantities?***

The first problem that an economy faces is to decide which goods and services are to be produced. Besides this, the economy also needs to decide in what quantities these goods and services should be produced. Let understand this problem with the help of the following example.

Let us suppose that an economy can produce only two types of goods *viz.* consumer goods (such as, rice, wheat, Laptops, etc.) and capital goods (such as, machinery, guns, bridges, etc.). Now, with the amount of resources available, the economy need to decide how much and which of the consumer goods should be produced and how much and which of the capital goods should be produced. Thus the economy faces a choice as whether, it wants more of capital goods and less of consumer goods or vice-versa.

2. ***How to Produce?***

The next problem that an economy faces is to decide which production technique is to be employed in the production of the decided goods and services. The following are the two techniques of production.

(a) *Labour Intensive Production Technique*

This production technique uses ***comparatively more of labour units*** than that of capital or machine. For example, agricultural activities in India use labour intensive production technique.

b) *Capital Intensive Production Technique*

This production technique uses ***comparatively more of capital or machine units*** than that of labour units. For example, production of durable goods such as, T.V, refrigerator, vehicles, etc. needs capital intensive production technique.

The economy needs to decide which particular production technique should be adopted in order to utilise its available resources in the best possible efficient and optimal manner. India, for instance, is a labour abundant country.

Thus, it will be more beneficial for India to opt for labour intensive techniques, as this will not only minimise the cost of production (due to cheap availability of labour) but will also help in reducing unemployment.

3. ***For Whom to Produce? Or the Problem of Distribution of National Product.***

This economic problem basically focuses on the distribution mix of the final goods and services produced. The distribution of the final goods and services is equivalent to the distribution of National Income (or National Product) among the factors of production such as land, labour, capital and entrepreneur.

The economy needs to decide a mechanism of distributing the final goods and services among the different segments of population, so as to reduce the inequality of income.

This problem is concerned about who gets more or who gets less? Which goods should be made available free or at low (nominal) price and to which segment?

Production Possibility Curve (PPC)

The curve which shows the combinations of two goods and services that can be produced with fuller utilisation of a given amount of resources in the most efficient way and with a given production technology. It is also known as Production Possibility Frontier (or PPF) and Transformation Curve. In the figure, the curve AE represents the Production Possibility Curve.

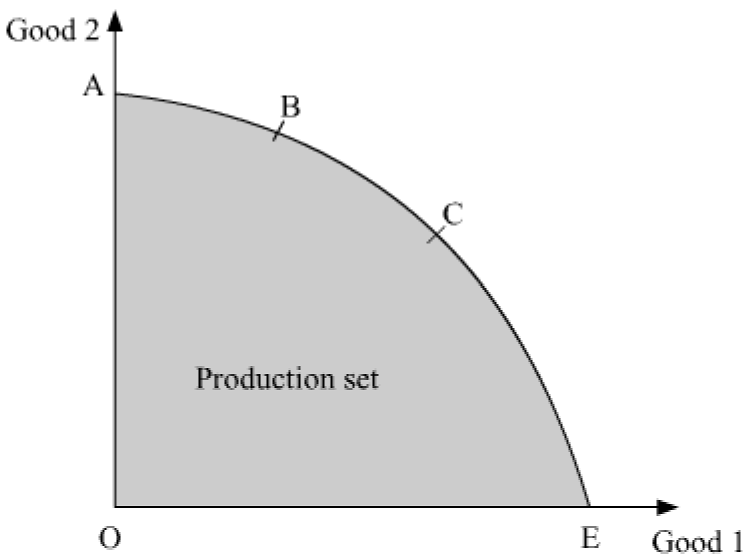
Assumptions of PPC

PPC of an economy is drawn with the following assumptions.

1. The economy can produce only two goods.
2. Quantity and quality of productive resources remains same
3. Level of technology remains same.
4. The economy is fully employing all its resources.
5. Resources can be utilised for the production of any of the two goods.

Production Possibility Set

It refers to a set of all the possible combinations of two goods and services that can be produced with the help of the given level of resources and production technology. In the figure, the shaded region represents the Production Possibility Set.



Opportunity Cost/ Economic Cost

Due to the scarce resources and unlimited wants, the economy needs to make a choice to employ its resources in the production of desirable goods and services. If the economy decides to use the resources in the production of one good (say, consumer goods), then it needs to forego or sacrifice some amount of other goods (say, capital goods) as the resources will be withdrawn from the production of the capital goods and will be employed in the production of consumer goods. The cost of enjoying more of one good in term of sacrificing the benefit of another good is called ***opportunity cost*** of the additional unit of the good. It is also called the economic cost.

Shape of PPC

PPC is concave to origin. This is because of the increasing opportunity cost i.e. in accordance with the law of increasing opportunity cost.

Slope of PPC

The slope of PPC shows for the production of every additional unit of one good, more and more units of other good has to be sacrificed. This is known as **Marginal Rate of Transformation (MRT)** or **Opportunity Cost**.

$$MRT = \frac{\Delta Y}{\Delta X} = \frac{\text{Amount of consumer good sacrificed}}{\text{Amount of capital good gained}}$$

It should be noted that as we move down along the PPC, the slope of PPC (or MRT) increases. This suggests that as the production increases, to produce each additional unit of one good, more and more units of other good needs to be sacrificed. In other words, the opportunity cost increases. This is called as the **law of increasing opportunity cost.**

Example

Let us once again consider the example of the economy producing two goods- consumer goods and capital goods assuming the level of resources and technology remain same. The following schedule depicts the different possible combination of the consumer goods and the capital goods that the economy can produce with its resource endowment and the available technology. This schedule is called production possibility schedule.

Production Possibilities	Consumer Goods (units)	Capital Goods (units)
A	50	0
B	48	1
C	44	2
D	35	3
E	0	4

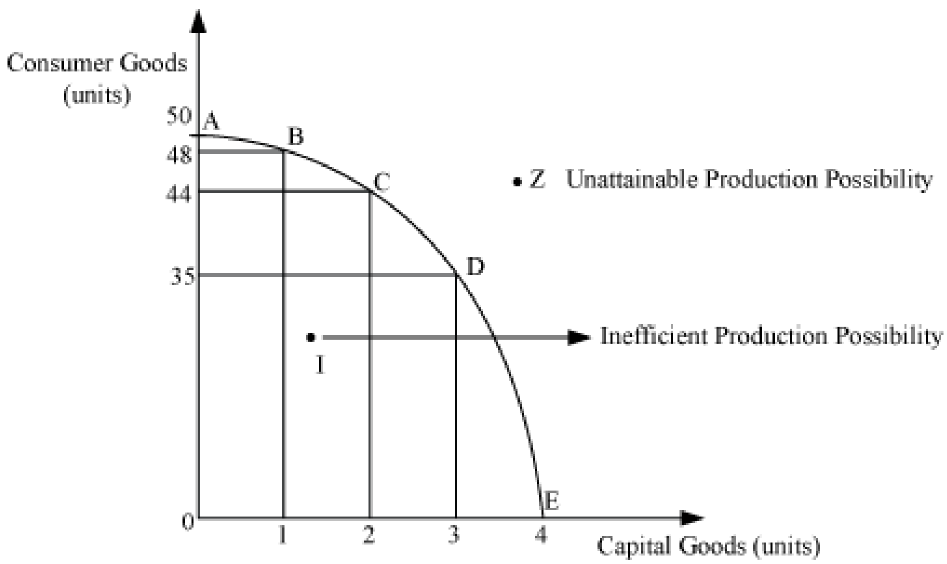
Let us plot these possibilities on a graph plane with capital goods on *x*-axis and consumer goods on *y*-axis. Joining all these points we get production possibility curve, *AE*. While, the point A shows that if all the resources are utilised in the production of the consumer goods, then 50 units of consumer goods can be produced with zero units of capital goods.

On the other hand, point *E* shows that if all the resources are utilised in the production of the capital goods, then 4 units of capital goods can be produced with zero units of consumer goods.

Thus, the economy needs to make a choice about how much of the consumer goods and capital goods are to be produced with the available amount of resources and given level of technology.

As we move downwards along the *PPC* from left to right (i.e. from *A* to *E*), we observe that in order to produce more units of capital goods, the economy must sacrifice some amount of consumer goods.

For example, movement from point *B* to point *C* implies that the economy is diverting resources from the production of consumer goods to the production of capital goods. In order to produce one additional unit of capital good, the economy needs to sacrifice four units of consumer goods. Thus, the opportunity cost of producing one additional unit of capital good is four units of consumer goods.



Production Possibility Curve

Consider the initial production point *B*, where 1 unit of capital good and 48 units of consumer goods are produced. To produce an additional unit of capital good, 4 units of consumer good must be sacrificed.

Here, the Marginal Rate of Transformation or Opportunity Cost is:

$$MRT = \frac{\Delta Y}{\Delta X} = \frac{\text{Amount ofconsumer good sacrificed}}{\text{Amount of capital good gained}} = \frac{44-48}{2-1} = -4$$

Thus, the *MRT* or the opportunity cost of getting an additional unit of capital good is 4 units of consumer goods.

Attainable and Unattainable Production Possibilities

Attainable Production Possibilities- These refer to those combinations of the two goods that can be produced with the available resources and technology. These are the points that lie on PPF and below PPF. Attainable production possibilities can be sub-divided into two categories.

1. The points that lie on the Production Possibility Frontier such as A, B, C, D and E are associated with full employment of resources and efficient utilisation of the available technology.

2. The points that lie below the PPF such as point I are associated with underemployment of resources and inefficient utilisation of the available technology.

Unattainable Production Possibilities- These refer to those combinations of the two goods which cannot be achieved with the present endowment of resources and technology. However, if the economy attempts to achieved such possibilities, then it will lead to overutilisation (or overemployment) of the existing resources.

Such production possibilities lie outside the production possibility set. In the above figure, point Z represents unattainable production possibility.

Shifting and Rotation of PPC

A PPC depends on the following two conditions:

1. Quantity and quality of productive resource endowment.

2. Level of technology.

A production possibility curve is drawn with a given endowment of resources and a given technology level. Accordingly, a PPC will shift or rotate under the following two conditions:

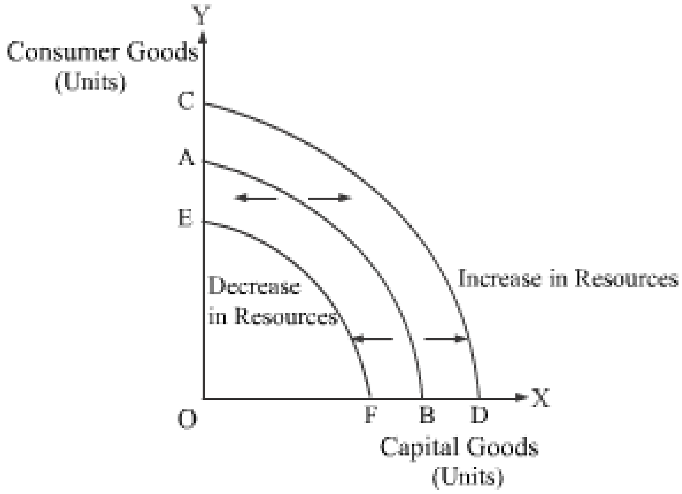
1. If there is a change in the resource endowment of the economy i.e. if there is a change in the resource availability to the economy.

2. If there is a change (appreciation/depreciation) in the existing level of production technology.

The two conditions are analysed below.

1. ***Change in Endowment of Resources***

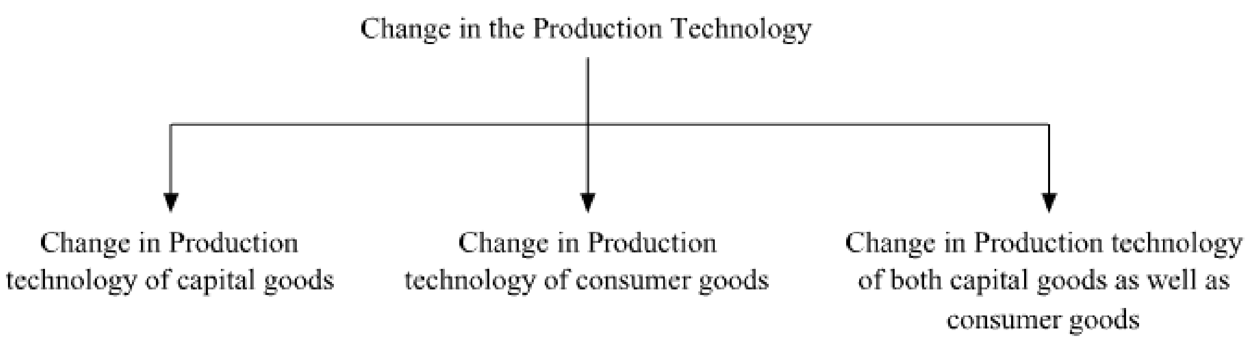
With a given endowment of resources and level of technology, let us assume that the initial PPC of the economy is represented by AB. Now, if suppose that the economy discovers new sources of resource, then it means that the economy can now produce more of both capital goods as well as consumer goods. The increase in the resource availability will shift the initial PPC outwards to the new PPC CD.



On the contrary, decrease in the resource availability is represented by an inward shift of the initial PPC AB to EF.

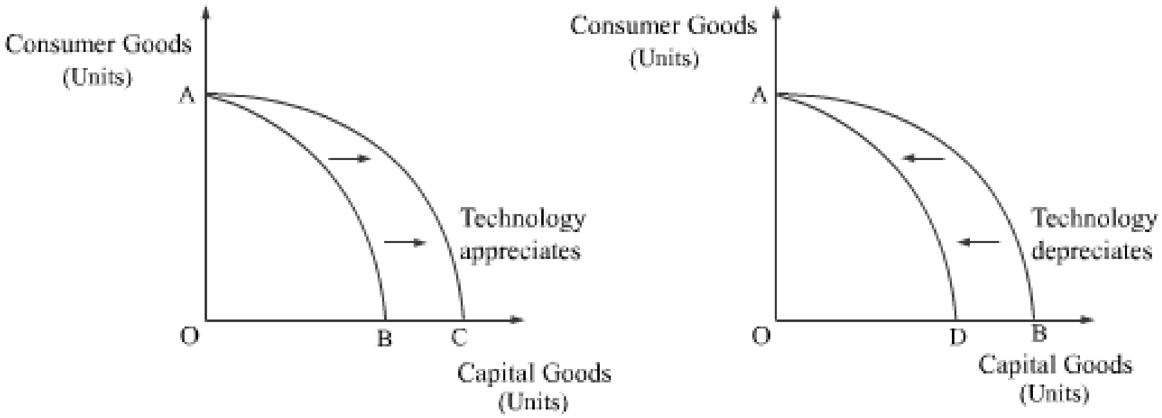
2. ***Change in the Production Technology***

The change in the technology may either take place in the production of both the goods or in the production of either of the two goods.



a. *Change in the Technology of Production of Capital Goods*- If the technology employed in the production of capital goods appreciates (or depreciates), then the production of capital goods will be more (or less) with the same level of resources and the PPC will pivot outwards (or inwards) with the same vertical intercept i.e. OA.

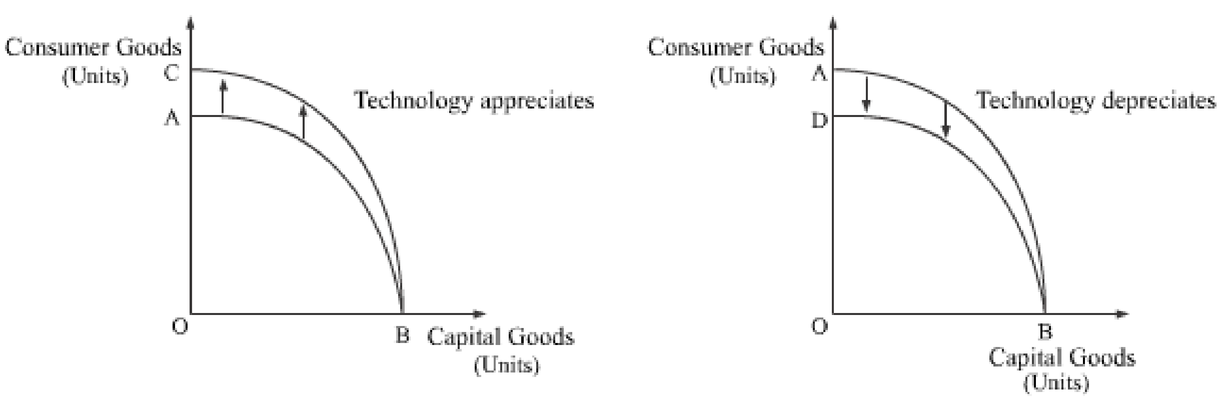
In the figure, with the ***appreciation*** of the production technology of the capital goods, the initial PPC AB pivots outwards to AC. On the other hand, with the ***depreciation*** of the production technology of the capital goods, the initial PPC AB pivots inwards to AD.



Change in Technology for Production of Capital Goods

b. *Change in Technology of Production of Consumer Goods*- If the technology employed in the production of consumers goods appreciates (or depreciates), then the production of the consumer goods will be more (or less) with the same level of resources and the PPC will pivot outwards (or inwards) along the same horizontal intercept i.e. OB.

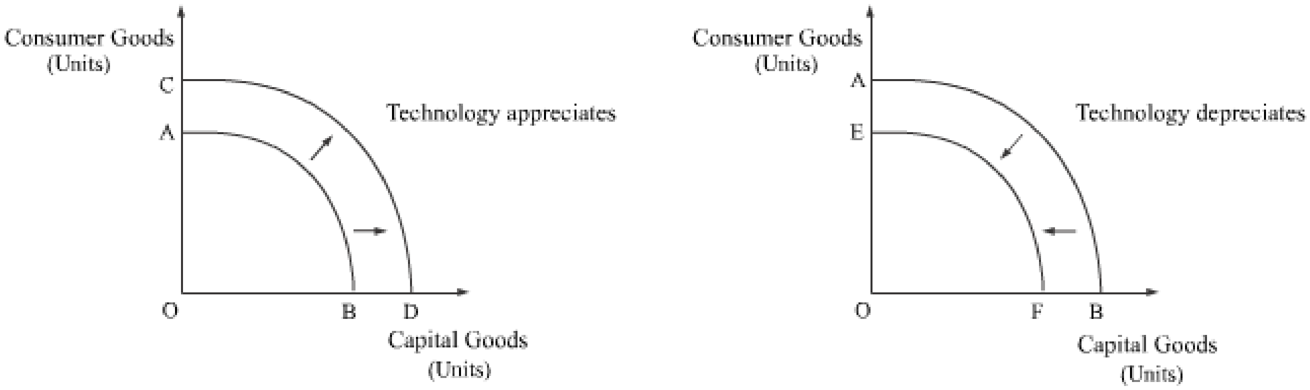
In the figure with the ***appreciation*** of the production technology of the consumer goods, the initial PPC AB pivots outwards to CB. On the other hand, with the ***depreciation*** of the production technology of the consumer goods, the initial PPC AB pivots inwards to DB.



Change in Technology in Production of Consumer Goods

c. *Change in Technology of Production of both the goods*- If the technology employed in the production of both the goods appreciates (or depreciates), then the economy can produce more (or less) of the both the goods. In the figure, with the appreciation of the production technology of both the goods, the initial PPC AB will shift outwards (rightwards) to new PPC CD.

On the other hand, with the depreciation of the production technology of both the goods, the initial PPC AB will shift inwards (leftwards) to new PPC EF.



Change in Technology in Production of both the goods – Consumer Goods and Capital Goods

Note: The effect of change in the resource availability on PPC is same as the change in the production technology of both the goods simultaneously.

Types of Economic Activities - The Centrally Planned Economy and Market Economy

Objectives

After going through this chapter you shall be able to understand the following concepts

- Economy and Economic Activity
- Types of Economic System- Market Economy, Centrally Planned Economy and Mixed Economy
- Difference between Market Economy, Centrally Planned Economy and Mixed Economy

Introduction

Economy- An economy is defined as a framework that consists of an economic system which allocates the scarce resources to the consumption, production, investment and saving activities. In economics, a country is generally referred to as an economy. This is because we are concerned with the economic aspect of above mentioned activities of a country as a whole.

Economic Activity- An activity that involves the use of scarce resources for the production of goods and services for the fulfilment of the human wants is regarded as an economic activity. Consumption, investment, production, saving, etc. are some of the examples of economic activities.

Types of Economic System

The economic system can be broadly classified into the following three types.

1. Market Economy

2. Centrally Planned Economy

3. Mixed Economy

Market Economy/Capitalist Economy

In this type of economy, the capitalist or the private entrepreneurs control the economic activities. They organise and undertake production with the sole motive of profit making. In this economic system, the government does not interfere in the economic activities.

The role of the government is limited only to defence and maintaining law order, and government do not interfere in the economic activities. This system is also known as Free Market Economy or Laissez-Faire System. For example, Britain during the industrial revolution period.

Features of Market Economy/ Laissez-Faire System/Free Market Economy

The following are the important features of a Market Economy.

1. The production activities are fully controlled, organised and managed by the private entrepreneurs. They hire the different factors of production such as, land, labour and capital to undertake the process of production.

2. The sole motive of undertaking the production process is to earn and maximise profits.

3. A market economy is not controlled, regulated and planned by the government. The role of government is limited only to defence and maintaining law and order in the economy.

4. There exists a very high degree of competition among different capitalist to earn maximum possible profits and capture the maximum market share.

5. The central problems of a market economy are solved by the price mechanism. That is, in other words, the capitalist decides what to produce, how to produce and for whom to produce as per the price signals.

Solutions to the Central Problems in a Market Economy

In a market economy, the solution to the three central problems is provided by the ***Price Mechanism***. This mechanism plays an important role in determining what to produce, how to produce and for whom to produce. Price of a good or service reflects the valuation and need of the society for that particular good or service.

Price is determined by the demand for and supply of the goods and services. It acts as a signal for the capitalist to take decision. Suppose, if the society demands more of a particular good or service, then its price will be high and a profit-motive capitalist will produce more of that good to earn profit.

Central Problems Faced by a Market Economy	Solutions to Central Problems
What to Produce?	Those goods will be produced for which the demand is high
How to Produce?	Those production techniques will be employed which minimise the cost of production.
For Whom to Produce?	Only for those who have the capacity to pay

Centrally Planned Economy

In this type of economy, central authority or state (government) plans, organises and regulates all the important economic activities. All the factors of production such as, land, labour, capital and entrepreneur are controlled and governed by the state. The state designs the plans (for the whole economy) and accordingly controls the production units to achieve the planned targets.

The main motive of the state is to render service and to enhance the welfare. The state controls the distribution of goods and services (i.e. the final product) among the different segments of population. The final product is distributed in a pattern that the state feels desirable, which is in tune with the accomplishment of the long-term planned targets. Unlike market economy, in a centrally planned economy the private entrepreneurs have no role to play as all the economic activities are solely governed by the state. For example, Soviet Union was a centrally planned economy for the major part of the twentieth century.

Features of Centrally Planned Economy

The following are the major features of a centrally planned economy

1. The production activities are planned, organised and controlled by the government.

2. Unlike market economy where self interest (or profit) is focused, in a centrally planned economy social welfare is focused. The state undertakes the production activities with the sole motive of social welfare and to render services.

3. Besides production, the state also manages and controls the distribution of goods and services among different segments of the population.

4. In a centrally planned economy, the role of the private entrepreneurs is minimal.

5. A centrally planned economy solves the central problems through economic or central planning. In other words, the state with the help of central planning tries to solve the three central problems of what to produce, how to produce, and for whom to produce as per the needs and requirements of the society.

Solutions to the Central Problems in a Centrally Planned Economy

In a centrally planned economy, the solution to the three central problems is provided by the ***economic (or state) planning***. The plans designed by the state helps in determining what to produce, how to produce and for whom to produce.

The economic activities are controlled to achieve the planned targets and simultaneously to enhance the social welfare. The state will produce those goods and services which will maximise the welfare of the society.

Central Problems Faced by a Mixed Economy	Solutions to Central Problems
What to Produce?	Those goods will be produced which will enhance the welfare of the society as a whole.
How to Produce?	The production technique which suits the economic conditions in the best manner. If labour (or capital) is abundant, then labour intensive technique (or capital intensive technique) will be employed.
For Whom to Produce?	For the society as a whole. This will be as per the requirements of the elimination of the major economic problem such as, poverty, inequality, employment, etc.

Mixed Economy

Mixed Economy consists of both the features of state economy and market economy. In a mixed economy, both private as well as public sectors works side-by-side. The private sector is free to choose their production line but is simultaneously governed by the public sector. The state interferes in the private sector activities in order to safeguard the interests of workers and consumers.

The interference by the state also ensures social justice along with accomplishing higher economic growth rate. While on one hand, the state owns the core and the base industries such as, iron and steel, energy, etc. on the other hand, the comparatively lesser important industries are owned by the private sector.

The state also keep a keen watch and tries to curtail the formation of monopolies, price rigging and manipulation, unfair trade practices. India, Sweden, Israel, Norway is an example of a mixed economy.

Features of a Mixed Economy

The following are the features of mixed economy.

1. In a mixed economy, both private sectors and public sectors coexists simultaneously.
2. The basic and core industries are owned by the public sectors, whereas, comparatively lesser important industries are owned by the private sectors.
3. The state keenly interfere in the working of the private sectors to safeguards the interest of the weaker and vulnerable sections of the society.
4. The factors of production are owned by both public as well as by the private sectors.
5. While on one hand, the public sector aims at social welfare and economic growth with social justice, whereas, on the other hand, the private sectors are profit-driven.
6. The interference by the state in the private sector operations tries to curtail the formation of monopolies and unfair trade practices.

Solutions to the Central Problems in a Mixed Economy

In a mixed economy, the solution to the three central problems is provided ***simultaneously through price mechanism*** and through ***economic (or state) planning***. The economic plans and price mechanism together helps in determining what to produce, how to produce and for whom to produce.

Central Problems Faced by a Mixed Economy	Solutions to Central Problems
What to Produce?	This problem is solved through price mechanism (for private sector) and also through central planning (for public sector).
How to Produce?	Private sector decides to employ those production techniques which reduces the cost of production, thereby maximises the

	profits. Public sector use those production techniques which enhance the social welfare.
For Whom to Produce?	The final product produced by the private sector is distributed as per the price mechanism. The final product produced by the public sector is distributed through the public distribution system.

Difference among Market Economy, Centrally Planned Economy and Mixed Economy

Points of Difference	Market Economy	Centrally Planned Economy	Mixed Economy
1. Ownership of factors of production	The factors of production are privately owned.	The factors of production are publically owned i.e. by the state.	The factors of production are jointly owned by the state as well as by the private sector.
2. Solutions to the Central Problems	The central problems are solved by the price mechanism, i.e. by the market forces- demand and supply	The central problems are solved by the planning mechanism.	The central problems are solved jointly by the price mechanism and planning mechanism.
3. Production motive	The main motive is profit making.	The motive of production is social welfare.	Coexistence of profit motive and social welfare.
4.Governing of Production	The production is governed by the price mechanism, i.e. by the demand and supply forces.	The production is governed by the planning mechanism, i.e. according to the government plans.	The production by the private sector is governed by price mechanism and the production by the public sector is governed by planning and welfare motive.
5. Income distribution	There exists very high inequality of distribution of income.	The degree of inequality of income is comparatively lesser.	There exists significant inequality of income. As in India, there is a wide gap between the rich and poor.

6. Government's role	The prime role is played by the private players. They decide what to produce, while the role of a government is very minimal and is limited only to maintain law and order in the nation.	The main role is played by the government- from production to distribution.	The core and base industries are governed by the state. The lesser important industries are owned by the private players. The degree of government role in a mixed economy is lesser than that of in a centrally planned economy but is higher than that of in a market economy.
7. Competition among the Producers	There exists a cut-throat competition among the capitalists.	There is absolutely no competition as the state is the only player.	There exists a high degree of competition among the private entrepreneurs, while there is no competition in the public sector.
8. Degree of Freedom available to the entrepreneurs	There exists very degree of freedom for the entrepreneurs to operate.	There exists absolutely no degree of freedom for the entrepreneurs to operate.	Although there exists considerable degree of freedom to the entrepreneurs to operate but government keeps a keen watch on the operations of the private sector.