INDIAN SCHOOL MUSCAT
DEPARTMENT OF COMMERCE AND HUMANITIES
INTRODUCTORY MICROECONOMICS
C LASS - XI

Introduction to Microeconomics

What Economics is all about?

Lionel Robbins defines economics as a science of scarcity.

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

Economic Problems of an Economy

- Resources or factors of production *(i.e.,* land, labour, capital and entrepreneurship) are scarce.
- They are available in limited quantities in relation to the demand.
- Resources also have alternative uses.
- All this necessitates a choice between which goods and services to produce first.
- The economy comprising of individuals, business firms, and societies must make this choice.
- Economic problem is the problem of choice. Human beings have wants which are unlimited. When these wants get satisfied, new wants crop up. The economic resources to satisfy these unlimited wants are limited.

Causes of Central Problems

- Human Wants are Unlimited. Human beings have wants which are unlimited. Human wants get satisfied by consuming goods and services, but new wants keep arising.
- Economic Resources are Limited. Economic or productive resources can be of four kinds: Land, Labour, Capital and Enterprise. These resources are limited in supply in relation to their demand. The scarcity of resources creates economic problems.
- Resources have Alternative Uses. The resources are not only scarce in supply but they also have alternative uses. For example, land can be used to produce wheat or rice or build a hospital or a school.

Central Problems

All economies have to face Central or basic problems.

The three fundamental economic problems are what, how and for whom to produce are grouped under allocation of resources.

1. **Allocation of Resources**

a) **What Goods to Produce and what quantity?:** An economy has to make a choice between consumer, capital, defence or civilian goods on the basis of *availability of technology, cost of production.* The problem of how much to produce is the problem of quantity of each good to be produced.

b) **How to Produce?** : It is the question of choice of technique of production. Generally, choice of technology is between labour-intensive and capital-intensive techniques. In labour-intensive technique, more labour and less capital is used. In capital intensive technique, more capital and less labour is used. A technique of production which would maximise output or minimise cost should be used.

c) **For Whom to Produce? :** This is the problem of how to distribute what is produced among the various income groups of the society. National product is the total output generated by the firms. This raises the problem of distribution of national product among different households.

Other Economic Problems

- **Full Utilisation of Resources:** This is the problem of how to achieve full employment of resources. Resources should not remain idle as it means wastage of resources.
- **Economic Efficiency:** The question of how to obtain efficiency in the utilisation of resources and distribution of what has been produced or to make anyone better off without making someone worse off.
- **Economic Growth:** This is the question to increases the economy's capacity to produce goods and services over time.

In a capitalist or market economy, central problems are solved by price mechanism.
In a centrally planned system, the government solves the central problems.

Production Possibility Curve (PPC)

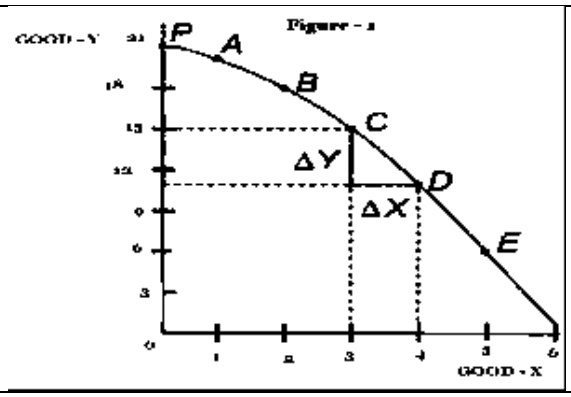
Production possibility curve shows the various alternative combinations of goods and services that an economy can produce when the resources are all fully and efficiently employed.

Assumptions

- Economy produces only two goods
- Amount of resources available in an economy are given and fixed.
- Resources are not specific, i.e., they can be shifted from the production of one good to the other good.
- Resources are fully employed, i.e., there is no wastage of resources.
- State of technology in an economy is given and remains constant.
- Resources are efficiently employed.

Graphical Presentation of Production Possibility Curve

Production Possibility	Good X	Good Y
A	0	21
B	1	20
C	2	18
D	3	15
E	4	11
F	5	6
P	6	0

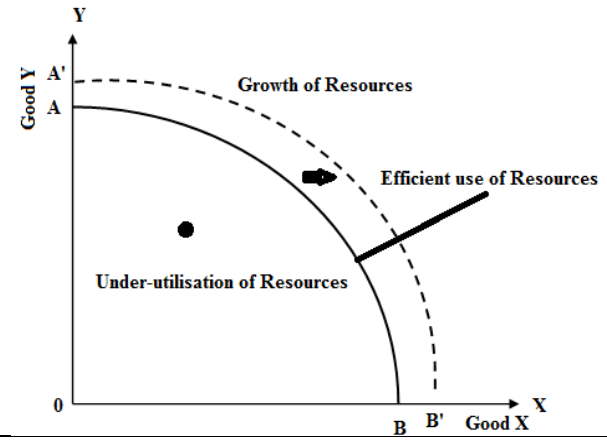


In the diagram, Good *X* is shown on the X- axis and good Y is shown on the Y –axis. PP is the production possibility curve. Each alternative possibility with available resources (0, 21), (1, 20), (2, 18), (3, 15) etc. are plotted as points *P, A, B,* C, *D, E is* joined by line segments forming the PPC.

Shift in PPC

A concave *PPC* is drawn based on the assumption that in reality infinite production possibilities exist.

- Along the PPC means full and efficient use of resources
- Any point above the PPC means Growth of resources.
- Any point below the PPC shows underutilization of resources.



Shift in PPC to the Right is when:

- New stocks of resources are discovered.
- There is advancement in technology.

Shift in PPC to the Left is when:

- Resources are destroyed because of national calamity like earthquake, fire, war, etc.
- There is use of outdated technology.
- There is massive unemployment; excessive unemployment will reduce production possibilities.

Shape of *PPC*

PPC is downward sloping concave to the origin. It implies that in order to produce more units of one good, some units of the other good must be sacrificed (because of limited resources).

PPC is downward sloping. Concave shape of PPC implies that slope of PPC is defined as the quantity of good Y given up in exchange for additional unit of good X

$$\text{Slope of the PPC} = \frac{\Delta Y}{\Delta X} = \frac{\text{Amount of Good Y lost}}{\text{Amount of Good X gained}}$$

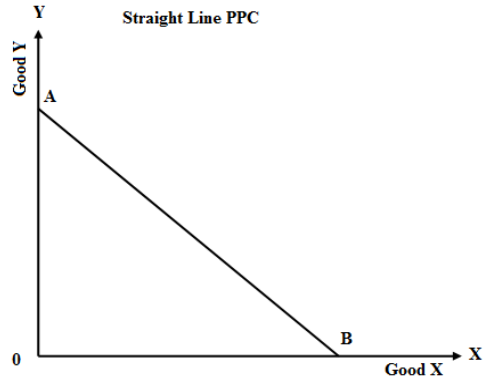
Slope of PPC = MRT = Marginal Opportunity Cost

Can PP curve be a straight line?

Yes, if we assume that MRT is constant, i.e. slope is constant.

When the slope is constant the curve must be a straight line.

If MRT constant, we assume that all the resources are equally efficient in production of all goods.



Marginal Opportunity Cost

Marginal opportunity cost or Marginal rate of transformation *(MRT)* of producing additional unit of good *X* tends to increase in terms of sacrifice of production of good Y.

Slope of *PPC* increases because of the following two reasons:

- Specific use of resources: Resources are not equally suited for the production of both the goods; and
- There is a difference in the proportions in which the factors are used in the production of both the goods.

Opportunity Cost

Opportunity cost is defined as the cost of alternative opportunity given up or sacrificed.
The given Table shows how marginal opportunity cost is calculated in a hypothetical example of two goods *X* and Y with their production values.

Production of Good *X*	Production of Good Y	Marginal Opportunity Cost of Good *X* (in Good Y)
0	18	-
1	17	1X : 1Y
2	15	1X : 2Y
3	12.5	1X : 2.5Y
4	9	1X : 3.5Y
5	3	1X : 6Y

Economy and Its Types

The Market economy (Capitalistic Economy)

The market economy is a political economic system based on private property and private profit. In this system, prices are determined by the market forces of demand and supply.

Main features

- Private ownership of property: All factors of production (land, labour, capital and organisation) are owned and managed by the private sector.
- Freedom of enterprises: Individuals are free to choose any job they like, free to save and invest in whatever form they choose.
- Profit motive of production: Private units are guided by maximisation of profit as the only motive. It results in most efficient utilisation of resources.
- Price mechanism guides production decisions: What to produce, how much to produce and how to produce is determined by market forces of demand and supply. There is no intervention by the government.
- Existence of competition: Competition prevails in capitalist economies.
- Consumers are supreme: Consumers preferences guides production. Consumers are free to consume whatever they like.
- Unequal distribution of income
- Absence of role of the government: The government does not interfere in the functioning of the private entrepreneurs.

The Centrally planned economy (Socialist Economy)

Centrally planned economy or socialist economy or command economy is based on government control and social welfare motive.

Main features

- Public ownership of property or factors of production: There is social or collective ownership of means of production in a socialist economy.
- No freedom of enterprise: There is no freedom to enterprise to choose their production combinations. The central authority is the State which plans and decides what, how and for whom to produce according to social and economic goals.

- Social welfare motive: Social welfare is the only basis of production activities.
- Planning mechanism guides production: The central planning authority decides what, how and for whom to produce.
- No competition. Since there is no profit motive, there is no incentive to competition.
- Absence of consumer's sovereignty: Consumers are not independent to decide what to consume. They can consume only those goods which are produced by the State.
- Inequalities of income greatly reduced: Work is ensured to everybody. Earnings differ according to nature of work and ability of the worker. Economic inequalities get reduced.
- Complete role of the government: The central planning authority allocates all resources according to pre-specified goals and objectives to attain maximum social welfare.

Mixed economy

All economies are mixed economies, with elements of both market and command. India is a mixed economy.

Main features

- Ownership of property is both by private and public sector.
- There is freedom of enterprise in the private sector but no freedom in the public sector.
- Private sector produces with profit motive and public sector with welfare motive.
- In the private sector, price mechanism solves the basic problems whereas in the public sector, the government guides the production decisions.
- Competition exists but is limited to the private sector.
- Consumer's sovereignty exists.
- Considerable inequality of income exists.
- Full role of the government in the public sector and limited role in the private sector

Price mechanism plays its role in the private sector of the mixed economy and decides what, how and for whom to produce. In the public sector, the central planning authority decides what, how and for whom to produce.
All economies are mixed economies, with elements of both market and command. India is a mixed economy.

Positive and Normative Economics

- Positive economics deals with what is or how an economic problem facing a society is actually solved. Positive economics studies human decisions as facts which can be verified with actual data.
- Normative economics deals with what ought to be or how an economic problem should be solved. Normative science prescribes value judgment of what is desirable and necessary.

Distinction between Positive and Normative Economics

Positive Economics	Normative Economics
It expresses "what is."	It expresses "what should be".
It is based on cause and effect of facts.	It is based on ethics.
It deals with actual or realistic situation.	It deals with idealistic situation
It can be verified with actual data.	It cannot be verified with actual data.
In this value judgements are not given. It is neutral between ends.	In this value judgements are given.
It deals with how an economic problem is solved.	It deals with how an economic problem should be solved

Microeconomics and Macroeconomics

Microeconomics:

- Microeconomics deals with individual economic units. Microeconomics is defined as the study of behaviour of individual decision making units.
- Its major subject matter deals with the determination of price of commodities and factors and resource allocation.

Macroeconomics:

- Macroeconomics deals with aggregative economics. Macroeconomics is defined as the study of overall economic phenomena, such as problem of full employment, *GNP,* savings, investment, aggregate consumption, aggregate investment, economic growth, etc.
- Its major subject matter deals with the determination of income and employment.

Distinction between Microeconomics and Macroeconomics

Microeconomics	Macroeconomics
It studies individual economic units.	It studies aggregate economic units.
It deals with determination of price and output in individual markets.	It deals with determination of general price level and national output in the country.
In microeconomics is price, consumers and producers take economic decision on the basis of price	In macroeconomics is income, decision relating to consumption, saving, investment etc., are on the basis of national income.
It alms at optimal allocation of resources	It aims at determination of aggregate output, national income, price level and employment level in the economy.
Examples: Individual demand, per capita income, etc.	Examples: Aggregate demand, national income, etc