

PRINCIPLES OF ECONOMICS

TOPIC ONE: INTRODUCTION:

Definition of Economics

"Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses". The definition deals with the following four aspects:

(i) Economics is a science: Economics studies economic human behavior scientifically. It studies how humans try to optimize (maximize or minimize) certain objective under given constraints. For example, it studies how consumers, with given income and prices of the commodities, try to maximize their satisfaction.

(ii) Unlimited ends: Ends refer to wants. Human wants are unlimited. When one want is satisfied, other wants crop up. If man's wants were limited, then there would be no economic problem.

(iii) Scarce means: Means refer to resources. Since resources (natural productive resources, man-made capital goods, consumer goods, money and time etc.) are limited economic problem arises. If the resources were unlimited, people would be able to satisfy all their wants and there would be no problem

iv. Alternative uses: Not only resources are scarce, they have alternative uses. For example, coal can be used as a fuel for the production of industrial goods, it can be used for running trains, it can also be used for domestic cooking purposes and for so many purposes. Similarly, financial resources can be used for many purposes. Man, or society has, therefore, to choose the uses for which resources would be used. If there was only a single use of the resource then the economic problem would not arise.

Economics as discipline of study is concerned with management of scarce resources. Resource management entails mobilization and allocation of resources to alternative uses in order to satisfy ones' needs. There are several **stakeholders (Entities)** that have interest in resource mobilization and allocation. These include:

- ❖ **Consumers;** whose interest is to maximize utility (satisfaction) given the limited resources (income). In allocating the limited resources to satisfy alternative ends, consumers try as much as possible to minimize expenditure. Hence, they (consumers) are said to be rational. A rational consumer is that who seeks to **minimize expenditure** while **maximizing satisfaction**.
- ❖ **The producers (business firms);** whose objective is to maximize profits. In order to maximize profits, business firms endeavor to maximize **total revenue** while minimizing **total costs**. $\pi_m = TR_{\max} - TC_{\min}$. Total costs of a firm arise from

employment of (F.O.P) Land, Labor and Capital in production of goods and services. Hence, there is need to identify the cheapest sources of factor inputs without compromising quality.

- ❖ **Government**, whose interest or objective is to maximize **social economic welfare** among the public. In providing social services to the public, government mobilizes land, labor and capital as factor inputs. Government will therefore identify priority areas which are basic in nature in order to meet the needs of the public.

Sources of economic problems.

These are brought about by the fact that human wants or desires are unlimited yet the means of satisfying them are limited. At any one time the world can only produce a limited amount of goods and services because it only has a limited number of resources.

In an effort to maximize their gains from the limited resources, people (individuals, households, firms, government) as producers and consumers have to make a number of choices regarding the use of their resources and spending their earnings. The need for making choices arises due to following basic facts of economic life:

- **Human wants are unlimited**
- **Resources available to satisfy human wants are scarce**
- **People want to maximise their gains.**

Human wants, desire and needs are endless in the sense that they go on increasing with increase in people's ability to satisfy them. Human wants continue to increase without meeting their end because

- (i) People have insatiable desire to raise their standard of living, comforts and efficiency;
- (ii) Human tendency is to accumulate things beyond their present need;
- (iii) Human wants increase with increase in knowledge, inventions and innovations;
- (iv) Satisfying one want (e.g., buying a car) creates want for many other things (e.g., petrol, driver, parking place, safety locks, spare parts, insurance, etc.);
- (v) The moment one want is satisfied, other wants come up from nowhere;
- (vi) Biological needs (e.g., food, water, etc.) are repetitive; and
- (vii) In modern times, advertisements influence consumer's taste and preferences and create new kind of wants.

The end of wants for an individual comes only with the end of his/her life. But human wants continue to increase. Another and an equally important feature of human wants is that they are not equally urgent and equally important. Satisfying some wants gives more pleasure than others. Therefore, gain maximising consumers have to make a choice between wants.

Economics also provides logic and reasoning, tools and technique, and analytical framework to analyse economic phenomena and to predict the consequences of change in economic conditions. It may, thus, be concluded that economics as a science studies economic behaviour of the people and its consequences; it brings out cause-and-effect relationships between economic events; provides the tools and techniques of analysing economic phenomena and the tools and techniques for predicting the consequences of economic decisions and economic events.

Economics is divided into two branches; Microeconomic and Macroeconomics

Microeconomics

What Does *Microeconomics* Mean? It is the branch of economics that analyzes the market behavior of individual consumers and firms in an attempt to understand the decision-making process of firms and households. It is concerned with the interaction between individual buyers and sellers and the factors that influence the choices made by buyers and sellers. In particular, microeconomics focuses on patterns of supply and demand and the determination of price and output in individual markets (e.g., coffee industry).

Microeconomics looks at the smaller picture and focuses more on basic theories of supply and demand and how individual businesses decide how much of something to produce and how much to charge for it. People who have any desire to start their own business or who want to learn the rationale behind the pricing of particular products and services would be more interested in this area. Macroeconomics, on the other hand, looks at the big picture (hence "macro"). It focuses on the national economy as a whole and provides a basic knowledge of how things work in the business world. For example, people who study this branch of economics would be able to interpret the latest Gross Domestic Product figures or explain why a 6% rate of unemployment is not necessarily a bad thing. Thus, for an overall perspective of how the entire economy works, you need to have an understanding of economics at both the micro and macro levels

Microeconomics as a Positive Science

Microeconomics as a positive science seeks to analyze and explain economic phenomena as they are. It seeks to answer the questions 'what is', 'Why it is' and 'what will be ...'. For example, what is the trend in the prices of matooke in Kampala? What will be the demand for matooke if prices go up? These are questions of positive nature. Microeconomics explains the economic behavior of individual decision-makers under given condition;

their response to change in economic conditions; and brings out the relationship between the change in economic conditions and economic decision of the people. In fact, *the main function of microeconomics is to establish cause-and-effect relationship, if there is any, between two or more economic events at micro level and to provide the basis for prediction.* Emphasizing the positive character of economics, Friedman says, “Economics as a positive science is a body of tentatively accepted generalizations about economic phenomena that can be used to predict the consequences of change in circumstance.” What Friedman said about economics is more true about microeconomics. One of the main tasks of microeconomics is ‘to provide a system of generalisations or microeconomic theories capable of being used to predict economic phenomena at micro level. This makes microeconomics a positive science. Here, the word ‘positive’ does not mean that theoretical statements are positively true: it means that it has a great possibility to occur if conditions are fulfilled.

Positive and normative economics

Positive economics presents what is, what was, and what will be. It deals with objective statements that can be tested, amended or rejected basing on the available evidence. For example:

1. A fall in price of matooke will lead to a rise in its demand.
2. An increase in income will lead to more demand of houses.
3. A rise in the temperature will increase demand for ice cream.
4. Minimum-wage laws cause unemployment

Normative economics deals with what should be now and, in the future, and what should have been. It deals with subjective statements based on value judgement or opinion rather than facts that can be tested using the available evidence.

1. Cigarette smoking should be banned.
2. The price of a litre of milk should be Uganda Shs. 1000.
3. The government should raise the minimum wage.

NB: There are no right or wrong answers to these questions. The answers depend on ethical

Therefore, economics uses both positive and normative statements to make radical decisions.

The Five Fundamental Questions in Economics

The need for ensuring efficiency in production of goods and services and their efficient distributions among the consumers arises due to (I) scarcity of resources; (ii) ever growing human wants; and (iii) desire to maximize gains. The problems that arise in

ensuring efficiency in production and distribution of goods and services are expressed in the following questions

- ***What to produce?*** The problem ‘what to produce’ is the problem of choice between commodities. This problem arises mainly for the reason that scarcity of resources does not permit production of all the goods and services that people would like to consume; it is essentially the problem of efficient allocation of scarce resources so that the *output is maximum* and *the output-mix is optimum*. The objective is to satisfy the maximum needs of maximum number of people.
- ***How to produce?*** The problem ‘how to produce’ is the problem of choice of technique. Here the problem is how to determine an optimum combination of inputs – labor and capital – to be used in the production of goods or services. This is because the limited resources and technology set a limit to how much of any good or service that can be produced.
- ***For whom to produce?*** i.e., the target market. The problem ‘for whom to produce’ is the problem of matching the production pattern with the demand pattern, so that those who have the ability and willingness to pay, get the commodity. Demand pattern is determined by the pattern of choices and preferences and income distribution.
- ***Where to produce?*** This is a problem of location, depending on what the business/ industry is producing, different factors like proximity to raw materials, markets, electricity have to be considered
- ***When to produce?*** this question looks at times and seasons, e.g., success and Christmas cards have to be produced at specific times of the year, for agricultural products, there are planting and harvesting seasons e. t. c

2.4 Scarcity, Choice and Opportunity Cost

Since human wants are unlimited, and the means to satisfy them are limited, every society is faced with the twin problems of scarcity and choice and hence, opportunity cost.

Resources can be classified as

- (i) natural resources (including land, space, water, minerals, forest climate, jointly called land);
- (ii) human resources including man-power, its energy, talent, professional skills, and innovative ability and organizational skills, jointly called labor);
- (iii) Man-made resources (including machinery, equipment, tools, technology and building, jointly called capital). To this, economist add another category of

resource called entrepreneurship, i.e., those who organize the resources and assume risk in business. Time and information are two other kinds of resources which have economic value.

All these resources available to a person, society, country – however rich – at any point of time are limited.

Resource scarcity is a relative term; it implies that resources are scarce in relation to the demand for them. The scarcity of resources is, in fact, the mother of all economic problems.

If resources were unlimited, like human wants, there would be no economic problem and no economics.

Scarcity

Scarcity, a concept we already implicitly discussed in the introduction to this tutorial, refers to the tension between our limited resources and our unlimited wants and needs. For an individual, resources include time, money and skill. For a country, limited resources include natural resources, capital, labor force and technology. Because all of our resources are limited in comparison to all of our wants and needs, individuals and nations have to make decisions regarding what goods and services they can buy and which ones they must forgo. For example, if you choose to buy one DVD as opposed to two video tapes, you must give up owning a second movie of inferior technology in exchange for the higher quality of the one DVD. Of course, each individual and nation will have different values, but by having different levels of (scarce) resources, people and nations each form some of these values as a result of the particular scarcities with which they are faced. So, because of scarcity, people and economies must make decisions over how to allocate their resources.

Choice

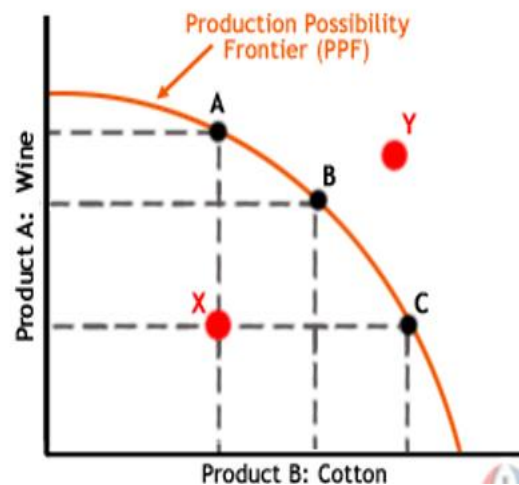
It is the scarcity of resources in relations to human wants which force people to make choices. Furthermore, the problem of choice arises also because resources have alternative uses and alternative uses have different returns or earnings. For example, if the resources used to set up a super market yield more income than when used to build houses for rent, gain maximizing resource owners have to make choices between the alternative uses of scarce resources. Economics as a social science, analyses how people (individuals and society) make their choices between the economic goals they want to achieve, between the goods and services they want to produce and between the alternative uses of their resources with the objective of maximizing their gains.

Opportunity cost

The gain maximisers will have to evaluate the cost and benefit of alternative options in making their choices. Once a choice is made, the alternative foregone is known as the opportunity cost

The Production Possibility Frontier (PPF)

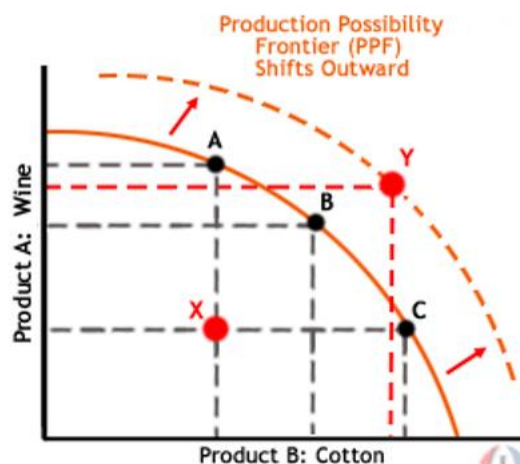
The Production Possibility Frontier (PPF) represents the point at which an economy is most efficiently producing its goods and services and, therefore, allocating its resources in the best way possible. If the economy is not producing the quantities indicated by the PPF, resources are being managed inefficiently and the production of society will decline. The production possibility frontier shows there are limits to production, so an economy, to achieve efficiency, must decide what combination of goods and services can be produced. e.g., Imagine an economy that can produce only Wine and Cotton. According to the PPF below, points A, B and C - all appearing on the curve - represent the most efficient use of resources by the economy. Point X represents an inefficient use of resources, while point Y represents the goals that the economy cannot attain with its present levels of resources.



As we can see, in order for this economy to produce more wine, it must give up some of the resources it uses to produce cotton (point A). If the economy starts producing more cotton (represented by points B and C), it would have to divert resources from making wine and, consequently, it will produce less wine than it is producing at point A. As the chart shows, by moving production from point A to B, the economy must decrease wine production by a small amount in comparison to the increase in cotton output. However, if the economy moves from point B to C, wine output will be significantly reduced while the increase in cotton will be quite small. Keep in mind that A, B, and C all represent the most efficient allocation of resources for the economy; the nation must decide how to achieve the PPF and which combination to use. If more wine is in demand, the cost of increasing its output is proportional to the cost of decreasing cotton production.

Point X means that the country's resources are not being used efficiently or, more

specifically, that the country is not producing enough cotton or wine given the potential of its resources. Point Y, as we mentioned above, represents an output level that is currently unreachable by this economy. However, if there was a change in technology while the level of land, labor and capital remained the same, the time required to pick cotton and grapes would be reduced. Output would increase, and the PPF would be pushed outwards. A new curve, on which Y would appear, would represent the new efficient allocation of resources.



When the PPF shifts outwards, we know there is growth in an economy. Alternatively, when the PPF shifts inwards it indicates that the economy is shrinking as a result of a decline in its most efficient allocation of resources and optimal production capability. A shrinking economy could be a result of a decrease in supplies or a deficiency in technology.

An economy can be producing on the PPF curve only in theory. In reality, economies constantly struggle to reach an optimal production capacity. And because scarcity forces an economy to forgo one choice for another, the slope of the PPF will always be negative; if production of product A increases then production of product B will have to decrease accordingly.

Increasing opportunity cost and concavity of PPF

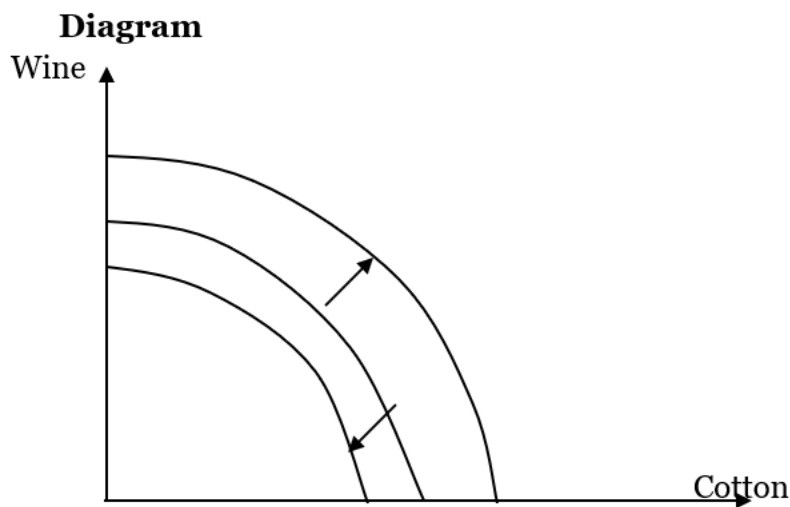
The production possibility frontier reveals another important fact that opportunity cost changes along the PPF. In Fig. 2.1, movement from point A downwards to points B, C, D, E and F shows increasing opportunity cost of clothing in terms of lost output of food. For example, movement from points A and B, means transferring resources (labor and capital) from foods production to clothing production. As a result, food production is lost by 1 thousand tons for 33 million meters of clothing. It means that the opportunity cost

33 million meters of clothing is 1 thousand tons of food. A further movement from point B to C means that the opportunity cost of only 15 million meters of clothing, a much lower quantity, is the same one thousand tons of food. It means that opportunity cost of clothing increases as we move downwards along the PPF. It increases further between points C and D. Similarly, movement from point F towards point A, shows increasing opportunity cost of food production in terms of clothing.

Why is PPF concave? It can be seen from the diagram that the PPF takes the form of concave curve. The PPF derives its concavity from the fact that opportunity cost increases along the PPF. The movement from point A towards point F implies transfer of resources from food production to production of clothing. As more and more resources are employed to produce clothing, marginal productivity of resources in terms of clothing goes on diminishing. The result is increase in the opportunity cost

2.5.2 Shift in Production Possibility Frontier

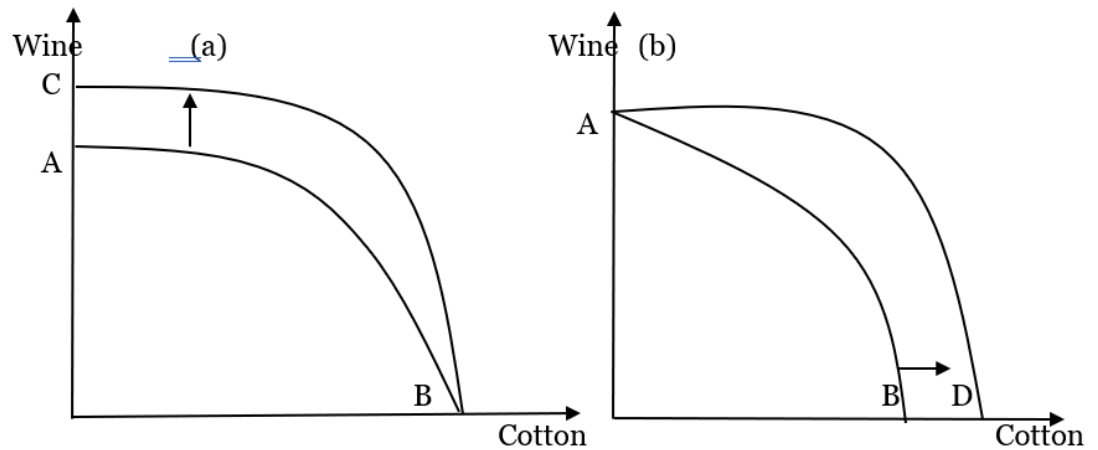
The production possibilities frontier is not fixed for all times. In general, it keeps shifting upwards for reasons such as: (i) expansion of resources, i.e., increase in the availability of resources and (ii) technological improvements. The effects of resource expansion and technological improvements on the PPF is explained and illustrated below. An outward shift in the PPF represents Economic growth while an inward shift represents a decline in the economy



Biased and unbiased shifts of the PPF

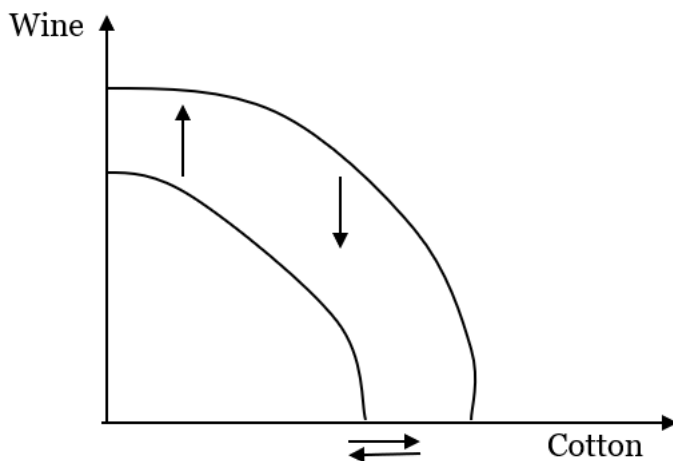
A **biased shift** is one where due to an increase in the resources used to produce one of the products production increases only in that product but not the second product causing the PPF to move outward only on one side as shown below. (a decrease in resources e.g. exhaustion causes an inward shift in the PPF)

Diagram



Unbiased shift

Is when due to for e.g. An improvement in technology the PPF moves outward i.e. there is an increase in the production of both products as shown below.



ECONOMIC SYSTEMS

An economy is a social organism through which people make their living. It is constituted of all the individuals, households, farms, firms, factories, banks and government who act and interact to produce and consumer goods and services. An economic system is an interaction of economic units in mobilization and allocation resource in the economy.

Capitalist society

Also called a laissez faire system is where resources are in the hands of the public, there is limited government intervention or no government intervention at all in the case of pure capitalism. Government intervention and its economic activities should deliver what free market mechanism cannot. E.g., UK, U.S.A, Germany, etc.

Socialist/ Command/ Centrally planned economy

In contrast with the capitalist system, the role of government in a socialist economy is all pervasive. While in the former, the government is supposed to play a limited role in the economic sphere, in the latter, it exercises comprehensive control on almost all economic activities. In the socialist system, the private ownership of factors of production is replaced by the state ownership. All economic activities are centrally planned, controlled and regulated by the state. All decisions regarding production, resources allocation, employment, pricing etc., are centralised in the hands of government or the Central Planning Authority. The individual freedom of choice and decision-making in regard to economic activities is drastically curtailed. This, however, should not mean that there is no scope for individual decisions. Individuals are provided freedom to make their own choices, but within the policy framework of the socialist economy.

The social aims of the socialist economics system are the same as in free enterprise system, but, while the motivating force in a capitalist economy is private profit, in the socialist economy, it is maximisation of social welfare. E.g., North Korea, Cuba, China

Mixed economy; A mixed economy is an economic system which combines the features of both free enterprise and socialist (or centrally planned) economic systems. In this system, the economy is divided into two sectors, (i) private sector, and (ii) public sector. Private sector is allowed to function on the principles of free enterprise system or free market mechanism within a broad political and economic policy framework. The other part of the economy, the public sector, is organised, owned and managed along the socialist pattern.

Apart from controlling and managing the public sector, the government controls and regulates the private sector through its industrial, monetary and fiscal policies. If necessary, direct controls are also imposed.

REVISION QUESTIONS;

REVIEW QUESTION AND EXERCISES

1. The origin of economics lies in endless human wants and scarcity of resources. Elaborate.
2. "Scarcity of resources is the mother of all economic problems." Discuss with examples.

3. What is microeconomics? Is microeconomics a positive or a normative science? Give arguments for your answer.
4. What is an economic system? What are the various constituents of the economic system? How do they act and react?
5. Define opportunity costs. why does opportunity cost increase along the production possibility frontier? Explain with an appropriate example. Suppose a country produced only two goods – cars and computers. When some of the resources are transferred from car production to computer production, car output decreases by 1000 units and computer output increases by 50,000 units. Find the per unit opportunity cost of car production.
6. What are the factors that make production possibility frontier upwards? Illustrate and explain an upward shift in the production possibility frontier caused by
 - (a) Increase in the supply of resources, technology remaining the same;
 - (b) Technological improvements, resource remaining the same.