BUSINESS ECONOMICS

INTRODUCTION

Economics is a social science that studies the economic behavior of people and economic phenomena/occurrence. Economic behavior is essentially a conscious effort of the people to derive maximum gains from the use of scarce resources and opportunities available to them. It is fundamentally the study of how people allocate their limited resources to their alternative uses to produce and consume goods and services to satisfy their endless wants or to maximize their gains.

Business Economics deals with the application of economics theories and principles into business practices to aid managers in decision making in order to achieve specific objectives.

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 maximize their gains.***

The mainstream economics is divided into two major branches, in brief, ***microeconomics*** studies the economic phenomena at micro level, i.e., at the individual level, and **macroeconomics** studies them at national aggregate level. *Microeconomics* studies how consumers and producers make their choices; how their decision and choices affect the demand and supply conditions; how consumers and producers interact to settle the prices of goods and services in the market; how prices are determined in different market settings.

Macroeconomics, on the other hand, studies the working and performance of the economy as a whole. It analyses behavior of the national aggregates including national income, aggregate consumption, savings, investment, total employment, the general price level and country's balance of payments. Macroeconomics analyses how these aggregate variables interact with one another, how they are determined and how they determine the aggregate national output. It also studies the impact of public revenue and public expenditure, government's economic activities and policies on the economy. An important aspect of macroeconomics studies is the consequences of international trade and other economic relations between the nations. The inclusion of these aspects of economic phenomena constitutes the major themes of **m**acroeconomic**s.**

IMPORTANCE OF ECONOMICS

- Equips business people with deeper insight of the working of the economy
- Understanding of the working of markets for goods, services and resources

- Business crucially depends on performance of the national economy (growth, inflation etc.)
- Understand impact of government policy on business.

Objectives of business firms

Firms are set out to achieve a number of objectives that include the following;

- Profit maximization
- Sales Revenue maximization
- Growth (In profit, sales revenue, capacity, number of employees)
- Stability (Continuity of business---In customer satisfaction, creditworthiness, employee satisfaction etc.)
- Efficiency (When all F.O.P are put to productive use)
- Survival (a short term objective, business start-ups, crisis etc.)

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 in puts – 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 marching 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

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

Scarcity: refers to a situation in which human wants are unlimited but the means to fulfill them are limited

Choice: scarcity of resources gives rise to the fundamental economic problem of choice. I.e. choice arises out of scarcity. One has to select out of a number of resources since all of them cannot be done/carried out at the same time because of the limited resources.

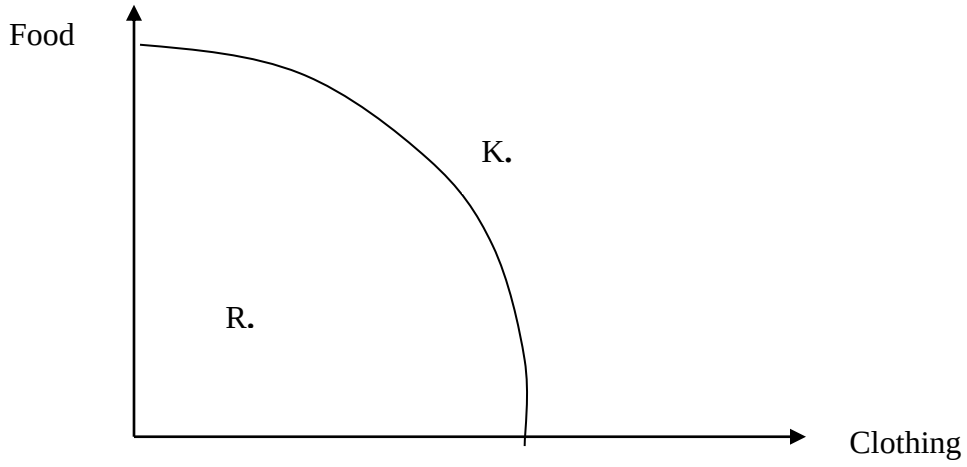
Opportunity cost: the problem of choice arises when there are alternative ways of doing something e.g. producing a commodity. The sacrifice of the alternative given up when a choice is made is called the opportunity cost.

THE PRODUCTION POSSIBILTY FROINTIER/CURVE (PPF/PPC)

The concepts of scarcity, choice and opportunity cost can be represented using the PPF. The PPF is a curve that shows all possible combinations of two goods that can be produced within a specified period of time when all resources are fully and efficiently employed.
Assumptions

1. Only two goods are produced.
2. Resources are limited or given.
3. Technology is given and is constant.
4. The resources are fully employed.
5. Technology is efficiently used.
6. It's a short run analysis.

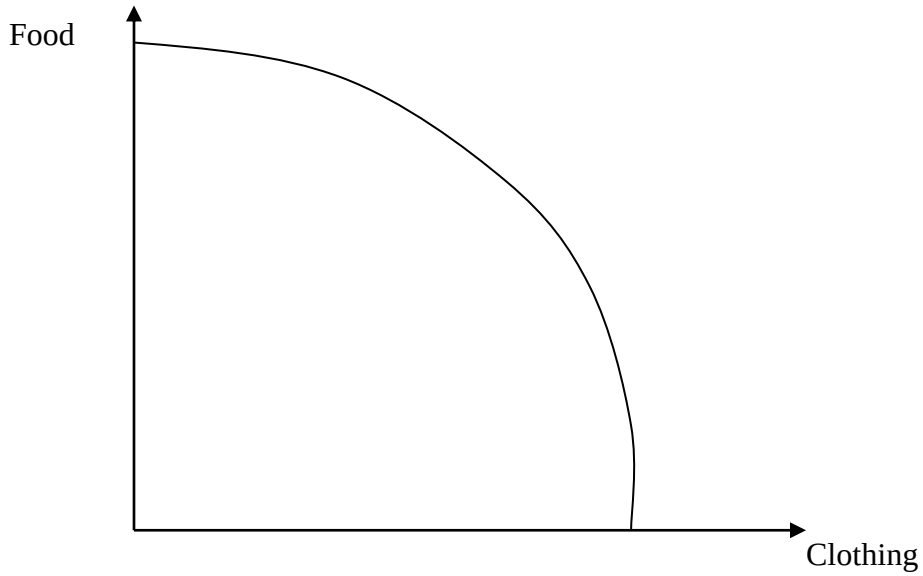
Diagram



From the diagram above, there are many combinations of clothing and Food that can be produced when efficiently utilizing resources, which are given by points A, B, C and D. as more and more of clothes is produced, less of food is successively produced. Any combination

lying inside the PPF such as R implies that the society is not using its resources fully. Such a combination is said to be technologically inefficient. Any combination outside the PPF such as K implies that the economy/firm do not possess sufficient resources to produce this combination.

Relationship between PPF and Scarcity, Choice and opportunity cost



Determinants of the PP Curve

The following factors affect the position of the PP curve in any given economy. Changes in these factors can shift the PP curve inward or outward. It is imperative to understand these determinants and how they affect the curve.

Size of the labor force

The more workers, the more goods that can be produced. An increase in the labor force leads to an outward shift of the PP curve. (A decrease consequently leads to an inward shift of the PP curve.)

Quantity/quality of capital

The more capital available to produce goods, the more goods that can be produced. Also, when the quality of the capital improves, more goods can be produced. An increase in the quantity/quality of capital shifts the curve outward as more goods are produced. (Again, a decrease consequently leads to an inward shift of the PP curve.)

Quantity/quality of resources

Similar to capital, more and better resources create more goods. An increase in the quantity/quality of resources shifts the curve outward. (Again, a decrease consequently leads to an inward shift of the PP curve.)

Technology

Improved technology produces goods faster and more efficiently. Thus, more goods can be produced. Increases/improvements in technology shift the curve outward.

Health

Healthier economies have more citizens in the work force as well as stronger workers. When the health of an economy increases, more goods can be produced, thus shifting the curve outward.

Education

Smarter economies create faster, better ways of producing goods. This increases the amount of goods produced, leading to economic growth. With an increase in education, the PP curve shifts outward.

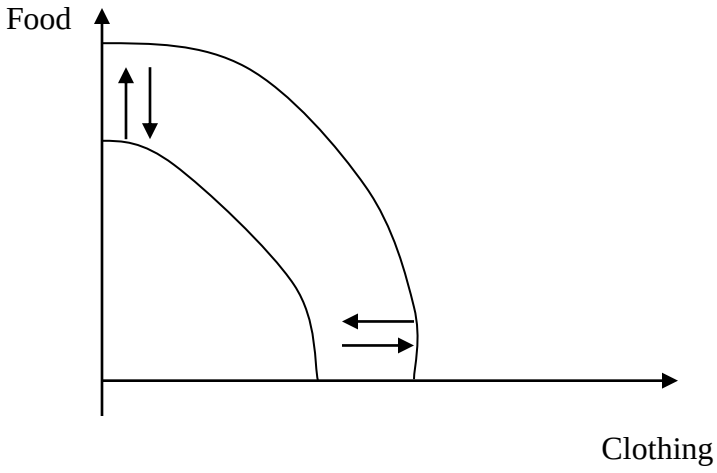
Shift in Production Possibility Frontier

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

A shift in the PPF may be unbiased or biased

Unbiased shift is when an improvement in technology or expansion of resources favors the production of both commodities. i.e. there is an increase in the production of both products as shown below.

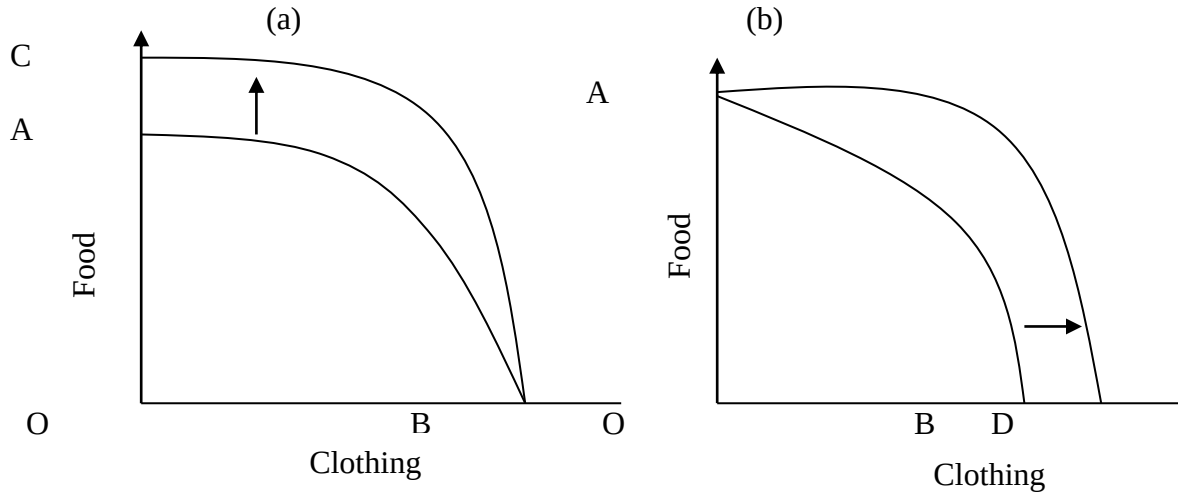
Diagram



Biased shifts of the PPF

A ***biased shift*** is where an improvement in technology or expansion of resources favors the production of one commodity. i.e. there is an increase in the production of one product as shown below.

Diagram



The slope of the PPF

Qn: why does the PPF bend outwards/ why is PPF concave?

The PPF derives its concavity from the fact that opportunity cost increases along the PPF. The movement from one point on the PPF to another means transfer of resources from the production of one commodity to that of the other. For example, movement from point A towards point D implies transfer of resources from production of Y to production of X. This is because resources tend to be specialized so that some of their productivity is lost when they are transformed from what they do well to what they do poorly.

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 Masaka? 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 Freidman 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.

Microeconomics as a Normative Science

Microeconomics as a normative science deals also with the normative question 'what ought to be' 'What is' or 'what happens in the market' may not be desirable or in the interest of the society. For example, production and sale of harmful goods like alcohol and cigarettes may be a very profitable business. But, 'Is production and sale of these goods desirable for the society? Is a normative question – a question in public interest. Microeconomics as a social science examines this question from the angle of social desirability of production and sale of such goods. It examines the social costs and benefits or production and sale of goods like alcohol and cigarettes and prescribes the control and regulatory measures.

Consider another microeconomic problem. Given the growth of population and supply of houses in Kampala, house rents if not controlled, will increase and has, in fact, increased exorbitantly. 'Should house rents be allowed to increase depending on the market demand and supply conditions or be controlled and regulated to protect the interest of tenants?' is a normative question – a question in public interest. Micro economics as

normative science examines the issue in the interest of both landlords and the tenants and prescribes the reasonable rate of house rents and measures to implement it.

Microeconomics, as *a normative science,* involves *value judgement* on 'what is goods' and 'what is bad' for the society. The values are drawn from the moral, ethical, social and political aspirations of the society. Since microeconomics prescribes methods to correct undesirable economic happenings, it is also called a *prescriptive science.*

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
is 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.

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.

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.

MARKET DEMAND AND SUPPLY

The word 'market' generally means a place or area where goods and services are bought and sold. It is a system by which sellers and buyers of a commodity interact to settle its price and the quantity to be bought and sold.

The Meaning of Demand

Demand is a desire for a good, backed by ability and willingness to pay. A desire without sufficient resources (money income) is merely a wish. A desire with resources but without willingness to spend is only a ***potential demand.*** A desire accompanied by ability and willingness to pay makes a ***real*** or ***effective demand***.

The Law of Demand

The law of demand can be stated as, all other things remaining constant (ceteris paribus), the quantity demanded of a commodity increases when its price decreases and decreases when its price increases. This law implies that demand and price are inversely related. The law of demand can be illustrated through a demand schedule and a demand curve.

The Demand Schedule

A demand schedule is a tabular presentation of different prices of a commodity and the corresponding quantity demanded per unit of time i.e. it is a tabular representation of the relationship between quantity demanded of a commodity and its price.

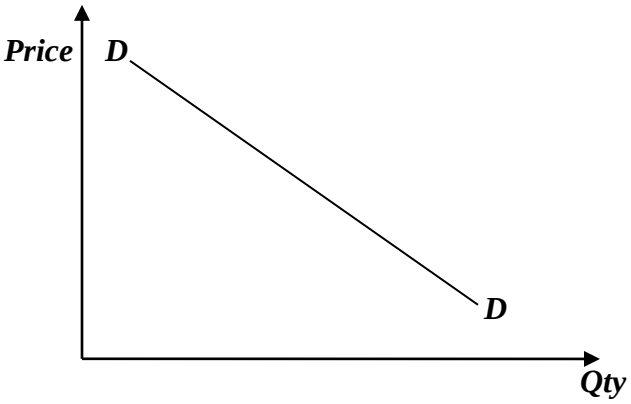
Illustration

PRICE	QTY Dd
1000	0
900	10
800	30
700	50
600	80
500	130
400	200

The Demand of Curve

A demand curve is a graphical presentation of the demand schedule. It has a negative slope which shows the inverse relationship between the price of a commodity and its quantity demanded.

Illustration



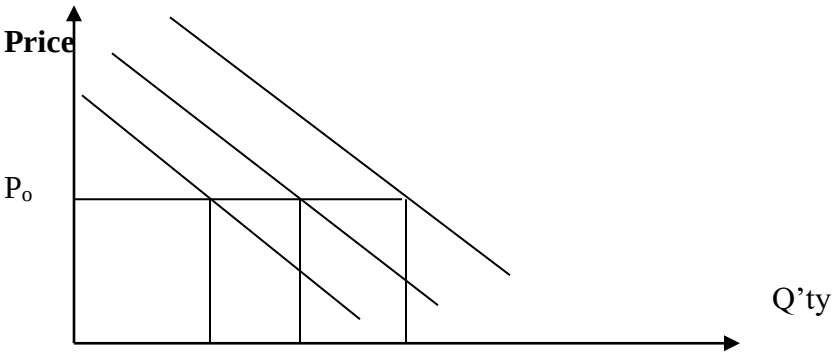
Qn: State and explain the various factors that affect the demand for a commodity

- *Price of the commodity*
- *Income of the consumer*
- Price of related commodities
- Taste and preference
- The expected price of the commodity
- Season of the year
- Religion and culture,
- Level of education
- Number of consumers etc…

Change in demand and Change in quantity demanded

A change in demand is defined as an increase or decrease in the amount demanded of a commodity due to a change in the factors that influence its demand apart from price. I.e. it is an increase or decrease in demand for a commodity at constant price. It is shown by a shift of the demand curve either to the right or left of the original curve

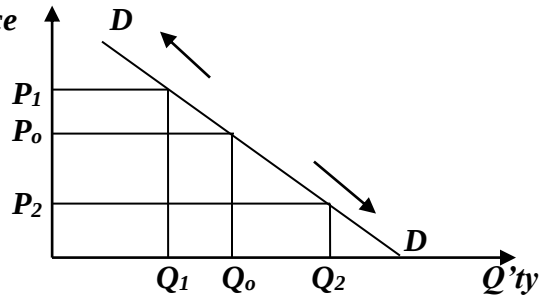
Illustration



Change in Quantity demanded

This is an extension or contraction in a commodities demand brought about by a change in its price ceteris paribus. It is shown by a movement along the same demand curve

Illustration



Exceptions to the Law of demand

The law of demand is one of the fundamental laws of economics. The law of demand, however, does not apply to the following cases:

(i) Expectations regarding future prices. When consumers expect a continuous increase in the price of a durable commodity, they buy more of it despite increase in its price, to avoid the pinch of still higher price in future. Similarly, when consumers anticipate a considerable decrease in the price in future, they postpone their purchases and wait for the price to fall further, rather than buy the commodity when its price initially falls. Such decisions of the consumers are contrary to the law of demand.

(ii) Prestigious good/ articles of ostentation. The law does not apply to the commodities which serve as a 'status symbol', enhance social prestige or display wealth and richness, e.g., gold, precious stones, rare paintings and antiques, etc. rich people buy such goods mainly because their prices are high.

(iii) Giffen goods. An exception of this law is also the classic case of Giffen goods named after a British Economist Sir Robert Giffen. A Giffen good does not mean any specific commodity. It may be any essential commodity much cheaper than its substitutes, consumed mostly by the poor households and claiming a large part of their income. If price of such goods increases (price of its substitute remaining constant), its demand increases instead of decreasing.

The concept of Market Demand

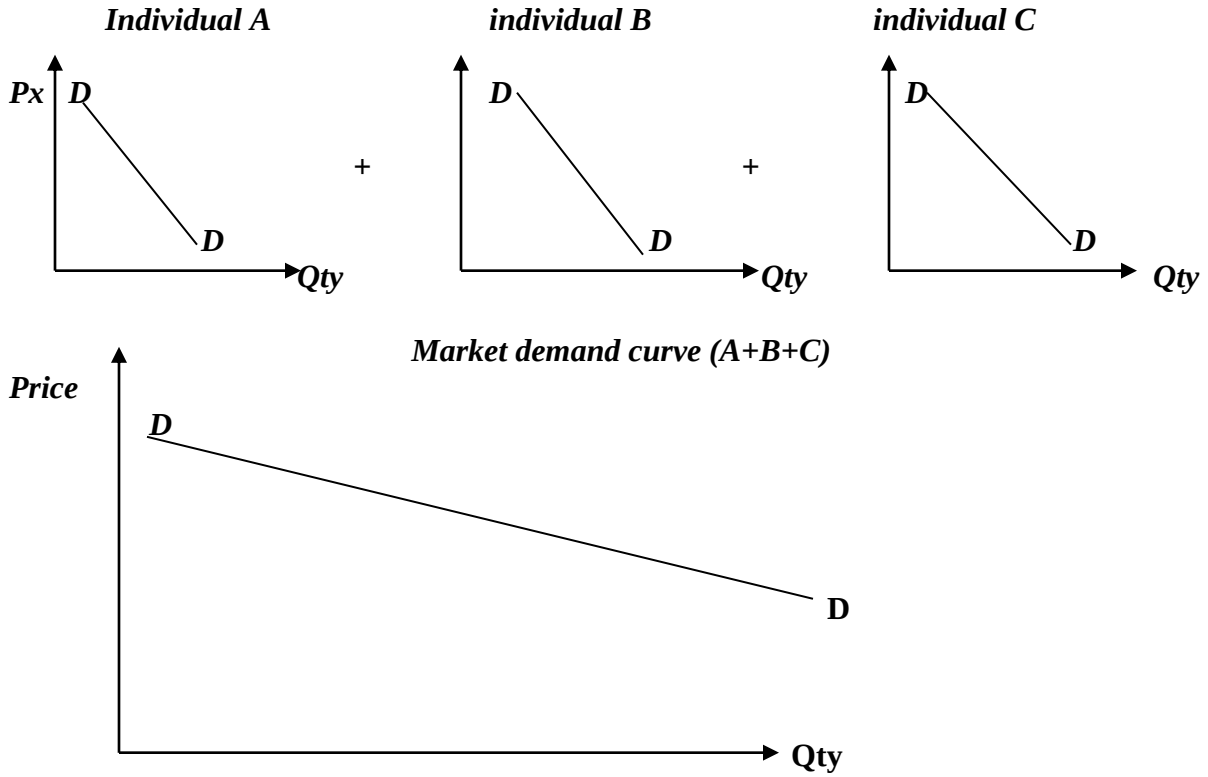
Market demand refers to the total quantity that all the users of a commodity are willing to buy at a given price over a specific period of time. In fact, market demand is the sum of individual demands. Market demand can be represented using a schedule and/or a curve

The ***market demand schedule*** is a tabular representation of the total amount of a commodity demanded by all consumers in the market at a given price per unit time

Price	**No. soda bottles demanded by**			**Market demand = A + B + C**
	A	**B**	**C**	
2000	0	0	0	0
1500	0	0	4	4
1000	0	4	8	12
800	3	8	12	23
700	5	12	16	33
500	8	16	20	44

Graphical Derivation; the market demand curve can be derived graphically by horizontally summing individual demand curves at each price level as shown below

Illustration



SUPPLY

Supply means the quantity of a commodity which a producer or seller offer for sell at a given price, per unit of time. Market Supply, like market demand, is the sum of supplies of a commodity made by all individual firms.

The law of supply

The law of supply can be stated as follows: the supply of a product increases with the increase in its price and decreases with decrease in its price, other things remaining constant. It implies that the supply of a commodity and its price are positively related.

Qn: state and explain the factors that determine the supply for a commodity

- *The price of the commodity*
- *The cost of production*
- *Price expectation*
- *Number of producers*
- *Taxes on the commodity*
- *Level of technology*
- *Production period*
- *Natural hazards*
- *Government policy etc*

The supply curve and schedule

The general form of a linear supply function is denoted as

$Qs_x = -c + dp_x$,

THE CONCEPT OF MARKET EQUILIBRIUM

In general sense, it means balance in opposite forces. In the context of market analysis, equilibrium refers to a state of market in which quantity demanded of a commodity equals the quantity supplied of the commodity. The equality of demand and supply produces an equilibrium price. The equilibrium price is the price at which quantity demanded of a commodity equals its quantity supplied. Equilibrium price is also called market-clearing price. Market is cleared in the sense that there is no unsold stock and no unsupplied demand.

Graphically it is determined at the point of intersection of the demand and supply curves as shown below

Illustration

P_e is equilibrium price and Q_e the equilibrium quantity

Example

THE CONCEPT OF MAXIMUM AND MINIMUM PRICE POLICY (Diversion from the equilibrium)

Price Ceiling

Also known as maximum price legislation is the price that is set by the government below the equilibrium above which it is illegal to sell. The fixed price acts as the maximum price possible.

In the case, the market forces set the price at Pe, The government considers this price to be socially undesirable and fixes a maximum price at P_c, called price ceiling. At P_c, demand increases from its equilibrium level Q_e to Q_1 and supply falls from Q_e to Q_2. As a result, demand exceeds supply by Q_1Q_2. This is called excess demand or supply shortage.

Reasons for setting a price ceiling

To enable the consumers, purchase essential commodities at a lower price than the one determined by the market forces of demand and supply. This is because during crises, producers take the advantage of scarcity and charge higher prices.

Effects of a price ceiling

- Demand exceeds supply
- Long queue's develop
- Rationing of the commodity
- Hoarding is carried out
- Customer discrimination
- Price discrimination

The price floor: Minimum price policy

This is a price that is set by the government above the equilibrium price below which it is illegal to sell. The fixed price therefore becomes the minimum price at which at which all firms should sell. The reason for setting a minimum price is to enable producers to recover the costs of production and keep them in business. It is mainly done during the period of high production when supply exceeds demand and consumers are offering low prices.

Illustration

The underlying effect of minimum price legislation is that it encourages production which could result in over utilization of resources.

CONSUMER AND PRODUCER SURPLUS

Consumer Surplus

If the price a consumer is willing to pay is higher than the price which he actually pays, then the consumer is said to have a surplus. This surplus is called consumer surplus. What a consumer is willing to pay for one unit of a commodity measures the money value of his expected utility and what he actually pays measures the monetary cost of the expected utility. The difference between the two values is called 'consumer surplus'

Consumer's surplus and its measurement are graphically illustrated below. The consumer's willingness to pay is shown by the straight line demand curve MN. the price which a consumer actually pays, is given by P_e. At price P_e, the consumer buys Q_e units. The total utility derived by the consumer from Q_e units is shown by the area $OMBQ_e$, for which the consumer pays $OPBQ_e$. Total consumer surplus equals PMP = PMBQ – OPBQ.

Illustration

Some uses of the concept of consumer's surplus

First, the concept of consumer's surplus is useful in demonstrating that the price paid for a commodity does not represent the satisfaction derived from the commodity. Generally, the satisfaction is greater than the price paid.

Secondly, the concept of consumer's surplus is a useful tool in comparing the burden of direct and indirect taxes. Besides, the concept of consumer surplus is useful in formulating fiscal policies. Taxes on commodities with higher consumer's surplus are preferable to those commodities with were consumer's surplus low. For, the taxes of the former kind yield greater revenue involve relatively less social cost, and also have lower distortionate effect on consumption and production.

Thirdly, in pricing policy of the monopoly, the concept of consumer's surplus plays an important role, particularly, where a discriminatory pricing of monopoly product is feasible and desirable. A revenue maximizing monopolist tries to extract the whole consumer's surplus through the first degree discrimination. He sets the price of a durable good, initially at such a high level that only those who have the ability and willingness to pay can buy the commodity. Then he gradually lowers down the price to attract the customers with lower paying capacity.

Producer Surplus

Producer surplus refers to the different between the amount of money the producer actually receives upon the sale of given quantity of output and the minimum amount she/ he would be willing to accept for the same quantity.

Diagram

The total amount of money the producer actually receives is equivalent to area OP_eBQ_e. However, he or she would be willing to receive amount of money equivalent to $OABQ_e$ i.e. the area below the supply curve subject to Q_e. Hence the difference AP_eQ is the producer's surplus.

THE CONCEPT OF ELASTICITY

Elasticity

This refers to the degree of responsiveness of quantity demanded or supplied of a given commodity due to a given percentage change in factors which affect demand or supply. Elasticity may also be re-defined as the degree of responsiveness of dependent variables arising from a given percentage change in independent variables.

There are two major types of elasticity and these include: ***elasticity of demand and elasticity of supply***.

Elasticity of demand determines the percentage change in quantity demanded arising from a given percentage change in the determinants of demand i.e. the ***price*** of the commodity, the ***income*** of the consumer and prices of other commodities.

There are three types of elasticity of demand:
1). Price elasticity of demand
2). Cross elasticity of demand
3). Income elasticity of demand

Price elasticity of demand

This refers to the degree of responsiveness of the quantity demanded arising from a given percentage change in the price of the commodity.

P.E.D can be redefined as the percentage change in quantity demanded divided by a given percentage change in the price of the commodity

i.e. $P\ E\ D = -\frac{\Delta Q}{\Delta P} \times \frac{P}{Q_1}$

Examples:

1. Given that the price of the commodity increases from 200/= to 250/= and as a result the quantity demanded of the commodity falls from 20 to 15 units.
   Determine the Price Elasticity of Demand for the commodity.

2. Suppose the demand and supply below;
   Qd = 36 – 4p and Qs = -12+ 12p. Determine the price elasticity of demand.

Types of price elasticity of demand

Price elasticity of demand ranges from perfectly inelastic to perfectly elastic.

1. Perfectly inelastic *p.e.d*

This is where a given change is the price of the commodity does not affect quantity demanded of the commodity i.e. P.e.d = (zero response).

Diagram

2. Inelastic demand *P.e.d.*

This is where a given percentage change in price leads to a smaller proportionate percentage change in quantity demanded.

Diagram

3. Unit elastic demand. ***P.e.d.***

This is where a given percentage change in price leads to an equal percentage change in the quantity demanded of the commodity. ***P.e.d*** =1

Diagram

1. **Elastic demand**.

This is where given percentage changes in price lead to a more proportionate percentage change in quantity demanded of the commodity. ***P.e.d*** *ranges* from ***1.1-***

Diagram

5. **Perfectly elastic** ***P.e.d.***

This is where quantity demanded changes ***infinitely*** without a change in price. P. e. d= ∞ response is infinite

Diagram

Factors that affect the size of price elasticity of demand

- The level of addiction. If it is high, ***Ped*** is in elastic
- Degree of necessity (nature of commodity)
- Availability of substitutes commodities
- Proportion of income spent on commodity
- The number of uses the commodity can be put
- Durability

Cross elasticity of demand

This Measures the degree of responsiveness of quantity demanded of a commodity due to a given percentage change in the price of another commodity.

$$CED = \frac{\Delta Qa}{\Delta Pb} \times \frac{Pb_1}{Qa_1}$$

If the value of the CED is positive, the commodities are substitutes ie, an increase in the price of one leads to an increase in the quantity demanded of the other and vice versa

If the value of CED is positive, the commodities in question are complements ie, an increase in the price of one leads to a fall in the quantity demanded of the other and vice versa

If CED=0, the commodities are not related

Example:

Income elasticity of demand

This measures the percentage change in quantity demanded arising from a given percentage in the consumers' income.

$$Yed = \frac{\Delta Q}{\Delta Y} \times \frac{Y_1}{Q_1}$$

If the value of YED is positive, the commodity under consideration is a normal good ie, an increase in income leads to an increase in the quantity demanded
If the value of YED is negative, the commodity in question is an inferior good ie an increase in the income of the consumer leads to a decrease in the quantity demanded of the commodity.

Example

Uses of Income-Elasticity

First, the concept of income-elasticity can be used to estimate the future demand for a product provided the rate of increase in income and income-elasticity of demand for the product are known. The knowledge of income-elasticity can be used for forecasting demand, when a change in personal income is expected, other things remaining the same.

Secondly, the concept of income-elasticity can also be used to define the 'normal' and 'inferior' goods. The goods whose income-elasticity is positive for all levels of income are termed as 'normal goods'. On the other hand, he goods for which income elasticities are negative, beyond a certain level of income, are termed as 'inferior goods'.

PRICE ELASTICITY OF SUPPLY

Price-elasticity of supply is the measure of responsiveness of the quantity supplied of a good to the change in its market price. The coefficient of price-elasticity of supply (e_p) is the measure of percentage change in the quantity supplied on a good due to a given percentage change in its price. The formula of supply elasticity is given as

$$e_p = \frac{\%\text{ change in quantity supplied (Q)}}{\%\text{ change in price (P)}}$$

$$= \frac{\Delta Q/Q}{\Delta P/P} = \frac{\Delta Q}{\Delta P} \cdot \frac{P}{Q}$$

Note that the formula for measuring the price-elasticity of supply is the same as for the price elasticity of demand, (without a minus sign). Given the formula, price-elasticity of supply can be easily measured.

Example