

CHAPTER

1

Introduction to Micro Economics



“Economics is everywhere, and understanding economics can help you make better decisions and lead a happier life”

–Tyler Cowen



LEARNING OBJECTIVES

- 1** To acquire a fundamental knowledge on the subject of Economics and to understand its nature and scope; and,
- 2** To understand the meaning of some of the basic concepts of Economics and to observe how they are applied in the various definitions formulated on the science of Economics

1.1

Introduction

A subject should have a name or a title that facilitates a clear and correct understanding of its contents. In a subject like Economics, there are many books available with titles such as *‘Introductory Economics’*, *‘Economics: An Introduction’*, *‘Basic Economics’*, *‘Elements of Economics’*, *‘Elementary Economics’*, *‘Fundamentals of Economics’* etc. But these books have the same contents, though each is intended to serve readers of a different levels of interest and capacity.

A good introduction to a subject, besides containing the meaning of its title,

should have an explanation of the nature and scope of the subject, i.e., whether the subject is traditional or modern, static or dynamic. The readers should be in a position to clearly classify the subject as belonging to either arts alone, or to science alone or to both. The significance of all the branches of the subject should find a place in it. As they go through the introduction, the readers should be able to understand the relationships of the subject with other subjects. Newer areas incorporated into the subject and the newer ways of comprehending its contents are to be highlighted in the introduction. The methodologies applied in the derivation of its laws are to be stated in such an introduction.

1.2

Economics: Meaning

The term or word 'Economics' comes from the Ancient Greek *oikonomikos* (*oikos* means "households"; and, *Nemein* means "management", "custom" or "law"). Thus, the term 'Economics' means 'management of households'. The subject was earlier known as 'Political Economy', is renamed as 'Economics', in the late 19th century by Alfred Marshall.

1.3

Economics: Its Nature

The nature of a subject refers to its contents and how and why they find a place in the subject. This nature is understood by studying the various definitions given by the notable economists. The existence of multiplicity of the definitions makes some scholars comment that a search for a clear definition of Economics is an exercise in futility. J. M. Keynes, for example, observes that "*Political Economy is said to have strangled itself with definitions*". Their presence makes studying a subject interesting, exciting, enjoyable, or worthwhile. In fact, their presence in a social science subject is a clear sign of the growth of the science. It indicates that there exists freedom for people associated with such as science to formulate fresh definitions. These associates appreciate and make use of the opportunity afforded to them and come up with a plethora of definitions saying: 'The more, the merrier'. Each definition represents a unique generalisation. A wide

variety of definitions paves the way to arrive a near-complete agreement on the subject-matter of Economics.

A science grows stage by stage, and at every stage, its newer definition emerges and a concept associated with it receives some special emphasis. However, the study of a subject is made possible when it possesses its clear cut definition and boundary.

Four definitions, each referring to particular stage of the growth of the subject of Economics, are presented here. They are:

01. Smith's Wealth Definition, representing the Classical era;
02. Marshall's Welfare Definition, representing the Neo-Classical era;
03. Robbins' Scarcity Definition, representing the New Age; and,
04. Samuelson's Growth Definition, representing the Modern Age.

1.3.1 Wealth Definition:

Adam Smith

(The classical era)



Adam Smith

Adam Smith (1723-1790), in his book "*An Inquiry into Nature and Causes of Wealth of Nations*" (1776) defines "*Economics as the science of wealth*". He

explains how a nation's wealth is created and increased. He considers that the individual in the society wants to promote his own gain and in this process, he is guided and led by an "*invisible hand*". He states that every man is motivated by his self interest. This means that each person works for his own good.

Smith favours the introduction of “division of labour” to increase the quantum of output. Severe competition in factories and society helps in bettering the product. Supply force is very active and a commodity is made available to the consumers at the lowest price.

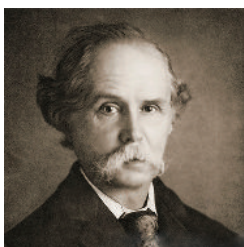
The publication of Adam Smith’s “The Wealth of Nations” in 1776, has been described as “the effective birth of economics as a separate discipline”.

Criticism

For Smith, Economics consists of ‘wealth-getting’ activities and ‘wealth-spending’ activities. An undue emphasis is given to material wealth. Wealth is treated to be an end in itself. This view leads him to ignore human welfare as an essential part of Economics. Smith gives his definition when religious and spiritual values are held high. *Ruskin* and *Carlyle* regards Economics as a ‘*dismal science*’, as it teaches selfishness which is against ethics.

1.3.2 Welfare Definition: Alfred Marshall

(The Neo- classical era)



Alfred Marshall

Alfred Marshall (1842-1924) in his book “*Principles of Economics*” (1890) defines Economics thus: “*Political Economy*” or *Economics is a study of*

mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the

attainment and with the use of the material requisites of well-being. Thus, it is on one side a study of wealth; and on the other, and more important side, a part of the study of man.”

The important features of Marshall’s definition are:

- a. Economics does not treat wealth as the be-all and end-all of economic activities. Man promotes primarily welfare and not wealth.
- b. The science of Economics contains the concerns of ordinary people who are moved by love and not merely guided or directed by the desire to get maximum monetary benefit.
- c. Economics is a social science. It studies people in the society who influence one another.

Criticism

- a. Marshall regards only material things. He does not consider immaterial things, such as the services of a doctor, a teacher and so on. They also promote people’s welfare.
- b. In the theory of wages, Marshall ignores the amount of money that goes as reward for the services of ‘immaterial’ services.
- c. Marshall’s definition is based on the concept of welfare. But it is not clearly defined. Welfare varies from person to person, country to country and one period to another. Marshall clearly distinguishes between those things that are capable of promoting welfare of people and those things that are not. Things like liquor that are not capable of promoting welfare but command

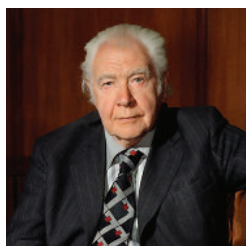
a price, come under the purview of Economics.

- d. However, welfare means happiness or comfortable living conditions of an individual or group of people. The welfare of an individual or nation is dependent not only on the stock of wealth possessed but also on political, social and cultural activities of the nation.

1.3.3 Scarcity Definition:

Lionel Robbins

(*The New Age*)



Lionel Robbins

Lionel Robbins published a book "*An Essay on the Nature and Significance of Economic Science*" in 1932. According to him, "*Economics is a*

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

The major features of Robbins' definition are:

- a. Ends refer to human wants. Human beings have unlimited number of wants.
- b. On the other hand, resources or means that go to satisfy the unlimited human wants are limited or scarce in supply. The scarcity of a commodity is to be considered only in relation to its demand.
- c. Further, the scarce means are capable of having alternative uses. Hence, an individual grades his wants and satisfies first his most urgent want. Thus,

Economics, according to Robbins, is a science of choice.

Criticism

- a. Robbins does not make any distinction between goods conducive to human welfare and goods that are not. In the production of rice and alcoholic drink, scarce resources are used. But the production of rice promotes human welfare, while that of alcoholic drinks does not. However, Robbins concludes that *Economics is neutral between ends*.
- b. Economics deals not only with the micro-economic aspects of resource-allocation and the determination of the price of a commodity, but also with the macro-economic aspects like how national income is generated. But, Robbins reduces Economics merely to theory of resource allocation.
- c. Robbins' definition does not cover the theory of economic growth and development.

1.3.4 Growth Definition:

Samuelson

(*The Modern Age*)



Samuelson

Paul Samuelson published a book "*An Intradiatory Analysis*" in 1948. He defines Economics as "*the study of how men and society choose, with*

or without the use of money, to employ scarce productive resources which could have alternative uses, to produce various

commodities over time, and distribute them for consumption, now and in the future among various people and groups of society”.

The major implications of this definition are as follows:

- a. Like Robbins, Samuelson states that the means are scarce in relation to unlimited ends and that such means could be put to alternative uses.
- b. Samuelson makes his definition dynamic by including the element of time in it. Therefore, his definition covers the theory of economic growth.
- c. Samuelson’s definition is applicable also in a barter economy, where money is not used.
- d. His definition covers various aspects like production, distribution and consumption.
- e. Samuelson treats Economics as a social science, whereas Robbins regards it as a science of individual behaviour.

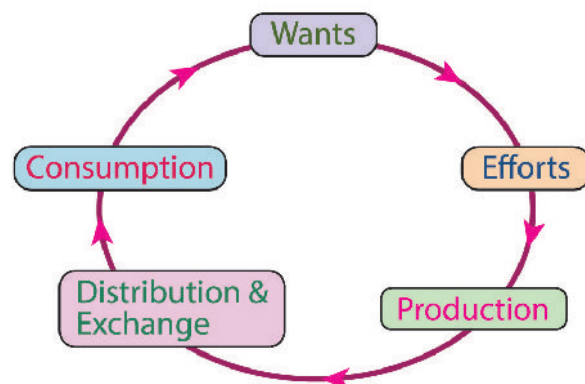
Of all the definitions discussed above, the ‘growth’ definition stated by Samuelson appears to be the most satisfactory.

1.4

Scope of Economics

The scope of the subject of Economics refers to on the subject-matter of Economics. It throws light on whether it is an art or a science and if science, whether it is a positive science or a normative science.

1.4.1 Economics: Its Subject-Matter



- Economics focuses on the behaviour and interactions among economic agents, individuals and groups belonging to an economic system. It deals with the activities such as the consumption and production of goods and services and the distribution of income among the factors of production. The activities of the rational human beings in the ordinary business of life under the existing social, legal and institutional arrangement are included in the Science of Economics; the abnormal persons and the socially unacceptable and unethical activities are excluded.
- Economics studies the ways in which people use the available resources to satisfy their multiplicity of wants. Scarcity is a problem indicating the gap between what people want and what they are able to get. This scarcity can be eliminated either by limiting the human wants or by increasing the supply of the goods that satisfy the

human wants. The method of getting more is resorted to, rather than the method of wanting less.

- Economics is concerned with activities of human being only. Human beings are related to one another and the actions of one member affect those of the other members in the society. Hence, Economics is called a Human Science or Social Science.
- The activities of rational or normal human beings are the subject-matter of Economics.
- All human activities related to wealth constitute the subject-matter of Economics. Thus, human activities not related to wealth (non-economic activities) are not treated in Economics. For example, playing cricket for pleasure, mother's child care.

It is customary to clarify whether Economics is an art or a science; and if it is a science, to observe its specific features.

1.4.2 Economics is an Art and a Science

i. Economics as an Art

Art is the practical application of knowledge for achieving particular goals. Economics provides guidance to the solutions to all the economic problems.

A. C. Pigou, Alfred Marshall and others regard Economics as an art.

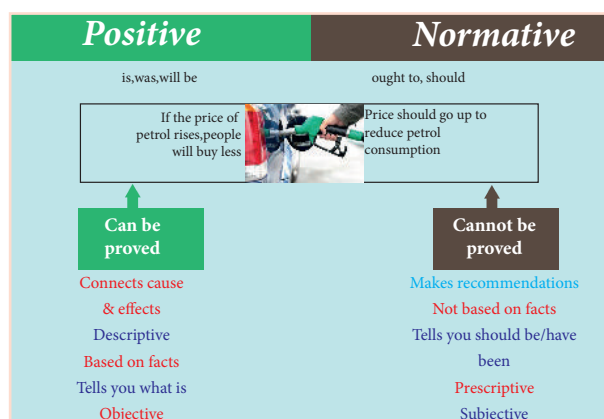
ii. Economics as a Science

Science is a systematic study of knowledge. All its relevant facts are collected, classified and analyzed with its scale of measurement. Using these facts, science develops the

co-relationship between cause and effect. Scientific laws derived are tested through experiments; and future predictions are made. These laws are universally applicable and accepted. Economists like Robbins, Jordon and Robertson argue that Economics is a science like Physics, Chemistry etc., since, it has several similar characteristics. Economics examines the relationships between the causes and the effects of the problems. Hence, it is rightly considered as both an art and a science. In fact, art and science are complementary to each other.

1.4.3 Economics: Positive Science and Normative Science

Positive science deals with what it is, means, it analyses a problem on the basis of facts and examines its causes. For example, at the time of a price increase, its causes are analysed.



On the other hand, normative science responds to a question like *what ought to be*. Here, the conclusions and results are not based on facts, but on different considerations belonging

to social, cultural, political, religious realms. They are basically subjective in nature.

In short, positive science is concerned with '*how? and why?*' and normative science with '*what ought to be*'. The distinction between the two can be explained. An increase in the rate of interest, under positive science, would be looked into as to why and how can it be reduced, whereas under normative science, it would be seen as to whether it is good or bad.

Three statements about each type are given below:

Positive Economics

- a. An increase in money supply implies a price-rise in an economy.
- b. As the irrigation facilities and application of chemical fertilizers expand, the production of food-grains increases.
- c. An increase in the birth rate and a decrease in the death rate reflect the rate of growth of population.

Normative Economics

- a. Inflation is better than deflation.
- b. More production of luxury goods is not good for a less-developed country.
- c. Inequalities in the distribution of wealth and incomes should be reduced.

1.5

Basic Concepts in Economics

Like other sciences, Economics also has concepts to explain its theories. A complete and clear grasp of their meaning

is necessary when the theories associated with them are studied. Only a preliminary acquaintance is now attempted here.

1.5.1 Goods and Services

Both goods and services satisfy human wants. In Economics, the term 'goods' implies the term 'services' also, unless specified otherwise.



Goods (also called 'products', 'commodities', 'things' etc)

- a. as material things, they are tangible;
- b. have physical dimensions, i.e., their physical attributes can be preserved over time;
- c. exist independently of their owner;
- d. are owned by some persons;
- e. are transferable;
- f. have value-in exchange;

Kinds of Goods (and Services)

a. Free and Economic goods

Free goods are available in nature and in abundance. Man does not need to incur any expenditure to own or use them. For example air, and sun shine. Water was also an example in the past, but at present it has exchange value. So it is not a free good.

Milton Friedman, a Nobel laureate, popularises a saying: “*There is no such thing as a free lunch*”. He means that it is impossible to get something for nothing. Even those offered ‘free’ always costs a person or the society as a whole. Its cost, however, is hidden. It is an externality. Someone can benefit from an externality or from a public good, but someone-else has to pay the cost of producing these benefits. In Economics, it refers to ‘opportunity cost’.

PUBLIC VS PRIVATE GOODS

• PUBLIC GOODS

A good available to everyone to consume, Regardless of who pays and who doesn’t.

- Spillover benefits;
- Non -rival in consumption and non- excludable;
E.g: National defence, Law enforcement.

• PRIVATE GOODS

A good consumed by a single person or Household;

- No spillover benefits;
- Rival in consumption and excludable;
E.g: food and drink

On the other hand, economic goods are not available in plenty. They are scarce in supply. Man has to spend money to own or use them.

b. Consumer goods and Capital goods:

Consumer goods directly satisfy human wants, TV, Furniture, Automobile etc.



Capital-goods (also called producer’s goods) don’t directly satisfy the consumer wants. They help to produce consumer goods. For example, machines do not directly satisfy the consumers, but in factories, the manufacturers need them.



c. Perishable goods and Durable goods:

Perishable goods are short-lived. Their life-span is limited. For example fish, fruits, flower etc., do not have a long life.



Durable goods and semi-durable goods have a little longer life-time than the Perishable goods. For example, a table, a chair etc.



Services

Along with goods, services are produced and consumed. They are generally, possess the following:

- **Intangible:** Intangible things are not physical objects but exist in connection to other things, for example, brand image, goodwill etc. But today, the intangible things are converted and stored into tangible items such as recording a music piece into a pen-drive. They are marketed as a good.
- **Heterogeneous:** Services vary across regions or cultural backgrounds. They can be grouped on the basis of quality standards. A single type service yields multiple experiences. For example, music, consulting physicians etc.
- **Inseparable from their makers:** Services are inextricably connected to their makers. For example, labour and labourer are inseparable; and,
- **Perishable:** Services cannot be stored as inventories like assets. For example, it is useless to possess a ticket for a cricket-match once the match is over. It cannot be stored and it has no value-in-exchange.



b. Characteristics of Utility

1. Utility is psychological. It depends on the consumer's mental attitude. For example, a vegetarian derives no utility from mutton;
2. Utility is not equivalent to usefulness. For example, a smoker derives utility from a cigarette; but, his health gets affected;
3. Utility is not the same as pleasure. A sick person derives utility from taking a medicine, but definitely, it is not providing pleasure;
4. Utility is personal and relative. An individual obtains varied utility from one and the same good in different situations and places;
5. Utility is the function of the intensity of human want. An individual consumer faces a tendency of diminishing utility;
6. Utility is a subjective concept it cannot be measured objectively and it cannot be measured numerically;
7. Utility has no ethical or moral significance. For example, a cook

1.5.2 Utility

a. Meaning

'Utility' means 'usefulness'. In Economics, utility is the want-satisfying power of a commodity or a service. It is in the goods and services for an individual consumer at a particular time and at a particular place.

derives utility from a knife using which he cuts some vegetables; and, a killer wants to stab his enemy by that knife. In Economics, a commodity has utility, if it satisfies a human want;

c. Types of Utility

The following are the types of utility

1. **Form Utility:** An individual consumer obtains utility from a good or service only when it is available in a particular form. Raw materials in their original form may not possess utility for a consumer. But in their changed forms as they become finished products, they provide utility to him. For example, cotton as a raw material may not possess utility for a consumer; but as it gets a new form as a cloth, it yields the consumer utility.
2. **Time Utility:** A sick man derives time utility from blood not at the time of its donation, but only at the operation-time, i.e., when it is used.
3. **Place Utility:** A student derives place utility from a book not at the place of its publication (production centre) but only at the place of his education (consumption centre).
4. **Service Utility:** An individual consumer derives service utility from a service made available at the time when he most needs it. For example, clients obtain service utility from their lawyers, patients derive service utility from the doctors and so on.
5. **Possession Utility:** When a student buys a book or dictionary from a book seller, then only it gives utility.

6. **Knowledge Utility:** It is the utility derived by having knowledge of a particular thing. Advertisement serves as a source of information on an object.

d. Measurability of Utility

Wants of a person are satisfied by the act of consumption. The consumer derives utility, measured in terms of 'Utils'. An 'Util' is a unit of measurement of utility. An individual pays a price for the unit of the good, equal to the utility derived. Marshall states that utility can be measured indirectly using the 'measuring rod of money'.

1.5.3 Price

Price is the value of the good expressed in terms of money. Price of a good is fixed by the forces of demand for and supply of the good. Price determines what goods are to be produced and in what quantities. It also decides how the goods are to be produced.

1.5.4 Market

Generally, market means a place where commodities are bought and sold.

But, in Economics, it represents where buyers and sellers enter into an exchange of goods and services over a price.

1.5.5 Cost

Cost refers to the expenses incurred to produce or acquire a given quantum of a good. Together with revenue, it determines the profit gained or the loss incurred by a firm.

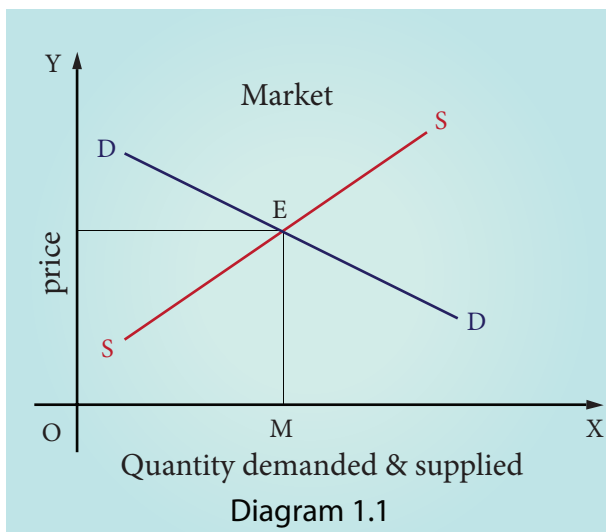
1.5.6 Revenue

Revenue is income obtained from the sale of goods and services. Total Revenue (TR) represents the money obtained from the sale of all the units of a good. Thus, $TR = P \times Q$, where TR is Total Revenue; P is the price per unit of the good; and, Q is the Total Quantity of the goods sold.

1.5.7 Equilibrium

a. Stable Equilibrium

Prof. Stigler states that “equilibrium is a position from which there is no net tendency to move”. Its absence is referred to as disequilibrium. Consumer’s equilibrium occurs when he gets maximum satisfaction. The equilibrium of the Producer occurs when he gets maximum profit. A resource is in equilibrium when it gets fully employed and gets its maximum payment. Where, static equilibrium is based on given and constant prices, quantities, income, technology, population etc.



b. Particular Equilibrium and General Equilibrium

An equilibrium, when it pertains to a single variable, may be called particular equilibrium.

An equilibrium, on the other hand, when it relates to numerous variables or even the economy as a whole, may be called general equilibrium.

1.5.8 Income

Income represents the amount of monetary or other returns, either earned or unearned small or big, accruing over a period of time to an economic unit. Nominal income refers to income, expressed in terms of money. It is termed as the *money income*.

Real income is the amount of goods that can be purchased with money as income. It is the purchasing power of income which is based on the rate of inflation.

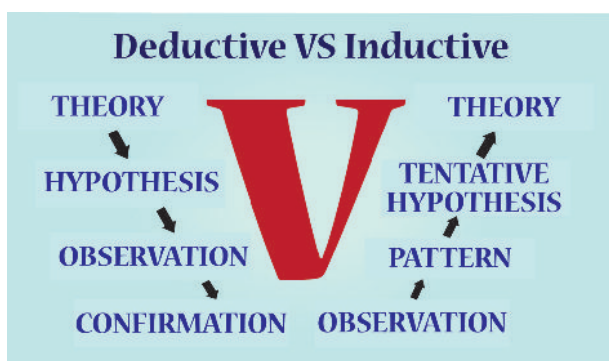
1.6

Economics: Its Methods, Facts, Theories and Laws



1.6.1 Methods of Economics: Deduction and Induction

Like any other science, Economics also has its laws or generalisations. These laws govern the activities in the various divisions of Economics such as Consumption, Production, Exchange and Distribution. The logical process of arriving at a law or generalization in a science is called its method.



Economics uses two methods: deduction and induction.

a. Deductive Method of Economic Analysis

It is also named as *analytical* or *abstract* method. It consists in deriving conclusions from general truths; it takes few general principles and applies them to draw conclusions. The classical and neo-classical school of economists notably, Ricardo, Senior, J.S.Mill, Malthus, Marshall, Pigou, applied the deductive method in their economic investigations.

Steps of Deductive Method

- **Step 1:** The analyst must have a clear and precise idea of the problem to be inquired into.
- **Step 2:** The analyst clearly defines the technical terms used in the analysis. Further, assumptions of the theory are to be precise.
- **Step 3:** Deduce hypothesis from the assumptions taken.
- **Step 4:** Hypotheses should be verified through direct observation of events in the real world and through statistical methods. (eg) There exists an inverse relationship between price and quantity demanded of a good.

b. Inductive Method of Economic Analysis

Inductive method, also called *empirical method*, is adopted by the “Historical School of Economists”. It involves the process of reasoning from particular facts to general principle.

Economic generalizations are derived in this method, on the basis of

- (i) Experimentations;
- (ii) Observations; and,
- (iii) Statistical methods.

- **Step 1:** Data are collected about a certain economic phenomenon. These are systematically arranged and the general conclusions are drawn from them.
- **Step 2:** By observing the data, conclusions are easily drawn.
- **Step 3:** Generalization of the data and then Hypothesis Formulation
- **Step 4:** Verification of the hypothesis (eg.Engel’s law)

According to Engel’s Law “The proportion of total expenditure incurred on food items declines as total expenditure [which is proxy for income] goes on increasing.”

Economists today are of the view that both these methods are complementary. Alfred Marshall has rightly remarked: “*Inductive and Deductive methods are both needed for scientific thought, as the right and left foot are both needed for walking*”.

1.6.2 Economics: Facts, Theories

Using the methods, the economist observes facts, such as, changes in the price of a commodity. Similarly, the quantity demanded of that commodity also varies. And he observes these movements and comes up with a theory that these two movements are inversely related, i.e., when the price increases, the quantity demanded of that commodity decreases and vice versa. Thus, he formulates his theory of demand.

He tests his theory by collecting further facts and when his theory stands the test of time and obtains universal acceptance, the theory is raised to the status of a law.

1.6.3 Nature of Economic Laws

A Law expresses a causal relation between two or more than two phenomena. Marshall states that the Economic laws are *statement of tendencies*, and those social laws, which relate to those branches of conduct in which the strength of the motives chiefly concerned can be measured by money price.

In natural sciences, a definite result is expected to follow from a particular cause. In Economic science, the laws function with cause and effect. The consequences predicted by the data, necessarily and invariably follow.

However, Economic laws are not as precise and certain as the laws in the physical sciences. Marshall holds the opinion that there are no laws of economics which can be compared for precision with the law of gravitation.

Importance of Micro Economics

- To understand the operation of an economy
- To provide tools for economic policies
- To examine the condition of economic welfare
- Efficient utilization of resources
- Useful in international trade
- Useful in decision making
- Optimal resource allocation
- Basis for prediction
- Price determination

A physical scientist carrying out controlled experiments in his laboratory can test the scientific laws very easily by changing the conditions obtaining there. Changes in Economics science cannot be brought about easily. As a result, prediction regarding human behaviour is likely to go wrong. There are exceptions to the Law of Demand. Thus, economic laws are not inviolable.

As unpredictability is invariably associated with the economic laws. Marshall compares them to the laws of tides. Just as it cannot be predicted and said with certainty that a high tide would follow a low tide, unpredictability prevails in Economics. Human behaviour is volatile. Economic laws are not assertive but they are indicative. The Law of Demand, for example, states that other things remaining the same, the quantity demanded of a commodity increases, as its price decreases and vice versa.

The use of the assumption 'other things remaining the same' (ceteris

paribus) in Economics makes the Economic laws hypothetical. It might be argued that the laws in other sciences can also be called hypothetical. It should be admitted however that in the case of Economics, the hypothetical elements in its laws are a little less pronounced than in the laws of physical sciences.

But since money is used as the measuring rod, laws in economics are more exact, precise and accurate than the other social sciences. As the value of the measuring-rod money is not constant, there is always an hypothetical element surrounding the laws of Economics.

Some economic laws are simply truisms. For example, saving is a function of income. Another example of truism is: human wants are unlimited.

1.7

Economics: Its Sub Divisions

Economics has been divided into some branches.

1.7.1 Consumption

Human wants coming under consumption is the starting point of economic activity. In this section the characteristics of human wants based on the behaviour of the consumer, the diminishing marginal utility and consumer's surplus are dealt with.

1.7.2 Production

Production is the process of transformation of inputs into output. This division covers the characteristics and role of the factors

of production namely Land, Labour, Capital and Organization and also the relationship between inputs and output.

1.7.3 Exchange

Exchange is concerned with price determination in different market forms. This division covers trade and commerce. Consumption is possible only if the produced commodity is placed in the hands of the consumer.

1.7.4 Distribution

Production is the result of the coordination of factors of production. Since a commodity is produced with the efforts of land, labour, capital and organization, the produced wealth has to be distributed among the cooperating factors. The reward for factors of production is studied in this division under rent, wages, interest and profit. Distribution studies about the pricing of factors of production.

1.8

Economics: Its Types

Economics is a rapidly growing subject and its horizon has been expanding. The basic thrust of the subject is that there should be efficient allocation of the available scarce resources to obtain maximum welfare to the people on a sustainable basis. Given below are some of the major branches of the subject, where such efficient resource allocation is made.

1.8.1 Micro-economics

Micro Economics is the study of the economic actions of individual units say

households, firms or industries. It studies how business firms operate under different market conditions and how the combined actions of buyers and sellers determine prices. Micro economics covers

- (i) Value theory (Product pricing and factor pricing)
- (ii) Theory of economic welfare

The terms 'micro economics' and 'macro economics' were first used in economics by Norwegian economist *Ragner Frisch* in 1933. After Prof. Frisch, the terms earned popularity when J.M. Keynes clearly distinguished between the terms through his book entitled '*General theory of Employment, Interest and Money*' published in 1936.

1.8.2 Macro-economics

Macro economics is the obverse of micro economics. It is concerned with the economy as a whole. It is the study of aggregates such as national output, inflation, unemployment and taxes. *The General Theory of Employment, Interest and Money* published by Keynes is the basis of modern macro economics.

Macro Economics Vs Micro Economics



Difference between Micro Economics and Macro Economics

Micro Economics	Macro Economics
1. It is that branch of economics which deals with the economic decision-making of individual economic agents such as the producer, the consumer etc.	1. It is that branch of economics which deals with aggregates and averages of the entire economy. E.g., aggregate output, national income, aggregate savings and investment, etc.
2. It takes into account small components of the whole economy.	2. It takes into consideration the economy of the country as a whole.
3. It deals with the process of price determination in case of individual products and factors of production.	3. It deals with general price-level in any economy.
4. It is known as price theory	4. It is also known as the income theory.
5. It is concerned with the optimization goals of individual consumers and producers	5. It is concerned with the optimization of the growth process of the entire economy.

1.8.3 International Economics

In the modern world, no country can grow in isolation. Every country is having links with the other countries through foreign capital, investment (foreign direct investment) and international trade.

1.8.4 Public Economics (Public Finance)

Public finance is concerned with the income or revenue raising and expenditure incurring activities of the public authorities and with the adjustment of the one with the other. The scope of Public Finance covers Public expenditure, Public revenue, Public debt, Financial administration and federal Finance.

1.8.5 Developmental Economics

The countries have been classified into developed, developing and under developed on the criteria of Per Capita Income, Human Development Index and Happiness Index. The Development Economics deals with features of developed nations, obstacles for development, Economic and Non-economic factors influencing development, various growth models and strategies.

1.8.6 Health Economics

Health Economics is an area of applied economics. It covers health indicators, preventive and curative measures, medical research and education, Rural Health Mission, Drug Price control, Neonatal care, Maternity and Child health, Budgetary allocation for health etc.

1.8.7 Environmental Economics

Depletion of natural resources stock and pollution result from rapid economic development. Hence the need for the study of Environmental Economics which analyse the interrelationship between economy and environment. Environmental Economics is a study of inter disciplinary tools for the problems of ecology, economy and environment.

1.9

Basic Economic Problems

If resources are abundant and wants are so few, then there would be no economic problem. But this situation can never exist. Resources are always scarce and our wants are numerous. Hence in every society certain choices have to be made.

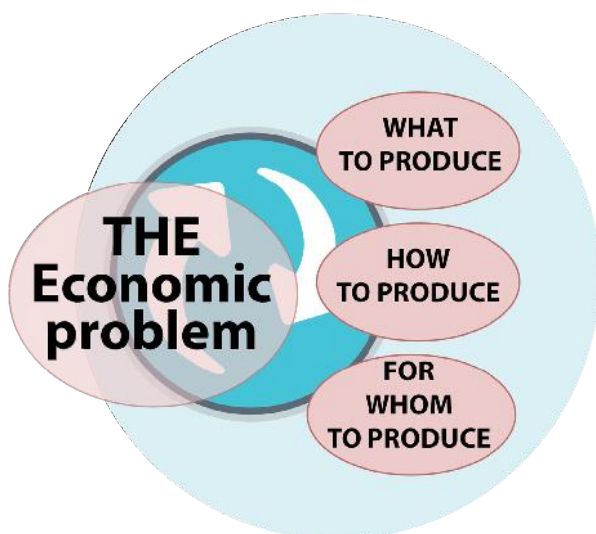
THE ECONOMIC PROBLEM

- Wants, desires; unlimited
- Resources: Scarce
 - Not freely available
- Economic choice
- Economics
 - How people use scarce resources to satisfy unlimited wants

What and how much to produce?

Every society must decide on what goods it will produce and how much of these it will produce. In this process, the crucial decisions include:

- a. Whether to produce more of food, clothing and housing or to have more luxury goods
- b. Whether to have more agricultural goods or to have industrial goods and services
- c. Whether to use more resources in education and health or to use more resources in military services
- d. Whether to have more consumption goods or to have investment goods
- e. Whether to spend more on basic education or higher education



How to Produce?

Every society has to decide whether it will use labour-intensive technology or capital intensive technology; that is whether to use more labour and less machines and vice versa.

For whom to produce?

Every society must also decide how its produce be distributed among the different sections of the society. It must also decide who gets more and who gets less. It should also decide whether or not

a minimum amount of consumption be ensured for everyone in the society. Due to the scarcity of resources, a society faces the compulsion of making choice among alternatives. It faces the problem of allocating the scarce resources to the production of different possible goods and services and of distributing the produced goods and services among individuals within the economy.



1.10

Production Possibility Curve

The problem of choice between relatively scarce commodities due to limited productive resources with the society can be illustrated with the help of a geometric device, is known as production possibility curve. Production possibility curve shows the menu of choice along which a society can choose to substitute one good for another, assuming a given state of technology and given total resources.

The explanation and analysis of production possibility curve is based upon certain assumptions, some of them are following

- (i) The time period does not change. It remains the same throughout the curve.
- (ii) Techniques of production are fixed.
- (iii) There is full employment in the economy.
- (iv) Only two goods can be produced from the given resources.

- (v) Resources of production are fully mobile.
- (vi) The factors of production are given in quantity and quality
- (vii) The law of diminishing returns operates in production.

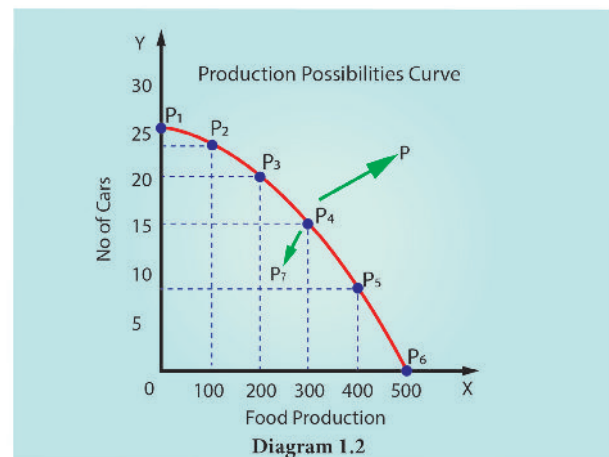
Every production possibility curve is based upon these assumptions. If some of these assumptions changes or neglected, then it affects the nature of production possibility curve.

To draw this curve we take the help of production possibilities schedule, as shown below.

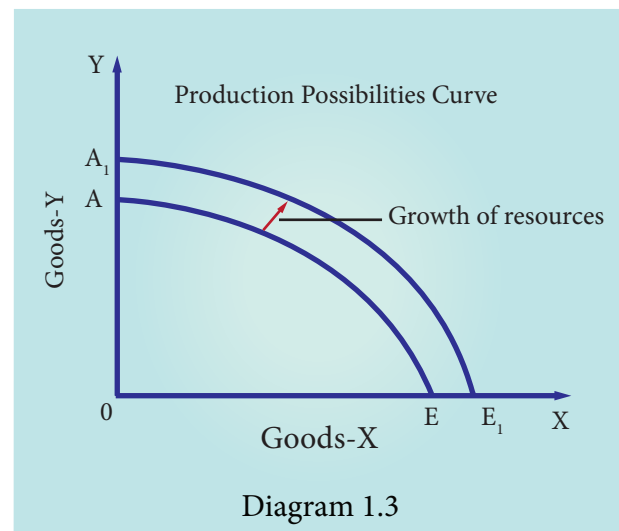
Production possibilities schedule

Production possibilities	Quantity of food production in tons	No of car production
I	0	25
II	100	23
III	200	20
IV	300	15
V	400	8
VI	500	0

This schedule suggests that if all resources are thrown into the production of food, a maximum of 500 tons of food can be produced, given the existing technology. If on the other hand, all resources are instead used for producing cars, 25 cars can be produced. In between these two extreme possibilities exist. If we are willing to give up some food, we can have some cars.



We can obtain a production possibility curve by drawing production possibilities schedule graphically. The quantity of food is shown on x-axis and the number of cars is shown on y-axis, the different six production possibilities are being shown as point P₁ P₂ P₃ P₄ P₅ & P₆.



Food production

If we assume that innumerable production possibilities exist between any two-production possibilities schedule, we get the production possibility curve P₁ to p₆. This shows the locus of points of the different possibilities of production of two commodities, which a firm or an

economy can produce, with the help of given resources and the techniques of production. Points outside the production possibility (e.g. point p) are unattainable as society's resources of production are not sufficient to give output beyond the curve. Points lying inside the curve like P_7 are attainable by the society but at these points resources production are not fully employed. For example, if society is producing at point P_4 then it can increase the production of food keeping the no of cars constant or it can increase the production of cars keeping the food grain output constant or it can increase the output of both the goods simultaneously.

Shift of production possibility curve

The PPC shifts upward or downward due to:

1. The change in the supply of productive resources and
2. The change in the state of technology.

The production capacity of an economy grows overtime through increase in resource supplies and improvement of technology. This enables PPC to shift upward from AE to A_1E_1 as shown in figure below. This outward shift of the PPC is the basic feature of economic growth.

Uses of production possibility curve

Through the device of PPC can be used for many analytical purposes. We shall discuss below some of its popular uses.

(i) The problem of choice

The problem of choice arise because of the given limited resources and unlimited wants, may relate to the allocation of

resources between the goods for the higher income group and the lower income group and the goods for the defense and the civilians. Since PPC is the locus of the combination of the goods the problem of choice will not arises when we choose any point on PPC.

(ii) The Notion of Scarcity

We can explain the notion of scarcity with the help of PPC. We know that every society possesses only a specific amount of resources, which can produce only limited amount of output even with the help of best technology, economic scarcity of best fact of life. The production possibility curve reflects the constraints imposed by the element of economic scarcity.

(iii) Solution of central problems

The central problems of an economy can be explained with the help of PPC. The solution of problem of what to produce involves the decision regarding the choice of location on the production possibility curves. A production combination represented by any point inside the PPC indicates that the economy is using inefficient methods of production and inefficient combination of resources.

1.11 Conclusion

This chapter has given a broad overview of economics. Moreover the present certain common characteristics of economics definitions of Wealth, Welfare, Scarcity & Growth free essential questions an economy must solve; what to produce, how to produce and for whom to produce and also looked at division of economics, distinguishing between Micro and Macroeconomics. It has introduced

some basic concepts frequently appearing throughout the lessons.

It is perhaps both importance, the study of economics is an intellectually fascinating adventure highly relevant and it affects people's life. Every now and then after learning lesson, think of economic activities in and around you. Perhaps in this way learning of economics makes to think like an economist.

GLOSSARY

Scarcity	The gap between what people want and what people can get
Production	Creation of utility
Distribution	Share of the national income reaching the four factors of production
Services	Services, like goods, are economic entities; and are inseparable from their owners and are intangible, perishable in nature

Value	Power of a commodity to command other commodities in an exchange
Price	Value of a commodity expressed in terms of money
Income	The amount of monetary or other returns, either earned or unearned, accruing over a period of time
Deductive Method	Deduction is a process in logic facilitating or arriving at an inference, moving from general to particular
Inductive Method	Induction is a process in logic facilitative or arriving at an inference, moving from particular to general



Part-A Multiple Choice Questions

1. 'Economics is a study of mankind in the ordinary business of life' -It is the statement of
 - a. Adam Smith
 - b. Lionel Robbins
 - c. Alfred Marshall
 - d. Samuelson
2. The basic problem studied in Economics is
 - a. Unlimited wants
 - b. Unlimited means
 - c. Scarcity
 - d. Strategy to meet all our wants
3. Microeconomics is concerned with
 - a. The economy as a whole
 - b. Different sectors of an economy
 - c. The study of individual economic units behaviour
 - d. The interactions within the entire economy
4. Which of the following is a microeconomics statement?
 - a. The real domestic output increased by 2.5 percent last year.
 - b. Unemployment was 9.8 percent of the labour force last year.
 - c. The price of wheat determines its demand
 - d. The general price level increased by 4 percent last year.
5. Find the odd one out:
 - a. "An inquiry into the nature and the causes of the Wealth of Nations"
 - b. "Principles of Economics"
 - c. "Nature and Significance of Economic Science"
 - d. "Ceteris paribus"
6. The equilibrium price is the price at which
 - a. Everything is sold
 - b. Buyers spend their money
 - c. Quantity demanded equals quantity supplied
 - d. Excess demand is zero
7. Author of "An Inquiry into the Nature and Causes of Wealth of Nations"
 - a. Alfred Marshall
 - b. Adam Smith
 - c. Lionel Robbins
 - d. Paul A Samuelson
8. "Economics studies human behaviour as a relationship between ends and scarce means which have alternative uses" is the definition of economics of
 - a. Lionel Robbins
 - b. Adam Smith
 - c. Alfred Marshall
 - d. Paul A Samuelson

9. Who is the Father of Economics?
 - a. Max Muller
 - b. Adam Smith
 - c. Karl Marx
 - d. Paul A Samuelson
10. "Economics is a science" The basis of this statement is—
 - a. Relation between cause and effect
 - b. Use of deductive method and inductive method for the formations of laws
 - c. Experiments
 - d. All of the above
11. Utility means
 - a. Equilibrium point at which demand and supply are equal
 - b. Want-satisfying capacity of goods and services
 - c. Total value of commodity
 - d. Desire for goods and services
12. A market is
 - a. Only a place to buy things
 - b. Only a place to sell things
 - c. Only a place where prices adjust
 - d. A system where persons buy and sell goods directly or indirectly
13. Which one of the following is **not** a point in the Welfare Definition of Economics?
 - a. Study of an ordinary man
 - b. Economics does not focus on wealth alone
 - c. Economics is the study of material welfare
 - d. Economics deals with unlimited wants and limited means
14. Growth definition takes into account
 - a. The problem of choice in the dynamic framework of Economics
 - b. The problem of unlimited means in relation to wants
 - c. The production and distribution of wealth
 - d. The material welfare of human beings
15. Which theory is generally included under micro economics ?
 - a. Price Theory
 - b. Income Theory
 - c. Employment Theory
 - d. Trade Theory
16. have exchange value and their ownership rights can be established and exchanged
 - a. Goods
 - b. Services
 - c. Markets
 - d. Revenue
17. Identify the correct characteristics of utility
 - a. It is equivalent to 'usefulness'
 - b. It has moral significance
 - c. It is same as pleasure
 - d. It depends upon consumer's mental attitude

18. Who has given scarcity definition of economics?
- Adam Smith
 - Marshall
 - Robbins
 - Robertson
19. The process of reasoning from particular to general is
- Deductive method
 - Inductive method
 - Positive economics
 - Normative economics
20. Total revenue is equal to total output sold multiplied by
- Price
 - Total cost
 - Marginal revenue
 - Marginal cost

Answers Part-A

1	2	3	4	5	6	7	8	9	10
c	c	c	c	d	c	b	a	b	d
11	12	13	14	15	16	17	18	19	20
b	d	d	a	a	a	d	c	b	a

Part-B Answer the following questions in one or two sentences.

- What is meant by Economics?
- Define microeconomics.
- What are goods?
- Distinguish goods from services.
- Name any two types of utility.
- Define positive economics.
- Give the meaning of deductive method.

Part-C Answer the following questions in one paragraph.

- Explain the scarcity definition of Economics and assess it.
- What are the crucial decisions involved in 'what to produce'?
- Explain different types of economic activities.
- What are the different features of services?
- What are the important features of utility?
- Distinguish between microeconomics and macroeconomics.
- Compare positive economics and normative economics.

Part-D Answer the following questions in about a page

35. Compare and contrast various definitions of Economics.
36. Explain various Steps of Deductive and Inductive methods.
37. Elaborate the nature and scope of Economics.
38. Explain basic problems of the economy with the help of production possibility curve.

ACTIVITY

Meet ten of your class-mates and prepare a Report on the advantages of studying Economics.

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