ELEMENTS OF ECONOMICS

INTRODUCTION

Economics is a subject of scarcity and choice. This is because human wants are unlimited while resources to satisfy them are limited and economics is concerned by how to make the limited economic resources meet or satisfy human wants.
The limited resources include:
- Land.
- Labour.
- Capital.
- Entrepreneurship.

NATURE OF ECONOMICS
There are several definitions of economics of various economists.
1. Economics concerns ways in which allocation distribution and total output changes over time. It concerns efficiencies and inefficiencies of economic systems.
2. Economics is the generation and distribution of wealth so as to increase the standard of living.
3. Economics is the study of mankind in the every day business in life from which individuals take out particular tools to tackle particular problems e.g fiscal problems and monetary problems.
4. Economics is the study of how man uses his economic resources to produce goods and services to which he can satisfy his needs and wants hence it's the study of how society decides how, what and for whom to produce.

THE SCOPE OF ECONOMICS
Economics deals basically with the concepts of:
- Scarcity.
- Choice and
- Opportunity cost.

1. SCARCITY
If resources available to people are insufficient to satisfy all their wants then resources are deemed to be scarce e.g producers have limited factors of production like land, labour, capital e.t.c and consumers have a limited income and unlimited wants to satisfy.

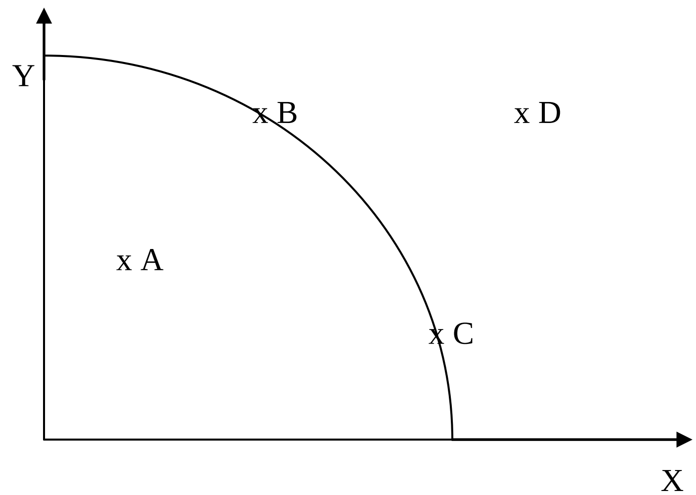
2. CHOICE
This is the selection of the best course of action from given alternatives. Choice has to be made since resources are limited and one can only have more of 'X' by having less of 'Y'. Producers have to choose which goods and services to produce with their scarce resources. Consumers will choose the items at the top of their list with first preference in as far as the allocation of their scarce resources are concerned.

3. OPPORTUNITY COST

Price economics is subject of scarcity and choice due to unlimited human wants and limited resources, in order to produce any goods and service.
Using the limited resources, some other goods or services must be foregone or sacrificed. For example, if the available resources can be used to build a hospital or a school but not both, then a decision must be made whether to build a hospital or a school. What is foregone or sacrificed in producing a good is called the <u>opportunity cost.</u>

Using a diagram, explain the concept of scarcity, choice and opportunity cost.

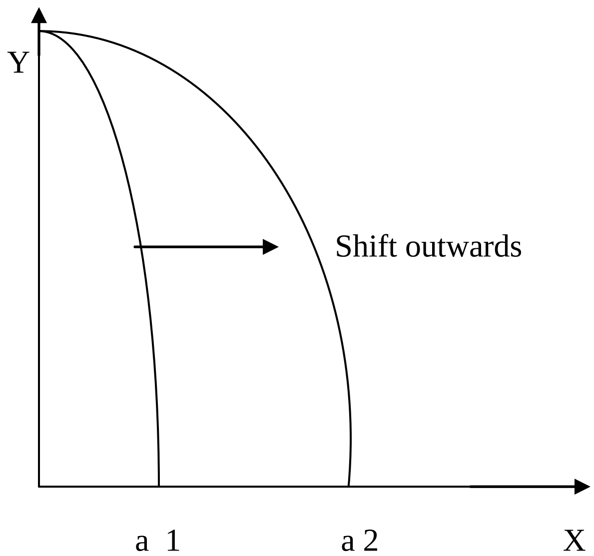
The production possibility frontier is a curve that shows points along which a country is able to produce by using all its available resource optimally.
This is a curve which explains the concept of scarcity choice and opportunity cost. It is also called <u>opportunity cost curve.</u>



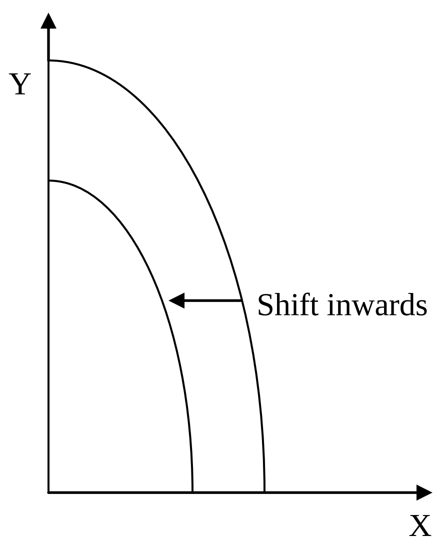
From the above diagram, a country can only produce efficiently along the curve B to C. Any point inside the curve e.g. point A is inefficient meaning the country is not utilizing its resources full. Any point outside the curve e.g. point D is unattainable meaning the country does not have enough resources to produce at that level.
The concept of scarcity is explained by point D whereby the city cannot produce at that level because resources are limited.

Because of scarcity choice has to be made on which goods to be produced less of the other must be produced hence opportunity cost.

However over time with capital accumulation, population growth and technological progress, the curve will shift outward indicating economic growth and more of each product will be produced as shown below.



However with deterioration in technology and political unrest, the curve will shift inwards indicating decline in economics growth i.e. less of each product produced.



The opportunity cost curve is drawn bulging out rather than as a straight line because one product increases as the other reduces. Opportunity cost should in this case be viewed as the amount of sacrifice made in terms of one good in order to produce more of the other.

Using the table below plot the production possibility curve

possibilities	fish	potatoes
A	0	100
B	1	85
C	2	75
D	3	65
E	4	55
F	5	0

WHY STUDY ECONOMICS

1. It provides the underlying principles of optimal resource allocation and thus enables individuals and firms to make economically rational decisions e.g. pricing, policy decisions.
2. It enables individuals and organizations to appreciate the constraints imposed by the economics environment within which an entity operates.
3. The area of development economics is fundamentally concerned with reasons why societies develops, means of accelerating development. It is vital for individuals as citizens to appreciate the parameters that determine the development process.
4. Economics is an analytical subject and its study can help to develop logical reasoning.
5. The basic economic problems of scarcity are based on seven questions which define the scope of economics. They include:
   i. What should be produced and in what quantities?
   ii. How are the goods produced?
   iii. How are they distributed?
   iv. For whom are they produced?
   v. Are country's resources fully utilized?
   vi. Is the purchasing power of money stable or eroded because of inflation?
   vii. Is the economy's capacity to produce goods and services growing or remaining constant?

There are basically two types of resources.

(a) Economic resources
These are scarce or limited in supply and they command a price e.g land, labour, capital and entrepreneurship.

(b) Non economic resources
These are unlimited in supply and are free and do not require the use of scarce production e.g. Air.

ECONOMIC METHOLOGY

This refers to the way in which economists go about their study of their subject mater. The two lines of approach are:

a) <u>Positive Economics</u>

This is concerned with proposition that can be tested by reference to empirical evidence. It relates to statements of what is? What was? Or will be? Eg. Kenya is a member of East African Community and Uganda is Kenya's major trading partner.

b) Normative Economics

This is concerned with propositions that are based on value judgment i.e. statements which are expressions of opinions. It relates to statements of what should? Or what ought not to be a case e.g.

- Uganda ought to join the Southern Africa Development Community
- The upper income classes ought to be taxed heavily.

ECONOMIC SYSTEMS

1. Free Economic system/capitalist/price mechanism/market economy

This is an economy where the price is detemined by the forces of demand and supply. There is less control by the government, hence people make independent decisions. Since it is very difficult to have a perfect market system, the government plays a regulatory role in the economy.

Features

- Freedom of choice and enterprise i.e. freedom to invest in any business produce any products and sell them in markets of their choice.
- Freedom of ownership of means of production i.e. land, labour and capital and enjoy incomes from them.
- Self interest is the dominating motive whereby firms aim at maximizing their profits, workers aim at maximizing their wages and salaries and consumers at maximizing their satisfaction.
- Limited role of the government.
- Reliance on price mechanism to allocate resources.

Advantages of Free Economy

1. It encourages foreign investment because overseas producers could expect a rights return on their investment because of limited government control.
2. Firms have greater incentive to bear risks since profit incentives exist which encourages hard work.
3. Efficiency of firms may increase since those firms aim at maximizing profits and will produce what consumers want at an affordable cost.
4. Consumers have a greater choice of goods and services due to many producers i.e. consumers soverigning is enhanced.
5. Increase in competition which will lead to quality products for consumers.
6. Greater responsiveness to changes in the international economic environment.

Disadvantages

1. Socially undesirable goods are produced e.g. drugs.
2. it brings about inequalities due to uneven distribution of resources.
3. It brings about instability in the economy e.g. cyclical unemployment which is bought about by the trade cycle.
4. Conflict between the rich and the poor due to inequitable distribution of income.
5. Development of monopolies i.e. those companies or individuals who own means of production only will become monopolies.
6. Negative externalities may arise in form of pollution, congestion and poor working conditions.

2. **Command Economic System/Centrally planned.**

This is a system where economic resources are owned by the state. Allocation decisions are determined by the state through an economic planning body which implements society's major economic goals.

Features

- ❖ Allocation of resources is achieved by use of an overall plan which sets production targets for different sectors of the economy.
- ❖ Rationing of certain commodities to predetermine their demand.
- ❖ Economic resources owned by the state.
- ❖ Fixing of prices and wages is done by the state.
- ❖ The interests of the citizens are the dominating factor.
- ❖ There is equitable distribution of resources.

Advantages

1. All essential goals and services such as education and health are provided by the state.

2. Equitable distribution of the national's wealth.

3. The state provides check on monopoly power since private monopolies are not allowed.

4. It takes account of external costs hence minimizes negative externalities.

5. Lower rate of inflation can be maintained.

6. Economic fluctuations are reduced and stabilized.

Disadvantages

1. Likelihood of resources being wasted.

2. The cost of gathering information on what, how and for whom to produce is likely to be high.
3. In absence of profit motive there is no incentive for innovation and hard work.
4. Limitation on consumer sovereignty.
5. Absence of competition reduces efficiency since any loss which may arise from production is borne by the state.
6. Time lag between collection of information and formulation of production plans based on that information.

3. Mixed Economic System

This is a compromise between free economic system and the command economic system. It aims at overcoming limitations of the two economic systems. Both government and private sector participate.

CONSUMER SOVEREIGNTY

This refers to freedom of individuals and households to decide themselves what they want to buy. The consumer is the best judge of his own welfare.

The concept of consumer sovereignty has limitations:

1. The nature of the economic system i.e. a consumer is more sovereign in a free market than a command economic system.
2. The size of consumer's income. The higher the income, the greater the consumer's soveigrity and vice versa.
3. The power of advertising
   Advertising not only entices consumers to use the product but also creates new wants.
4. The range of goods available.
   The more goods available the more consumer sovereignty and verse versa.
5. The existence of monopolies.
   They limit consumer's sovereignty by providing rights priced products with low quality.
6. Government intervention in providing the public goods.
7. Fashions and tastes.
8. Customs – some can only consume some goods.

BRANCHES F ECONOMICS

1. **Micro Economics**
2. **Macro Economics**

MICRO ECONOMICS

This is a branch of economics which studies the behaviour of individual decision making units such as, Consumers, Resource owners and business firms as well as individuals markets in a free market economy.

It explains markets in a free market economy.
It explains determination of the prices and quantities of individual goods and services. It also considers the impact of government regulation and taxation on individual markets.

MACRO ECONOMICS

This is the study of behaviour of the economy as a whole whereby the relationship is considered between broad economic aggregates such as national income, employment, inflation etc.
It focuses on economic stabilization whereby government policy is used to moderate the business cycle and encourage economic growth.

TOPIC 2. ELEMENTARY THEORY OF DEMAND AND SUPPLY.

DEMAND

This is the quantity of a commodity that a consumer is willing and able to buy at a given price and time.

Effective demand.

This is demand backed by ability to pay.

Demand schedule.

This is a tabular representation of various quantities that consumers are willing and able to buy at a given period of time

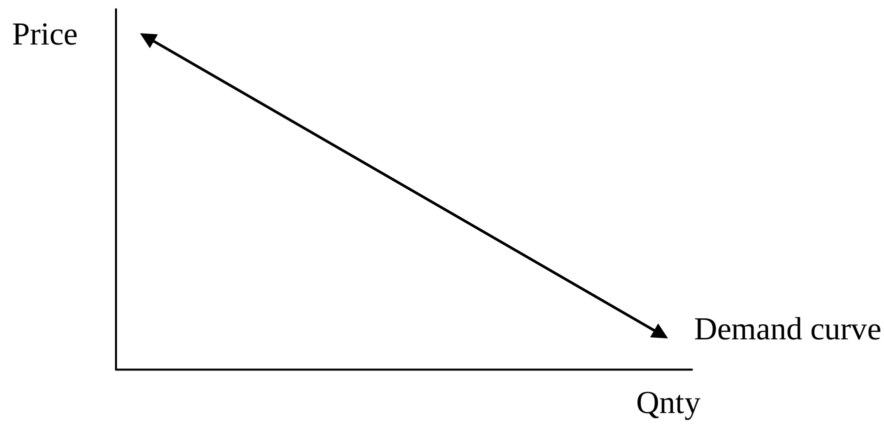
Illustration

Price(shs)	Quantity(kgs)
20	70
25	60
30	50
35	40
40	30
45	20
50	10

The quantities will be plotted on the x-axis while price on the y-axis giving rise to a demand curve.

Demand curve

It's a graphical representation of the demand of schedule. It shows the relationship between price and quantity demanded whereby price is on the y-axis and quantity on the x-axis.



Demand and quantity demanded

Demand refers to various quantities that consumers are willing and able to buy at various prices a given time, which is illustrated by a shift in the demand curve.
Quantity demanded is the specific quantity that consumers are willing and able to buy at specific price at a given time which is illustrated by a movement in the demand curve.

The law of Demand

It states that holding other factors constant, the higher the price the lower the quantity demanded and vice versa i.e. an inverse relationship.

Exception's of the law of demand

In some cases, the law of demand would not hold such that the curve slopes upwards from left to right and such a curve is called **regressive/exceptional**/abnormal **demand curve.**

1. **Veblen goods**
   These are luxury goods associated with status e.g. luxury cars, jeweler etc. whereby as their prices increase, the demand also increases.

2. **Giffen goods**
   These are goods of low quality (inferior) consumed by people of low income. When the price of such goods increases, their demand will also increase and vice versa e.g. second hand clothes.
3. Quality
4. Degree of necessity
5. Current supply in the market

   Other situations also lead to the exceptional law of demand i.e.
   - (i) Fear of shortage of a product at a future date which will lead to increase in demand even if the price is high.
   - (ii) Fear of increase in price at a future date which will lead to increase in quantity demanded even if the price is high due to fear of further increase.

FACTORS AFFECTING DEMAND OF A PRODUCT

1. **Price of the commodity**
   The higher the price, the lower the demand and vice versa.

2. **Price of related goods.**
   This refers to substitute goods and complimentary goods. Substitute goods are goods that can be used in place of the other i.e. can satisfy same wants and needs. E.g. tea and coffee. An increase in the price of tea will lead to an increase in the demand of coffee.

   Complimentary goods are goods which are used or consumed together i.e. one can not be used in the absence of the other. E.g. pen and ink. An increase in the price of ink will lead to a decrease in the demand of pen.

3. **Income of consumer**
   The higher the income, the higher the demand for goods and services and vice versa.

4. **Future expectations**
   If consumers speculate the prices are going to increase in future, there will be an increase in demand as people will hoard goods to avoid increased prices and vice versa.

5. **Population**
   The higher the population the higher the demand for goods and services and vice versa.

6. **Tastes and preferences**

If consumers taste and preferences for a given product are high, the demand will be high and vice versa. E.g. fashionable goods.

7. **Climate**

Demand will vary depending on the weather e.g there is a high demand for woolen clothes during cold weather and vice versa.

8. **Transport and communication**

Improved infrastructural faculties will lead to increase in demand and vice versa.

9. **Government factors.**

a. **Taxation**

Its compulsory payments by citizens of the city. When there is increase in tax e.g. VAT, this will lead to increase in cost of production leading to higher prices hence a decrease in demand and vice versa. This can also occur when there is an increase in income tax which lead to a decrease in the disposable income hence decrease in demand.

b. **Subsidy**

This is the opposite of taxation. It is a grant given to a consumer, producer or both. When the government grants subsidy production cost falls and thus decrease in price hence increase in demand for goods and services.

c. **Price minimization**

This is where the government sets prices above equilibrium in to protect producers leading to and increase in price hence a decrease in demand.

d. **Price maximization/ceilings**

This is where the government sets prices below equilibrium in order to protect consumer leading to a decrease in price hence an increase in demand.

10. **Advertisement**

It is a device through which consumers are informed about the quality, use of the product e.g. It helps to create new wants by informing the consumers of the possibilities of satisfying a want. It is not only to create and develop a market for a new commodity on service but also to maintain and expand the market already created and developed for old and established products.

The objective of advertising is to create a customer by imparting ideas, creating interests, persuading the buyer and convincing him to buy and continue buying. Increase in advertisement will lead to an increase in demand in the following ways.

1) It helps to inform about the products of a firm.
2) It's needed to introduce new products.
3) It induces the individual for a frequent use of a product of a firm.

Factors affecting advertising policy.

1) The cost of advertising.
2) The mode of advertising.
3) The number of competitors and quality of their products.
4) Impact of advertising on the demand for products.
5) The target group e.g. youth etc.
6) Market share of the firm and degree of competition.

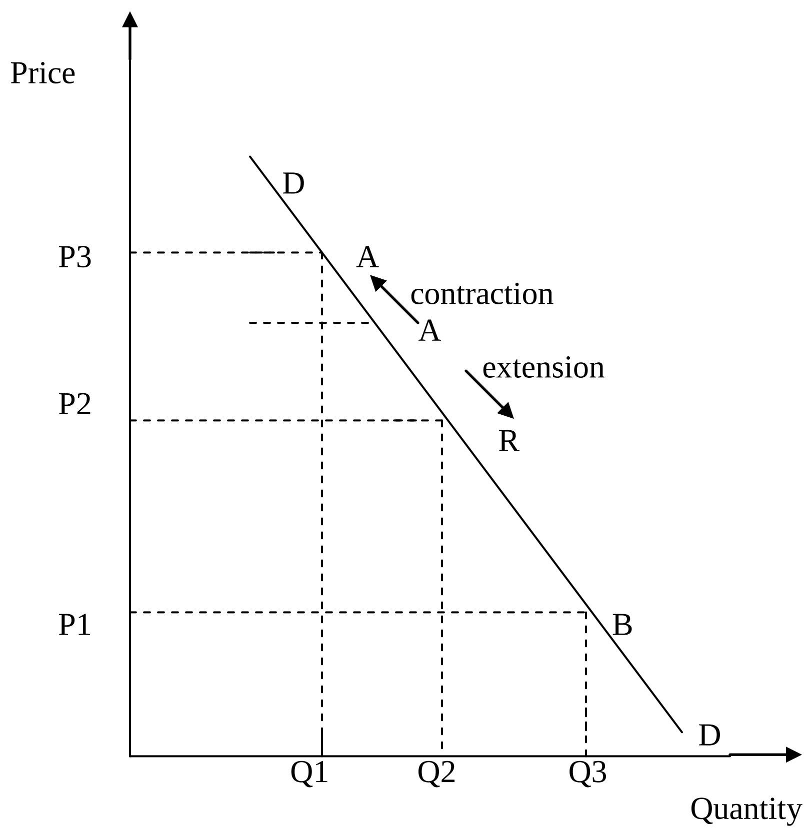
CHANGES IN DEMAND

Demand would change due to a change in any of the determining factors.

Change in the factors would lead to either.

(i) **Movement along the demand curve/extensions and contractions.**

This is brought about by the changes in price holding other factors Constance as shown below:



When price falls from P2 to P1, quantity demanded increases from Q2 to Q3 hence, an extension. When price increases from P2 to P3 quantity demanded decreases from Q2 to Q1, hence a contraction.

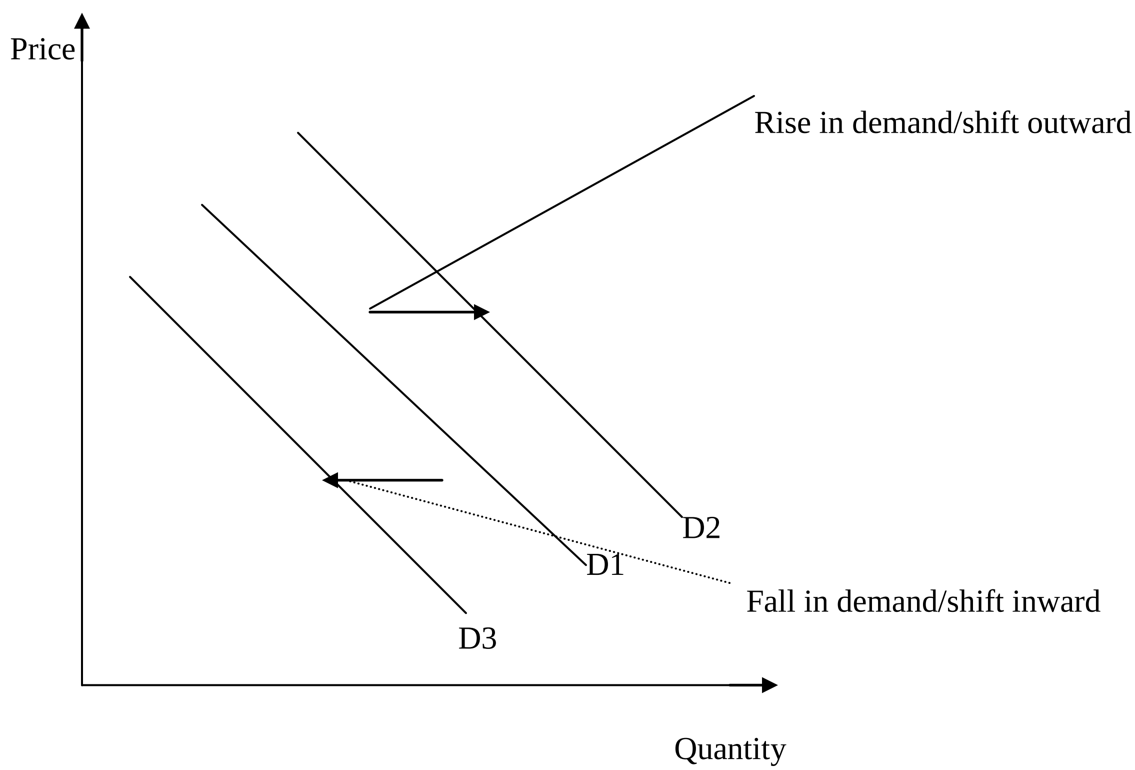
There is a movement in the demand curve from A to R and R to B. An extension occurs when increase in demand is bought about by a fall in price.

Contraction occurs when there is a decrease in demand due to an increase in price.

2 A shift in the demand curve/rise/fall in demand.

This is bought about by changes in factors other than price of the commodity. An increase in demand for the commodity is indicated by a shift to the right or left.

A decrease in demand is indicated by a shift to the left or fall in demand and less is demanded.



THE MARKET DEMAND

Market demand is the aggregate amount of a commodity demanded per time period at various prices by all individuals in the market. It depends on all factors affecting individual demand. E.g. income of consumer, population e.t.c.

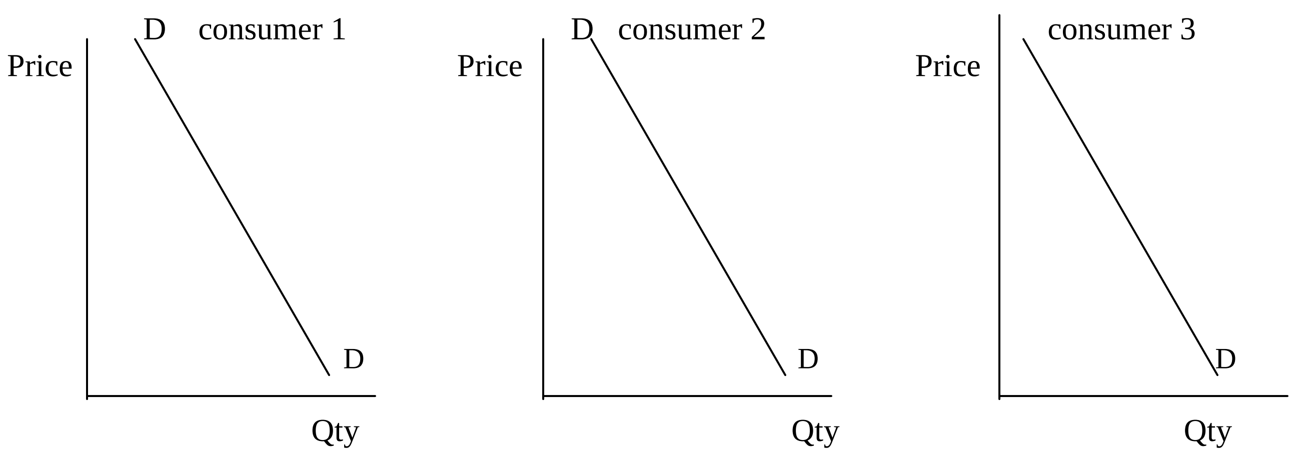
Market demand schedule

This is a tabular representation of various prices and quantities e.g. Various individuals in the market at a given time.

Price	**Quantity demanded Individual 1**	**Quantity demanded individual 2**	**Mkt demand**
10	50	100	150
20	40	80	120
30	30	60	90
40	20	40	60

Market demand curve.

It is a graphical representation of the market demand schedule showing various prices and quantities of various consumers in the market at a given time.



TERMS USED IN THE DEMAND

i. **Joint Demand**

This is demand whereby two commodities are always demanded together i.e. one good cannot be demanded in the absence of the other. e.g car and petrol. That is this applies to complimentary goods.

ii. Rivals demand and competitive demand.

This is where one demands goods which are rivals to each other e.g. tea and coffee i.e. substitute goods.

iii. **Derived demand**

This is where goods are demanded in order to produce other goods. e.g. cotton required to produce cloths.

TOPIC 3. ELEMENTARY THEORY OF SUPPLY

SUPPLY

It is the quantity of a product that producers are willing and able to take to the market (sell) at a given price and time.

Quantity supplied and supply

Quantity supplied is the specific quantity that producers are willing and able to offer at a specific price at a given time.

Supply is various quantities that producers are willing and able to offer at various prices at a given time.

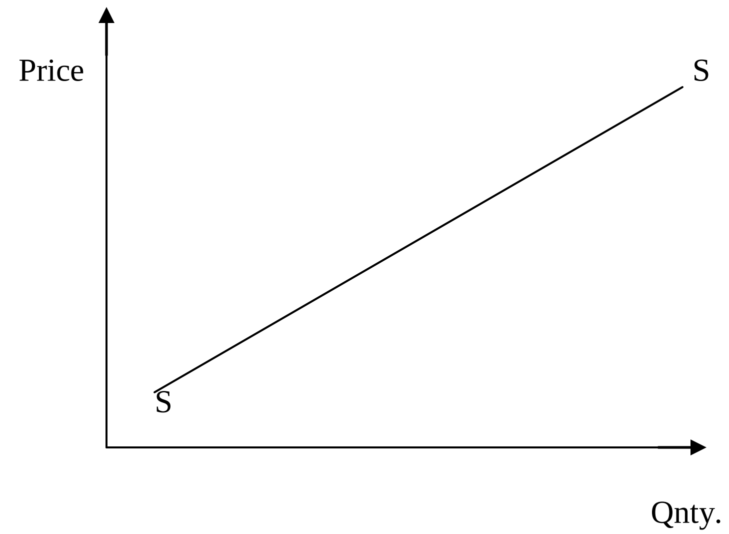
The Supply Schedule

It is a tabular representation of a list of prices and quantities supplied at a given period of time. E.g.

Price(shs)	**Quantity supplied(kg)**
20	10
25	20
30	30
35	40
40	50
45	60
40	70

Supply curve

It is a graphical representation relating prices and quantities supplied at a given period.



The Law of Supply

States that holding other factors constant as price increases, quantity supplied will increase and vice versa.

FACTORS AFFECTING SUPPLY

1. **Cost of Production**
   If the cost of inputs e.g. raw materials, labour e.t.c is costly, this will lead to a decrease in supply and vice versa.
2. **Weather or climate**
   This is common with agricultural products whereby if whether conditions are favourable then supply will increase and vice versa.

3. **Technology**
   Use of improved techniques of production e.g. use of machines and new methods will lead to increase in supply and vice versa.

4. **Political stability**
   Political stability will lead to increase in supply and production and vice versa.

5. **Population**
   A higher population will lead to increase in supply and production and vice versa.

6. **Transport and communication**
   Improved infrastructural facilities will lead to increase in supply and vice versa.

7. **Political stability**
   Political stability will lead to increase in supply and production and vice versa
8. **Government Policy**
   (a) **Tax**

Imposition of tax on commodities (V.A.T.) will lead to increased cost of production hence decline in production.

(b) **Subsidy**

This is a grant to citizens of the city which lowers the production hence encouraging production and increase in supply.

(c) Price control

This can either be:

- Price minimization whereby prices are fixed above equilibrium encouraging producers to produce more hence increase in supply.
- Price maximization whereby prices are fixed below equilibrium discouraging producers to produce hence decline in supply/

(d) Quotas

This is where the government puts restrictions/limit on the production of various goods which leads to a decrease in supply.

9. **Price of other commodities**

(a) **Complimentary goods**

These are goods used together. If price for one increases, the quantity demanded falls and demand for the other will fall leading to a reduction in supply.

(b) Substitutes

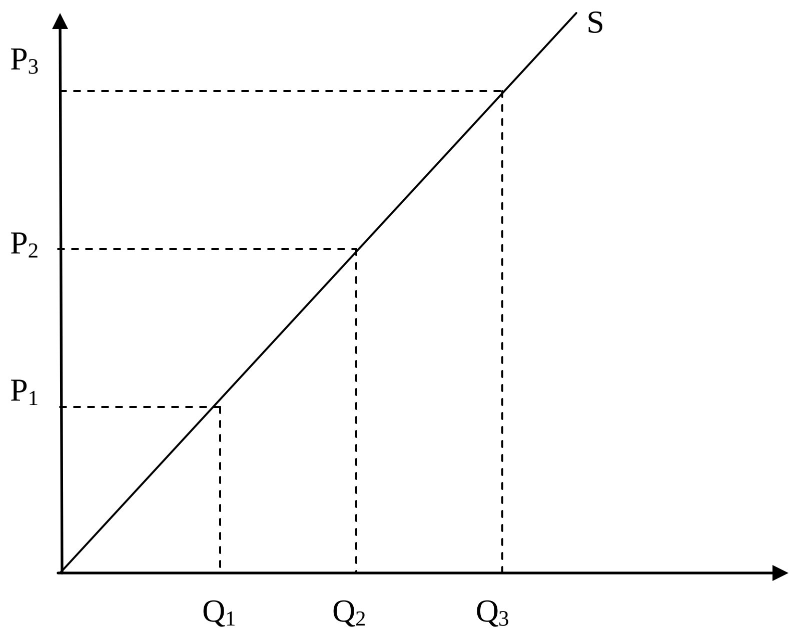
These are goods used in place of another. If price for one increases, quantity demanded will fall and this will lead to increase in demand for the other hence increased supply.

CHNAGES IN SUPPLY

This can be:

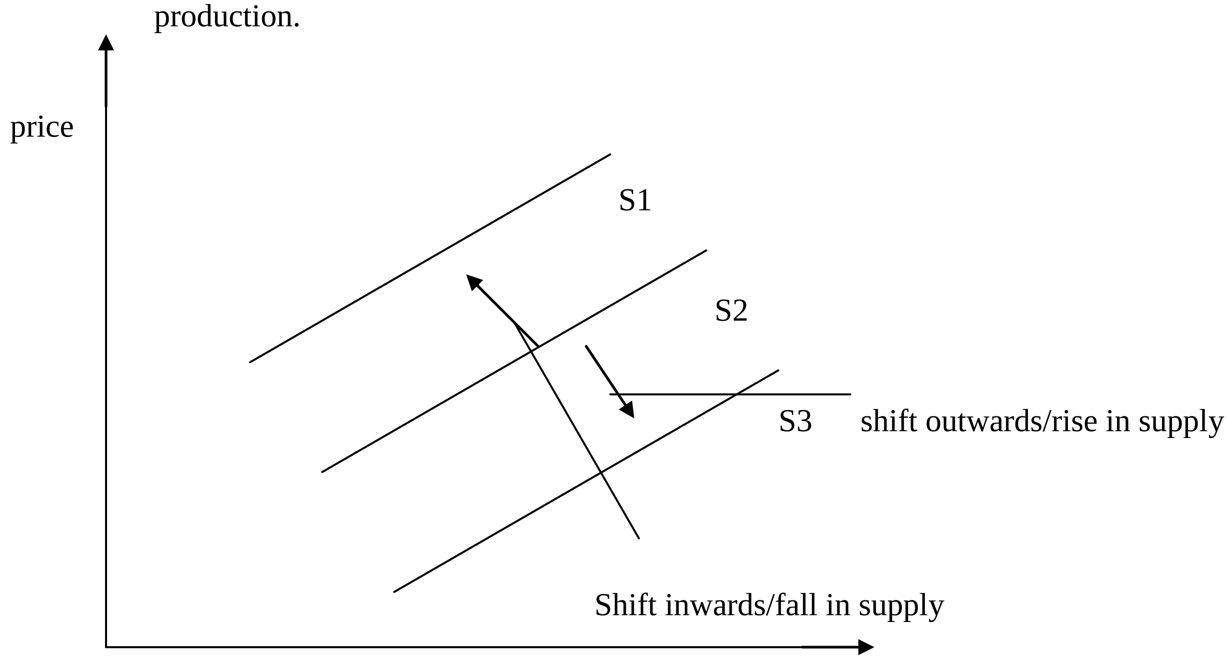
(a) **Movement along/extension and contraction/demand curve**

This is brought about by changes in price of the commodity holding other factors constant.



Decrease in price from P2 to P1 leads to a decrease in supply from q2 to q1 while an increase in price from P2 to P3 leads to an increase in supply from q2 to q3 (extension).

(b) **Shift in supply curve/rise and fall.**
It is brought about by all other factors apart from price e.g. increase or fall in cost of production.

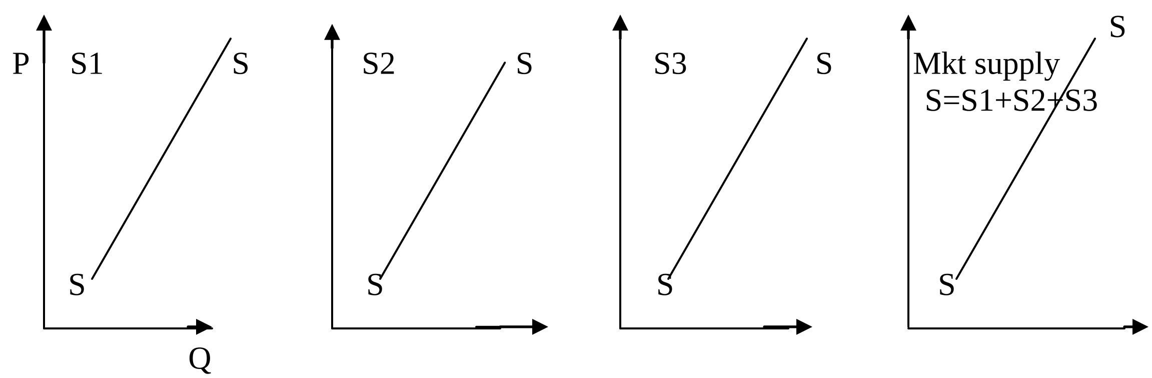


MARKET SUPPLY

This is the aggregate of the individual supplies in the market.
Market supply schedule and market supply curve may be obtained by summation. In the same way as with the market demand.

Market supply schedule.

Price (ksh)	Qnty. Supplied supplier 1	Qnty supplied supplier 2	Qnty supplied supplier 3	Total mrk supply
10	5	10	15	30
20	10	15	20	45
30	15	20	25	60
40	20	25	30	75
50	25	30	35	90



TERMS USED IN SUPPLY

1.Joint supply
Some goods are produced together. The supply of such goods is increased or decreased simultaneously e.g. wool and mutton.

2, **Composite supply**
These are goods which substitute one another. Their total quantity is composite supply e.g. supply of mutton, beef, chicken e.t.c.

2.Competitive supply
These includes factors of production e.g. land, labour and capital e.g. if more land is used to produce wheat then production of maize will decrease.
The supply of these goods is competitive supply.

MARKET EQUILIBRIUM DETERMINATION

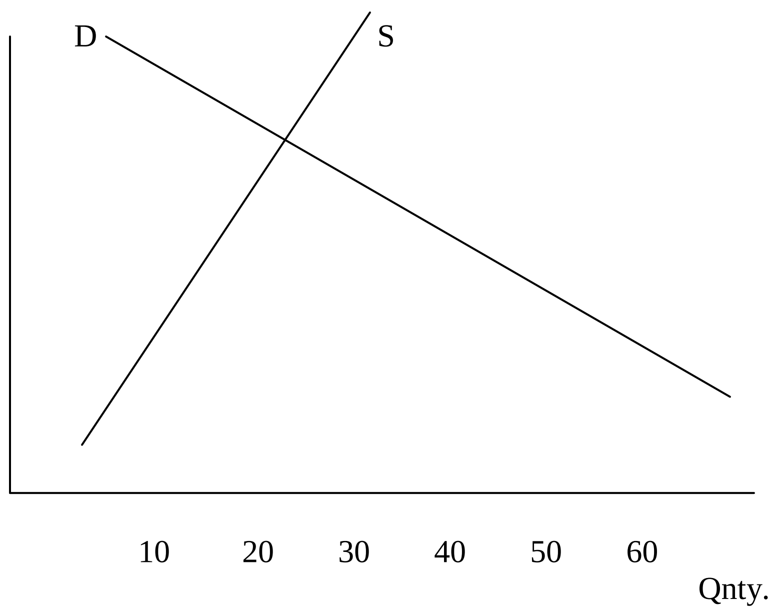
Determination of price occurs when the quantity of a commodity demanded equals the quantity supplied. The equilibrium point is represented equals the quantity supplied. The equilibrium point is represented by intersection of supply and demand curve. The price and quantity at which equilibrium exists are known as equilibrium price and equilibrium quantity.

There are two methods that can be used to determine equilibrium quantity and price

1.Graphical approach
This is where the demand curve and supply are used given a supply and demand schedule.

Illustration

Price	Quantity demanded	Quantity supplied
100	10	50
80	20	40
60	30	30
40	40	20
20	50	10



'Q' is the equilibrium price, 'Q' is the equilibrium quantity and E is the equilibrium point

Equilibrium in the market is attained when price is at 60 and quantity demanded and supplied is at 30.

2. Mathematical Approach

In mathematical approach, demand and supply functions are used whereby the demand functions should equal the supply function for equilibrium to exist.

Illustration

The market for oranges is represented b the following market functions.

QD = 36 – 1/3P	Qd – Qty demanded
QS = -9 + ½P	QS – Qty supplied
	P = Price

Determine the equilibrium price and quantity in the market.

36 – 1/3P	=	-9 + 1/2P		Substitute
36 + 9	=	1/2P + 1/3P	$\frac{3+2}{6}$	Qd = 36 – 1/3 x 54
6 x 45	=	5/6Px6		= 36 – 18
$\frac{270}{5}$	=	$\frac{5P}{5}$		= 18
				Qb = -9 + ½ *54
P	=	54		= 18

Consider the following two commodity market model in which both the demand and supply are considered to be liner.

Qd1 = 8 – 2P1 + P2
QS1 = -5 + 3P1

qd2 = 16 + P1 – P2
qS2 = -1 + 2P2

Determine the equilibrium price and quantity in the two commodity market models.

Qd1 = QS1	Qd2 = qS2
(i) 8 – 2P1 +P3 = -5 + 3P1	16 + P1 – P2 = -1 + 2P2
8 + 5 = 3P1 + 2P1 + P2	16 + 1 = 2P2 + P2 –P1
13 = 5P1 + P2	17 = 3P2 – P1
13 – 5P1 = P2 = ……….(ii)	P1 = _17 + 3P2 …..(iii)

P14 P2 7
P2 = -17 + 3(13-5)

-17 + 24	-7 + 3 x 7
P1 = 7	P1 = 4

A two commodity market model is defined by the following:

$Qd1 = 4 – P1 + ½ P2$
$Qd2 = 10 + P1 + P2$
$QS1 = -3 + 4P1$
$QS2 = -18 + 4P2$

Determine the equilibrium price demand quantity in the market.

1.

4 – P1 + 1/2 P2 = -3 + eP1		10 + P1 + P2 = -18 + 4P2	
4 + 3	= 4P1 + P1 – 1/2P2	10 + 18	= 4P2 + P2 – P1
2 x 7	= 5P1 – 1/2P2 x 2	28P1	= 5P2 – 28
14	= 10P1 – P2	P1	= 5P2 – 28
P2	= 10P1 – 14		

Substitute

P2 = 10(5P2-28) – 14	P1=5(6) -28=2
P2 = 50P2-280-14	
P2-50P2= -294	P1 =2
-49P2=-294	

P2=6

TYPES OF EQUILIBRIUM

3. Stable Equilibrium

It occurs where any deviation from original equilibrium brings into operation market forces that push the situation back to the original equilibrium.

4. Unstable Equilibrium

It occurs where for only deviation from the original equilibrium market forces push the situation away from the original equilibrium.

5. Neutral Equilibrium

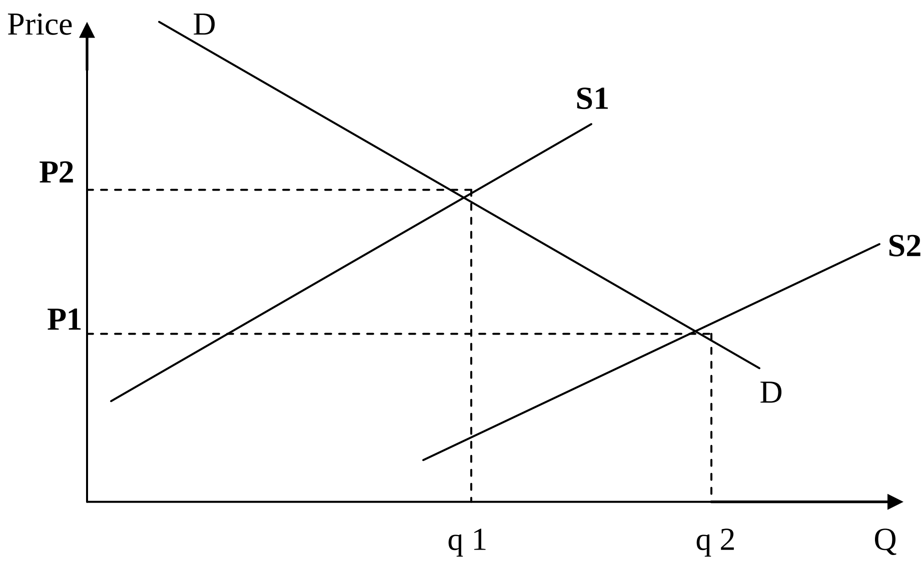
This is where any deviation from equilibrium will not bring any force away or towards such equilibrium.

Illustration

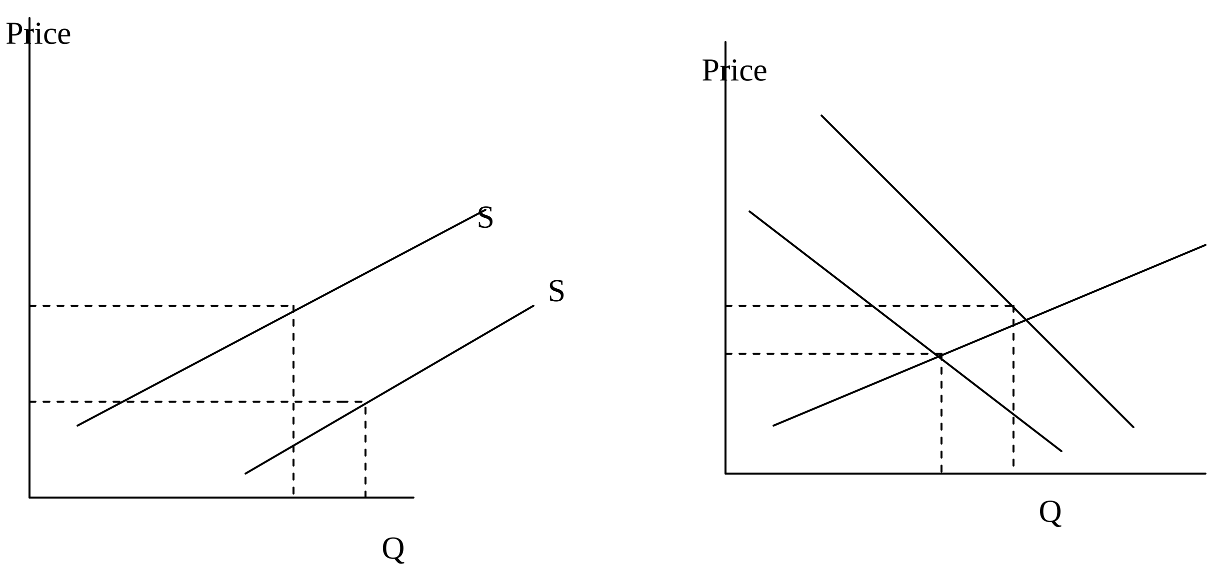
Use supply and demand analysis to explain the effect of each of the following on equilibrium price and quantity traded of chicken consider each event separately.

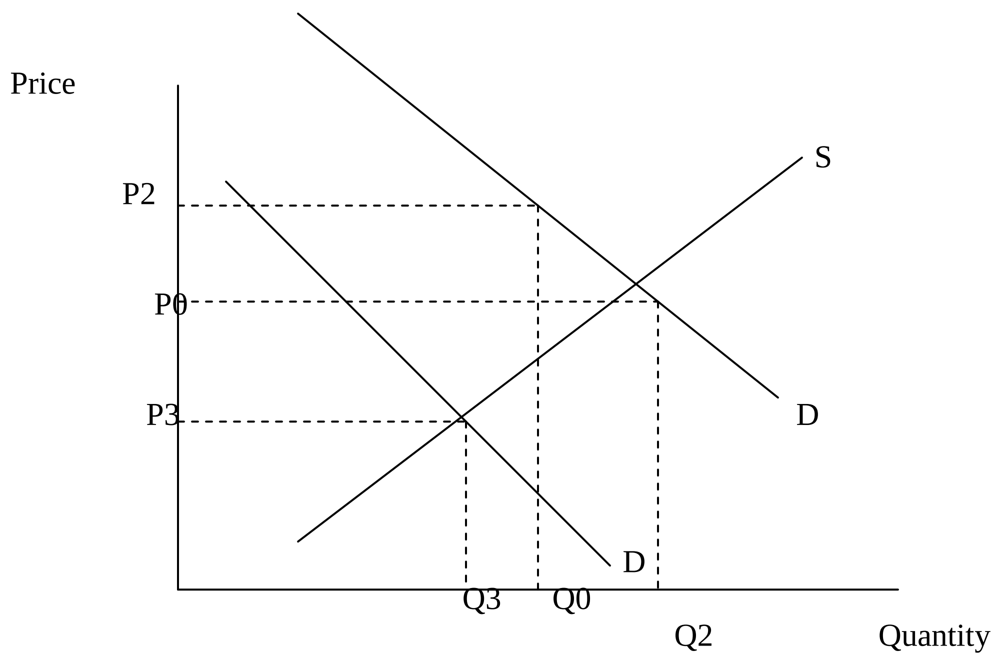
a) An increase in supply of chicken.
b) An increase in supply of fish.
c) Publication of a report linking the consumptions of chicken with good health.

(a)



(b)




Price
S
P2
P0
P3
D
D
Q3
Q0
Q2
Quantity

INTERMEDIATE THEORY OF PRODUCTION

PRODUCTION THEORY

Production is the creation of utility production theory derives physical and technical conditions under which production takes place. It brings out the relationship between output and input.
Production is the process of creating wealth. It's an activity that results in the creation of goods and services for the satisfaction of human wants.

Production process leads to major outputs ie

- Production of consumer goods
- Producer goods
- Production of goods for export

Production function: it expresses the technological relationship between physical output and physical quantities of input. It specifies the max quantity of a commodity that can be produced per unit of time and given quantities per input.

Firm: it's a single business unit producing a given product and able to generate some income
Industry: this is composed of all firms producing similar goods
Total product: this is the total output on average per unit of a valid factor
Average product: this is the output of an average per unit of the variable factor
Marginal product: it's the incremental output brought about by employing an extra unit of the variable factors.

FORMS OF PRODUCTION

a) **Direct production**

This is production for own consumption also known as subsistence hand to mouth production
The production is characterized by

- poor method of production
- poor methods of production
- low output
- use of family labor
- small scale in nature
- it's a characteristic of developing cities

b) **Indirect production**

This is also known as commercial/ market economy. The production is mainly for sale characterized by:

- Use of modern technology
- Large scale in nature
- Characterized by developed cities

LEVELS OF PRODUCTION

a) Primary Level

It's known as the basic level of production where production starts. It involves extraction of raw materials in their raw forms
e.g fishing an mining

b) Secondary Production

This is also known as transformation level/manufacturing level where processing is done. It uses output form primary level as inputs to produce final goods and services.

c) Tertiary level

This completes the production process. It links the final consumers of the products. It involves giving services such as – teaching
Insurance
Transporting

FACTORS OF PRODUCTION

1.LAND

This is a gift of nature whose reward is rent.
It refers to all the natural resources over which people have the power of disposal and which may be used to yield income. It includes family land forest rivers e.t.c
Total supply of land in the world is limited. Land is geographically immobile and occupational mobile
Drainages, irrigation and fertilizers can increase the area of cultivated land.

2. LABOUR

It refers to the exercise of human mental and physical effort in the production of goods and services.
The mental effort is produced by skilled laborers who are educated experienced.
Its reward is wages. It's the service of labour that is bought and sold not the laborer himself.
The supply of labor in an economy is a measure of the number of hours work which is offered at a given wage rate over a given period of time. Labor cannot be stored and cannot be separated from the laborer
Labor is both geographically and occupationally mobile.

3. CAPITAL

This is a manmade input. It can also be classified as working capital or circulating capital referring to stars of raw materials partly finished goods held by producer's e.t.c
Alternatively it can be classified as fixed capital which consist of equipment used in production such as machinery and binding
In some industries such as banking capital money is the basic raw material of the business ie capital can be human (People) real capital (eg machinery) or cash.

4. ENTERPRENUERSHIP

This refers to the ongoing of all factors of production with a view of making profits.
The main functions of an entrepreneur include:

- Hiring and combining all other factors of production including making decisions relating to what to produce, how to produce and where to produce.
- Risk taking function which arises because most production is undertaken in anticipation of demand where the uncertain
- Starting of business
- Selling the product to the market.
- Paying the rewards of labor, land and capital

Combining factors of production horizon and span of production which can be divide into

a) Short run this refers to a period of time in which only some variables change or economic process eg land are fixed and cannot be varied
b) Long run it refers to a period of time in which all variables are able to settle at their own equilibrium and all economic processes have time to work in fully all factors fixed and variable can be altered.

Factors of production can also be

(i) Fixed factors – this is an input this is an input which do not change with the level of activity factors that cannot be changed in the short run eg land
(ii) Variable factors - this is an input which varies with the level of output for the short run eg labor.

MOBILITY OF FACTORS

This is the ease with which factors can shift from one form of mobility can be:-

a) Geographical
This is movement from one area to another either within the country or outside the country.
Factors that cause geographical immobility
    - Social ties to family and friends
    - Housing problems in new locations
    - Costs of transferring a home
    - Disruption to children's education
    - Climatic hostility i.e. adverse geographical conditions
    - Language barrier at both local and internal levels

- Insecurity and political instability in some areas
- Poor infrastructural facilities
- Cultural barrier
- Government restrictions concerning immigrations and migration
- Ignore of job opportunities in different parts of the country.

b) Occupational mobility

This is movement from one occupation to another. It includes:

i. Horizontal mobility – this is movement from one employment to another of the same grade.

ii. Vertical mobility – this is movement of labour from a low grade to a senior grade and vice versa.

Barriers to occupational mobility of labour

i. Job security where some job's are more secure than the others

ii. Personal talents (natural abilities) some jobs involve talents hence not performed by everybody.

iii. Level of education and experience

iv. Age barrier

v. Sex discrimination

vi. Capital needed to purchase equipment is high

vii. Trade union/ professions e.g. accounting, medicine e.t.c

viii. Class particular social backgrounds within education at certain schools may provide advantage in certain fields of employment.

POLICIES TO ASSIST GEOGRAPHICAL MOBILITY

1) Provision of information on regional job opportunities through establishment of employment exchange and job centers
2) Employers would enhance geographical mobility by assistance with the cost of movement by meeting some of the removal costs
3) Employers can provide hardship allowance particularly if movement to remote areas is involved
4) Geographical mobility can be enhanced by linking movement to promotion in the sense that a higher salary is to be offered.
5) Geographical mobility can be enhanced by employers providing low cost housing in areas where they want employees to relocate.

Policies to assist occupation mobility

1) Provision of retraining schemes or centers where people who are unemployed can learn new skills they can use to find alternative employment.
2) Financial assistance for people to enable them starts their own businesses in form of low interest loans for projects which are considered viable.
3) Provision of information on opportunities available in different occupations through employment bureaus and exchanges
4) Legislation to reduce trade unions and professional barriers to entry into different occupations.

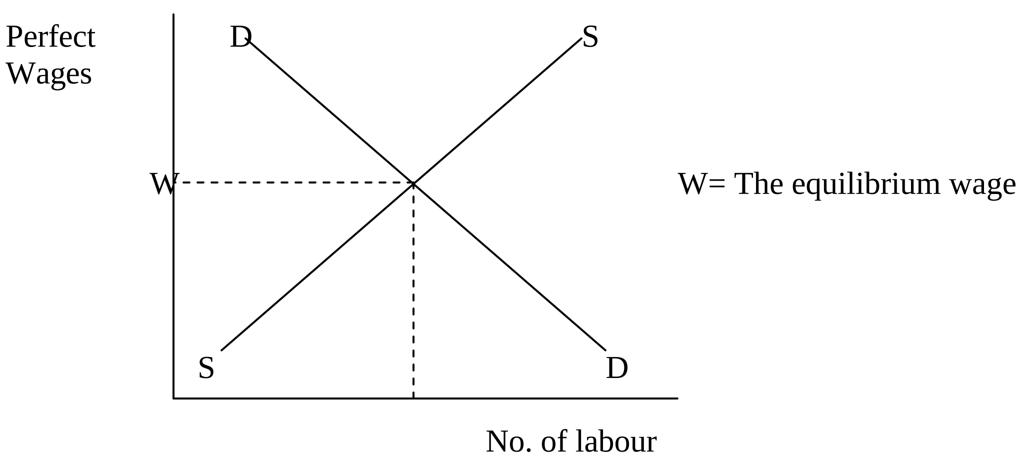
5) The industry can play an important role in reducing labour immobility by offering training to new entrants especially with new technology in industry.

Significance of mobility of factors of production

1) It enables different factor combination to be used i.e. more labour and capital can only be used if either of these factors is mobile.
2) It facilitates the movement of factors of production from surplus to deficit areas.
3) It enables the benefits of economic growth to be spread more evenly throughout a country i.e. industries can be encouraged to locate in rural areas due to cheap labour hence spread of economic growth.
4) It enables the transfer of expertise to areas where it's deficient.
5) The possibility of vertical occupational mobility of labour can have motivational effects in that if workers perceive chances of being promoted for outstanding work, they are likely to be more efficient hence increased productivity.
6) Mobility is significant in that if workers are occasionally allowed to perform different tasks, and then are capable of minimizing monotony associated with specialization.

FACTOR PRICING

This means how much each factor of production receives in the production process after it has been put into use by the entrepreneur. It therefore means the reward earned by each factor of production. In a free competitive market, the forces of demand and supply determine the price of a factor e.g. price of labour in the market can be determined by the intersection of the demand curve for and the supply curve for labour.



Factor pricing is explained through the marginal productivity theory, which explains how much a factor of production can be paid in the production process.

Marginal productivity theory
It states that the reward for the factor should be equal to its margin productivity; hence the price of a factor depends on the use of that factor. It explains why factors of production move from one use to another or from one firm to another as they search for rational earnings.
For a rational entrepreneur marginal productivity of a factor must be equal to price per unit of output.
Assumption of the theory
i. The factors of production are homogeneous i.e. units of the factors are the same.
ii. The operation of the law of diminishing returns to scale
iii. Existence of unemployment
iv. Substitutability of the factors of production
v. There's perfect mobility

Limitations of the theory

i. The theory presuppose that there is unemployment in an economy hence this will affect effective demand
ii. The theory is contradicting that marginal productivity determines the rewards of a factor, which is not always the case.
iii. Factors of production are not easily variable and production depends on technology hence its very difficult to determine productivity.
iv. In case a factor is substituted with another the entire production process becomes disorganized leading to high losses.

Question:
Present the law of marginal productivity in the factor pricing

DEMAND FOR THE FACTORS OF PRODUCTION

This means how much of a factor of production an entrepreneur will employ at a particular time in the production process.
Demand for a factor depends on the following factors:-
1) **Efficiency of a factor**
   The higher the efficiency the higher the demand and vice versa.
2) **The price of a factor**
   The higher the price for a factor, the lower the demand and vice versa since entrepreneur's aim is to maximize profit by minimizing costs
3) Demand for goods and services produced by the factor
   The higher the demand for goods and service produced by a factor the higher the demand for the factor and vice versa.
4) The economic conditions of the economy
   Favourable conditions (prosperity) imply high output hence high demand for factors and vice versa.
5) The marginal productivity of factor

The higher the marginal productivity expected of a factor, the higher the demand for it and vice versa.

6) **Availability of the factor**
   The more available a factor is the higher the demand for it and vice versa.

7) **Technology in use**
   Demand for a factor will depend on the current technology e.g. if capital-intensive technology is in use the demand for capital will be high and vice versa.
8) The likes and dislikes/ tastes and preferences of the entrepreneur
   If they favour a factor, the demand for the factor will increase and vice versa.

THE SUPPLY OF THE FACTORS OF PRODUCTION

This refers to the amount of factors that the owners are willing to put in the market at a particular time.

a) Supply of labour
   The following factors affect the supply of labour:
   - The population level – higher population will lead to high supply of labour and vice versa
   - Education and training (skills)
   - Wages and salaries- higher wages will lead to high supply of labour
   - Economic conditions- if there's prosperity it means there's high production, which will lead to high supply of labour.
   - Social conditions – cultural issues, religion
   - Political climate
   - Health of people
   - The working conditions & nature of work – good – high supply
b) Supply of capital
   This is influenced by the following factors:
   - The level of income
   - The rate of investment
   - The rate of interest charged by the commercial banks if it's money
   - The rates of saving i.e. the high the savings the less the supply of capital.
c) Supply of land
   This is influenced by the following factors:
   - Economic activities i.e. the more the economic activities the higher the supply of land.
   - The population density – higher population supply will reduce
   - Land tenure system
   - The price of land i.e. how much the land will cost hence the higher the rent the higher the supply.
d) Supply of entrepreneurship
   It's influenced by:
   - The profit level – high profits leads to high enterprising

- Education and training – as many acquire education and training, the supply of entrepreneurs increase
- Population size – higher the population more enterprising
- Tastes and preferences of the labour force
- Political stability
- The new innovations and technology in general

Question
Identify factors that may determine the demand and supply of the factors of production.

WAGE DIFFERENTIALS

In a free system workers aim at maximizing wages hence workers will move from low paying jobs to high paying jobs. In practice differentials exist both between occupation and even within the same occupation.

Factors responsible for wage differentials with both occupation

1. Effectiveness of trade union
   The more effective the trade union in a given occupation, the higher the wage and vice versa. e.g. unions in industry tend to be stronger than unions in agricultural sector hence difference in wages.
2. Job security
   Different jobs offer different levels of security hence people prefer to stay in a lower paying job because of added security. e.g. the civil service and private sector.
3. Sex
   Occupations that are predominantly women's occupations tend to pay less than those that are predominantly men's occupation.
4. The existence of international barriers
   People working in different countries may earn different wages since it's not easy for people to move from low paying to high paying countries.
5. Ignorance of wage differentials
   Individuals are simply unaware that some jobs may pay more than others.
6. Limited mobility of labour between occupations especially to difficult trades requiring long periods of training and increasing financial aspect.
7. Differences in pleasantness of jobs and their social esteem.
   Unpleasant jobs often have to pay higher wages in order to attract workers or in some cases they are performed by poorly paid and unskilled labour who do not have any other opportunities.
8. Job satisfaction
   Some jobs often offer a higher level of satisfaction and such even though wages are lower, workers may not go to higher paying jobs despite qualifying to do so.
9. Non homogeneity of labour
   The wage rate is determined by the interaction of demand and supply in the market. The greater the demand and lower the supply the higher the wage rate and vice versa.

Occupations where relatively unskilled labour is used prices tend to be low by the fact that unskilled labour is abundant in supply.

Factors responsible for differentials within the same occupation

1. Experience
   Older workers are likely to earn more than young workers for doing the same work since they are considered to be more skilled.
2. Paid by results job
   In such jobs where paying varies with output e.g. tea picking, people may do same work and earn differently
3. Job security
   The same kind of work done for different employers may result in different wages e.g. a doctor in the civil service may earn less than a doctor in private hospital but in return enjoy higher job security.
4. Sex differences
   Women are paid less because of their restriction to a smaller number of occupations is great
5. International barriers
   The same occupation may pay differently in different countries because of barriers to international mobility of labour such as restriction imposed on the foreign workers.

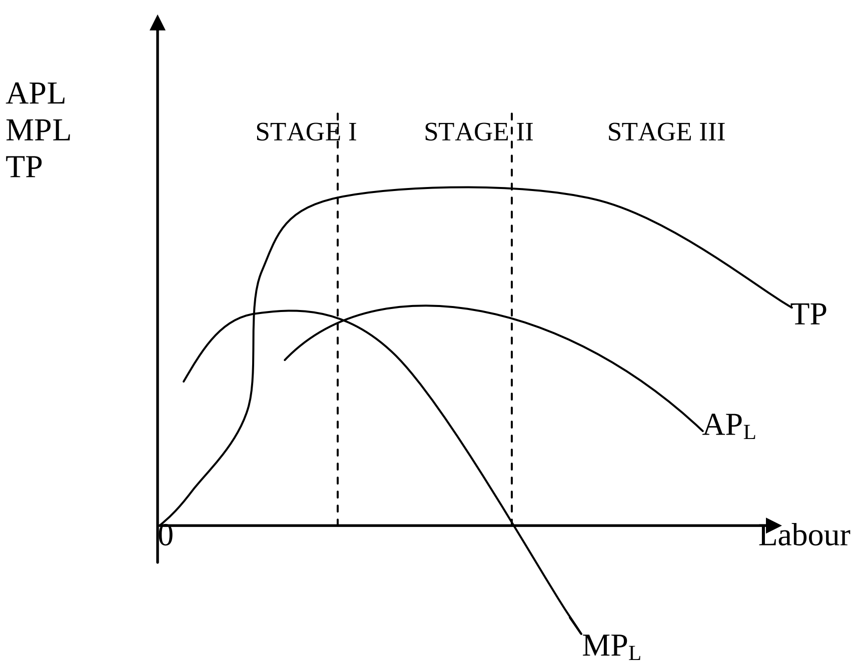
THE LAW OF DIMINISHING MARGINAL RETURNS/LAW OF VARIABLE PROPOSITIONS

It states that holding other factors constant, as additional units of a variable factor are added to a given quantity of a fixed factor the total product and marginal product will initially increase at an increasing rate but beyond a certain level of out put, it will increase at a declining rate and will eventually fall.

The law is explained by use of a given schedule below:

No. of workers	TP	AP	MP
0	0	0	0
1	3	3	3
2	8	4	5
3	12	4	4
4	15	3.75	3
5	17	3.4	2
6	17	2.8	0
7	16	2.3	-1
8	13	1.625	-3

THE STAGES OF PRODUCTION



The average product curve rises at 1st reaches a maximum then falls but it also remains positive as long as total product is positive.

The marginal product curve also rises at first, reaches a maximum, and then declines. The marginal product becomes o when the total product is maximum and negative when the total product begins to decline.

The falling position of MP curve illustrates the law of diminishing returns.

There are 3 types of laws of returns which explain the 3 stages of production:

a) **The law of increasing returns**

   This is when production increases more man proportionately to the increase in variable factors of production i.e. when units of labour are increased marginal production increases more (the law of diminishing costs)

b) **The law of constant returns**

   This is where an increase in production is proportional to increase in variable factors of production i.e. maximum output reached with a given maximum number of the variable factor of production i.e. the optimum point.

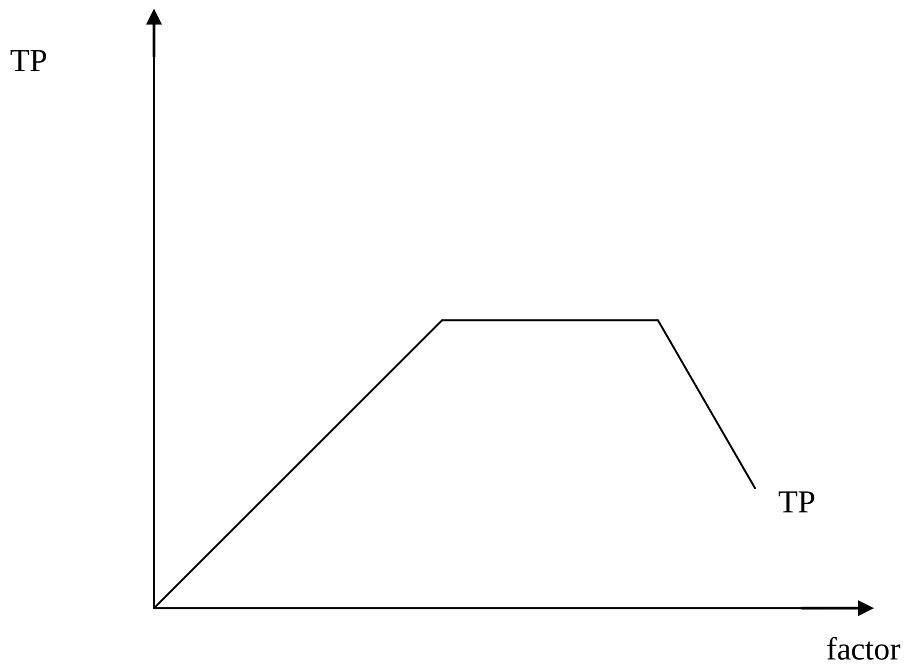
c) **The law of decreasing returns**

This is where additional units of a variable factor of production lead to less output.

The law of diminishing returns is also called the law of variable proportions because factors of productions are combined in small proportions at varied levels

The 3 stages of the law of variable proportions include

- Increasing returns
- Constant returns
- Decreasing returns



Why the law operates?

1. Because of wrong combinations of the factors of production
2. Imperfect substitution of the factors of production
3. scarcity of the factor of production such that procedures end up over using the factor they have

COST OF PRODUCTION

Cost of production refers to the total expenditure to be incurred in the production process

Concepts

Total costs: This is the total amount of cost incurred in the production of a commodity given by:

TC = T.F.C + T.V.C

= Total fixed cost + Total variable cost

Average costs: This is the cost per unit produced on average given by:

$$\text{Average cost} = \frac{\text{Total cost}}{\text{No. of units produced}}$$

$$= \frac{T.C}{Q}$$

Marginal Cost: this is the incremental cost incurred due to the production of an extra unit of a product. Given by:

$$MC = \frac{\text{change in T.C}}{\text{Change in Q}}$$

Explicit Cost: This is the actual expenditure of the firm to purchase inputs for the production process

Implicit costs: This is the value of entrepreneurs owned inputs used by the firm in the production process.

Short run costs: These are costs which vary and can be varied within the short run period e.g. land; i.e. only variable costs can be varied.

Fixed costs: These are costs which do not vary with the level of output eg. Rent and rates in buildings.
Long run costs: These are costs which can only be varied in the long run e.g. fixed costs which take longer time to be altered

Illustration

Given the information below Determine the TFC, TVC, AVC, AC and AFC

Q (output)	T.C
0	50
2	80
3	85
4	95
5	1 15
6	160

Solution

Q (output)	T.F.C	T.V.C	T.C
0	50	0	50
1	50	20	70
2	50	30	80
3	50	35	85
4	50	45	95
5	50	65	115
6	50	110	160

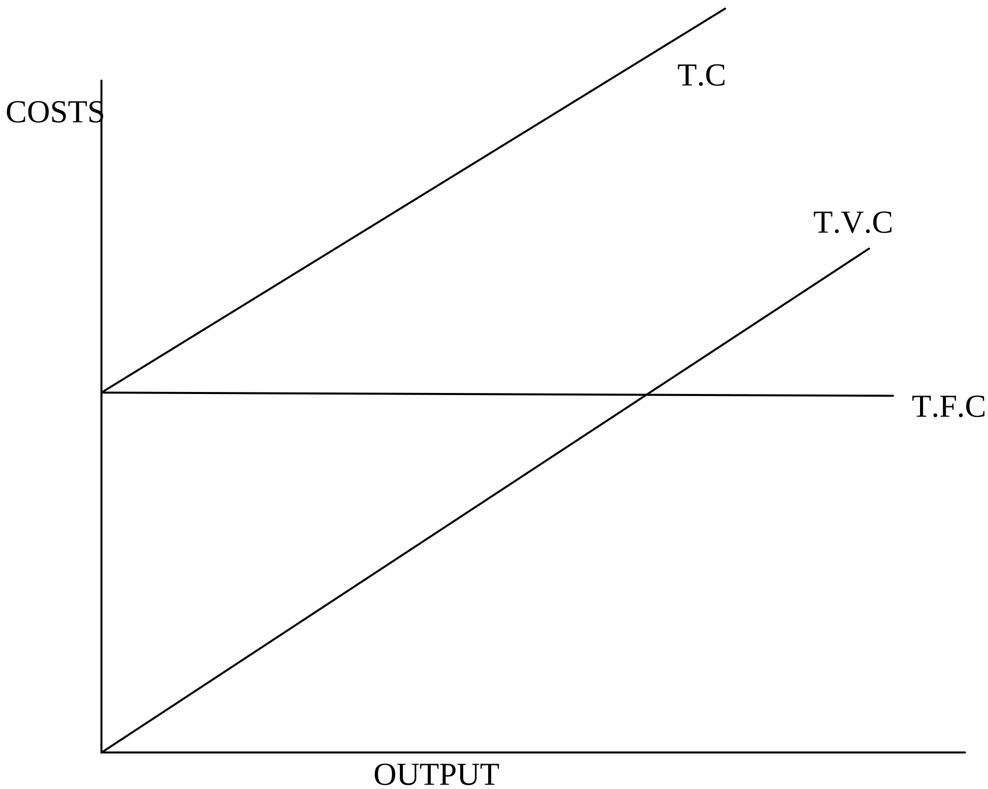
$$A.V.C = \frac{T.V.C}{Q}$$

$$A.F.C = \frac{T.F.C}{Q}$$

$$A.T.C = \frac{T.C}{Q}$$

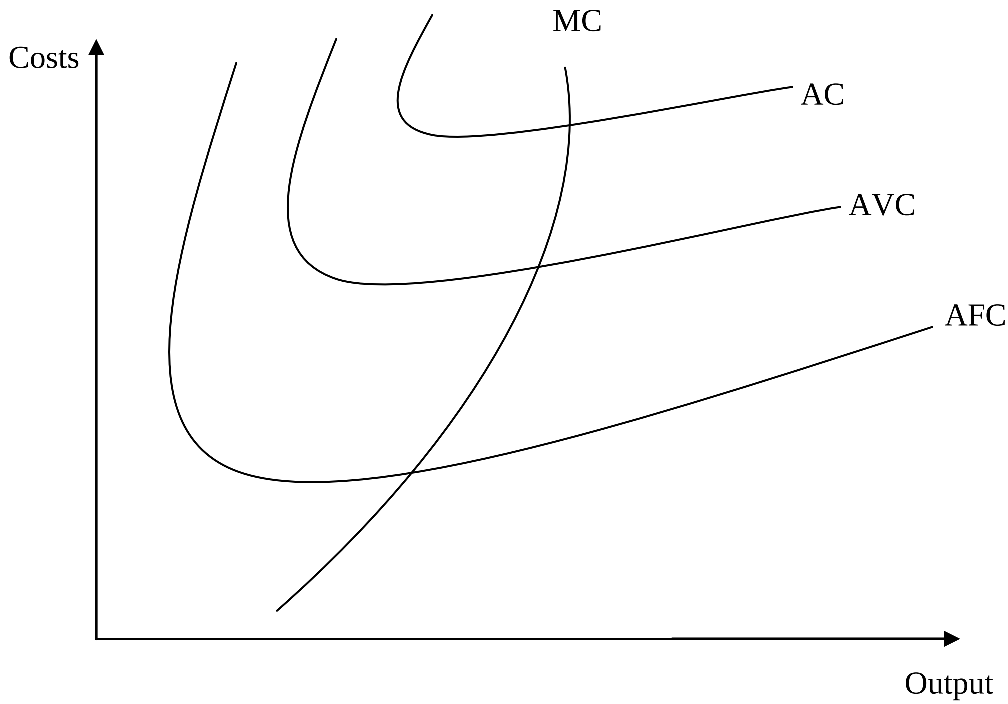
A.C = A.V.C + A.F.C

DIAGRAMATICALLY TC, TVC and TFC can be represented as below



Relationship between Marginal Cost, Average Cost, Average variable Cost, AV.F.C

Q	A.F.C	A.V.C	A.C	T.C	M.C
1	50	20	70	70	70
2	25	15	40	80	10
3	14.7	11.7	28.4	85.2	5.2
4	12.5	11.3	23.8	95.2	10
5	10	13	23	115	19.8
6	8.3	18.3	26.7	160.2	45.2



Illustration

Output [units]	T.C
0	150
10	210
20	260
30	410
40	455
50	560
60	680
70	750
50	920

Required:

Define marginal cost & give an estimate of the MC producing the 20^{th} unit of output

Determine the TVC, ATC and AVC at each levels of output.

MATHEMATICAL APPROACH TO COST FUNCTIONS

Total cost is expressed as a function of output

$TC = F[Q]$

Illustration.

Given

T.C = a + bQ + cQ2 + Dq3

a.Determine FC, AVC and AC

$$F.C = a$$

$$\text{Variable cost} = BQ + CQ^2 + DQ^3$$

To get average cost (A.C)

$$AC = \frac{TC}{Q}$$

b. Determine

A.F.C & A.V.C

$$M.C = \frac{\text{change in TC}}{\text{Change in Q}}$$

Illustration

Given $T.C = 25 + 4Q - 2Q^2 + 3Q^3$

Determine the FC,VC,AC and marginal cost function

REVENUE FUNCTIONS

Revenue is the receipt from sale of a good or a service

Total revenue is the price*quantity sold

$T.R = P * Q$

Marginal revenue it's the incremental revenue brought about by an extra unit sold.

Illustration

1. Given the information below determine the TR, AR. And MR

PRICE	**QUANTITY**
13	0
12	1
11	2
10	3
9	4
8	5
7	6
6	7
5	8
4	9

2.Given a price function below determine the Total Revenue and Marginal revenue function

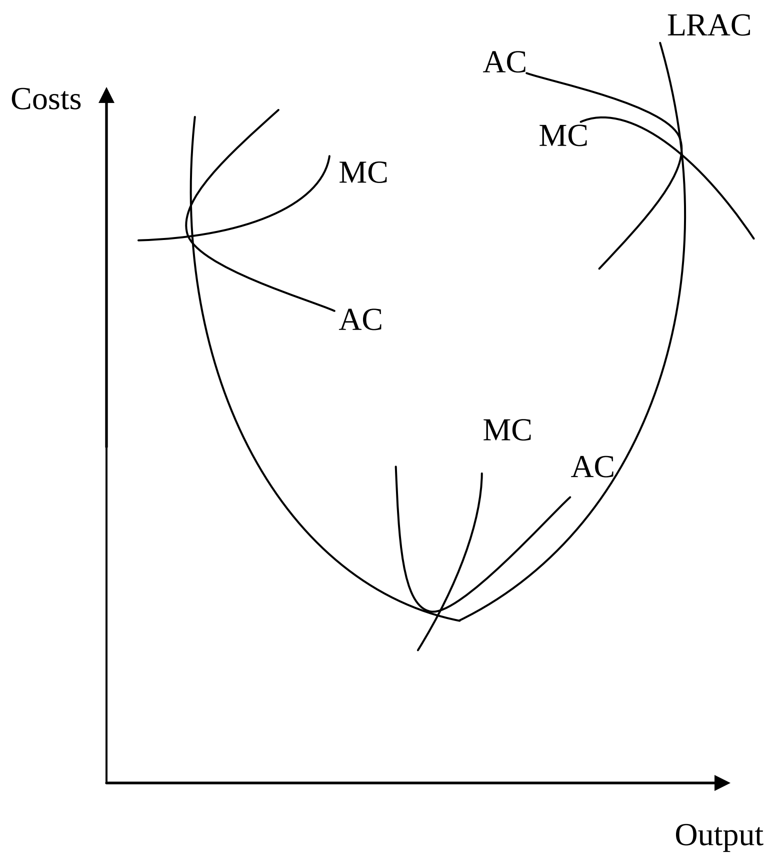
$P = 3+ 8Q$

4. Given the total revenue function below determine the Average revenue function and marginal revenue functions.

   $TR = 32+8Q-10Q^2 + 12Q^3$

ECONOMIES AND DISECONOMIES OF SCALE

These are aspects of increase in size of production which leads to falling long run average costs in the long run depend on returns to scale.
Economies of scale can be illustrated using the long run Average cost curve



The long run average cost curve consist of a series of parts of different short run cost curve and the parts on the long run average cost curve represents the lowest costs attainable for the production of any level of output.

The long run average cost curve can therefore be described as an envelope to a series of short run average cost curve.
The L.R.A.C curve reaches its minimum when ‘Q’ units of output are produced, up to this level of output, the long run cost are declining i.e the firm is experiencing economies of scale hence increasing returns to scale.

TYPES OF ECONOMIES OF SCALE

Economies of scale can be classified as

- Internal Economies
- External Economies

A. Internal Economies of Scale

These are factors which bring about a reduction in average cost as the scale of production of individual firm rises. This is attributed to the activities within the firm hence the economies are brought about by various sources.
They include:

- Marketing economies of scale
- Technical Economies
- Research
- Financial Economies
- Risk bearing Economies
- Managerial and administrative economies

B. External Economics of scale

External economies are advantages that arise from the growth of the industry resulting from simultaneous interaction of a number of firms in the same or related industries and the community at large.

1. **Employment**

Due to growth of the industry this will create employment opportunities to the community that will help improve the standards of living.

2. **Specialization**

Different firms within the industry will decide to specialize in one area of production will reduce the costs of production; improve quality of the product and reduction in prices.

3. **Growth of complimentary services**

Wherever the business unit is expanding the output there are some complimentary services that arise e.g. schools, medical facilities, financial institutions, better roads which will benefit the society.

4. **Co-operation**

Many firms within the industry can co-operate with one another in terms of research and development hence improve quality of products and new techniques of production which will lower costs hence reduction in price.

DISECONOMIES OF SCALE

These are disadvantages associated with expansion in the scale of production they include:-

- **Overproduction –** increases in growth of firms will lead to overproduction leading to a decrease in price which is disadvantageous to the firm
- Negative externalities such as pollution, congestion, poor working condition will be experienced as many firms expand their output.

- Maintenance of morale is difficult as individual workers feel unimportant to the firm and may not identify with the firms objectives.
- Communication may be a problem due to the many levels in the organization structure.
- As organizations become larger managerial functions become difficult to perform effectively hence delay in decision making due to many departments
- The task of control and of ensuring implementation is difficult
- Government interference whenever there's increase in output due to increase in growth leading to increase in profits of a business. The Government will impose taxes which is disadvantageous to the firm.

MARKET STRUCTURES

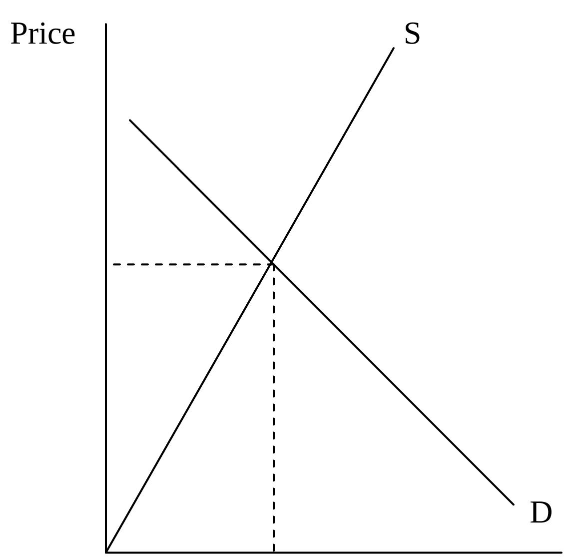
Definition of a market

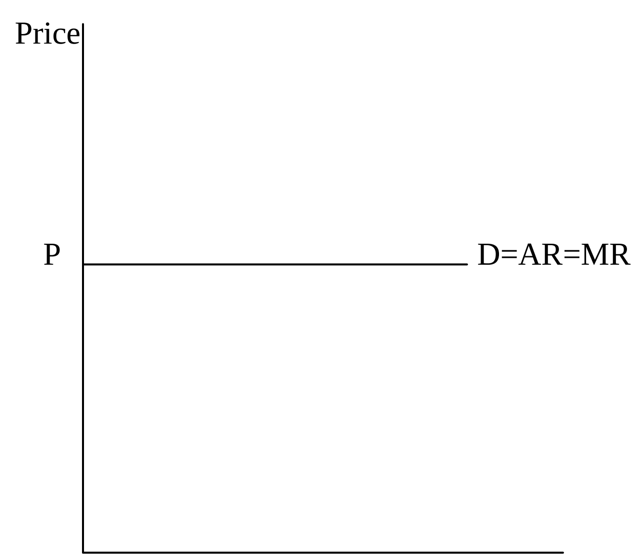
It's a situation or context where potential buyers and a means of exchange is available Revenue concepts are considered here and will be combined with the cost concepts to develop the theory of marketing structures

TYPES OF MARKET STRUCTURES

PERFECT MARKET SRUCTURES

a) Perfect market competition
This is a market where no individual buyer or seller has any influence over the market hence marketing prices of demand and supply determines price and output.



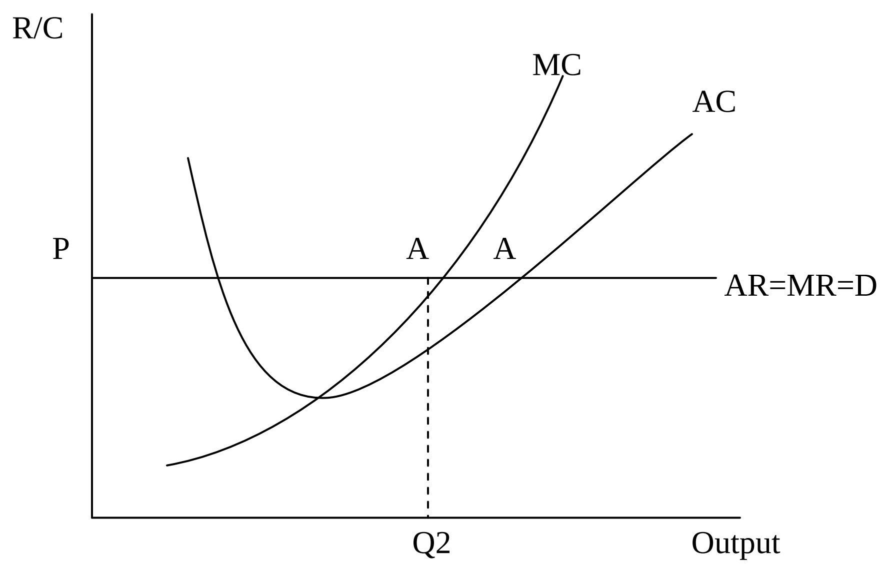


Q

Industry   Firm

For profit maximization conditions must exist they include:

1) **Necessary condition:** profit is maximized at the level of output where marginal revenue = marginal cost
2) **The sufficient condition:** it states that the slope of the marginal revenue where must be less than the slope of the marginal cost curve at the positive part where they are equal i.e Marginal cost must cut marginal revenue curve from below.



The necessary and sufficient conditions for profit maximization are achieved at point A in the above diagram.
At output levels below ‘Q_2’ Profits can be increased since an increase in outputs adds more to total revenue than it does to cost.
At output levels greater than Q_2 the reverse applies hence profits can be increased by lowering output.

Assumptions / features of perfect competition

i. Many buyers and sellers in the market.
ii. Freedom of entry and exit.
iii. Perfect mobility of factors of production
iv. Perfect knowledge about price quality and quantity
v. Constant price / uniformity in prices
vi. The perfect market is a price taker
vii. It faces perfectly elastic demand curve.

viii. Average revenue is equal to marginal revenue which is equal to price and demand MR = AR = D
ix. No transport cost for buyers i.e no advertising cost for sellers
x. Less government intervention

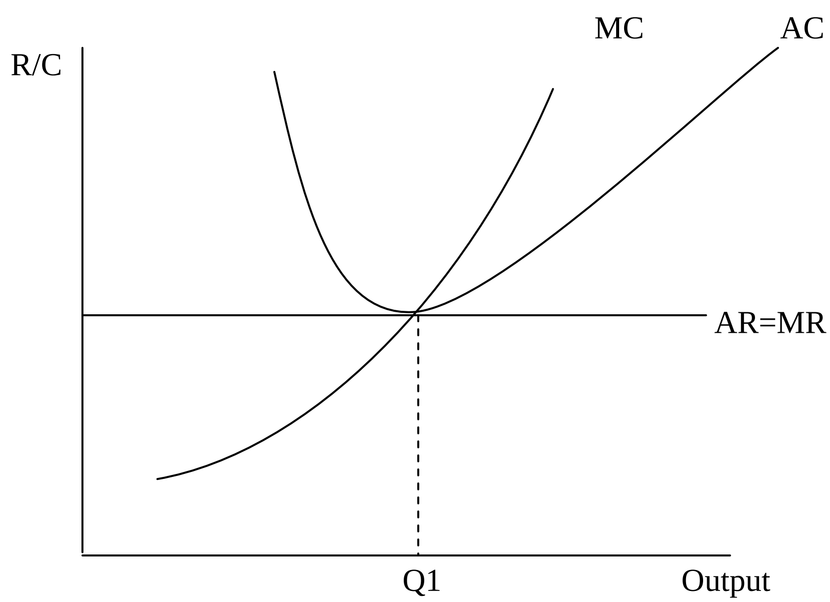
OUTPUT OF THE FIRM IN PERFECT COMPETITION

The short run

Firms can make normal profits, super normal profits or losses.

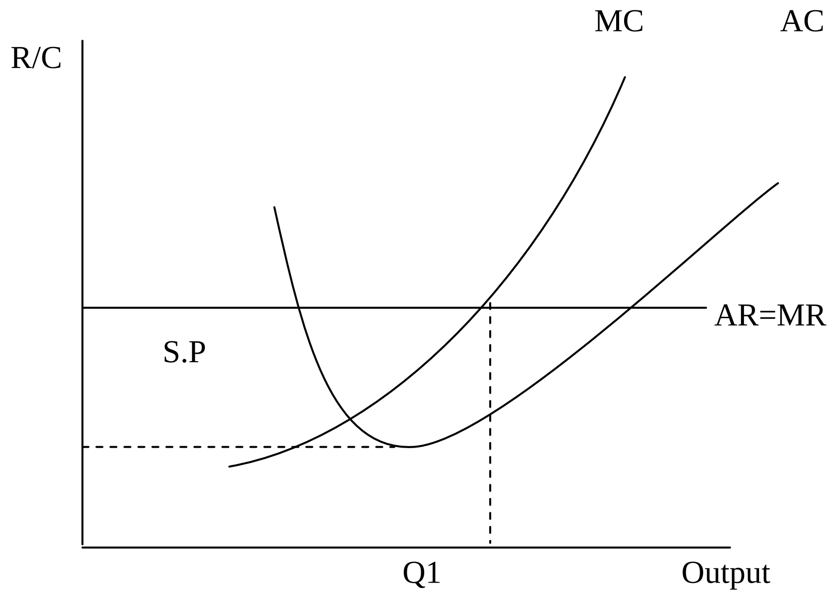
Normal profits

These are minimum level of profits which a firm must acquire in order to induce it to remain in operation.

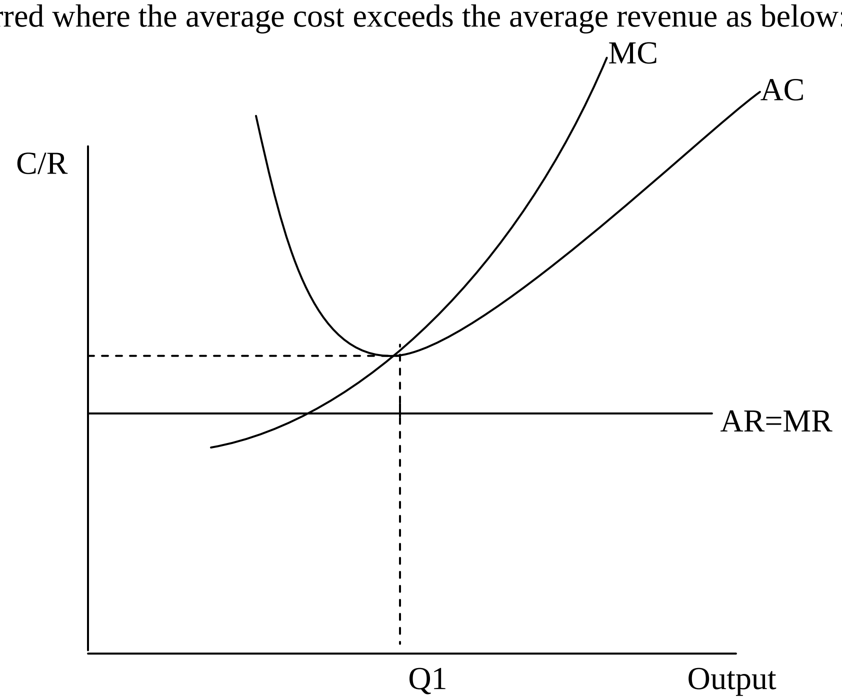


Profit maximizing output is ‘Q1’ where necessary and sufficient conditions are satisfied. When price exceeds average cost the firm is said to be earning abnormal or supernormal profits as below

Supernormal profits

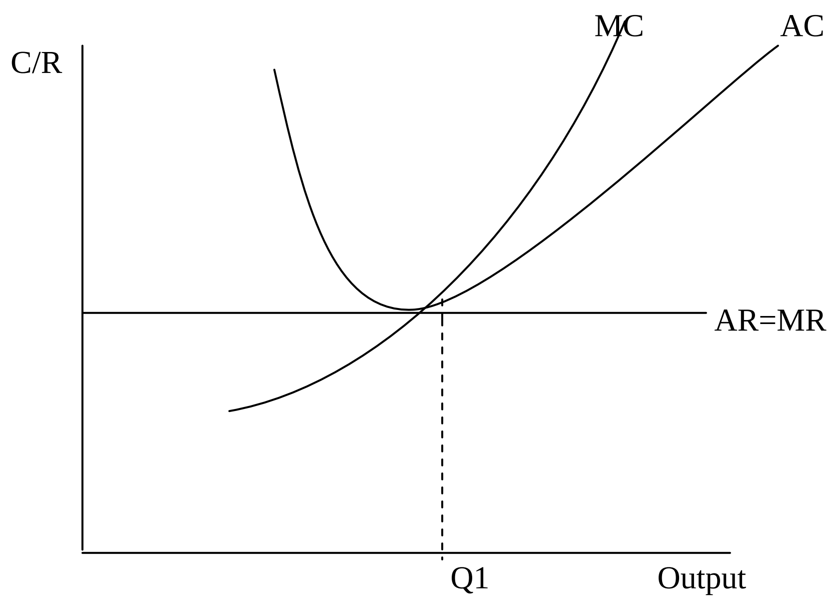


Total super normal profit = CPDE and price is greater than average cost.
Losses can be incurred where the average cost exceeds the average revenue as below:



Long run equilibrium in perfect competition

Free entiry and exit ensure that the long run equilibrium output is such that each surviving firm earns normal profits whereby the price equals the average cost of production.
Long run equilibrium exists when supernormal profits & losses have been eliminated.

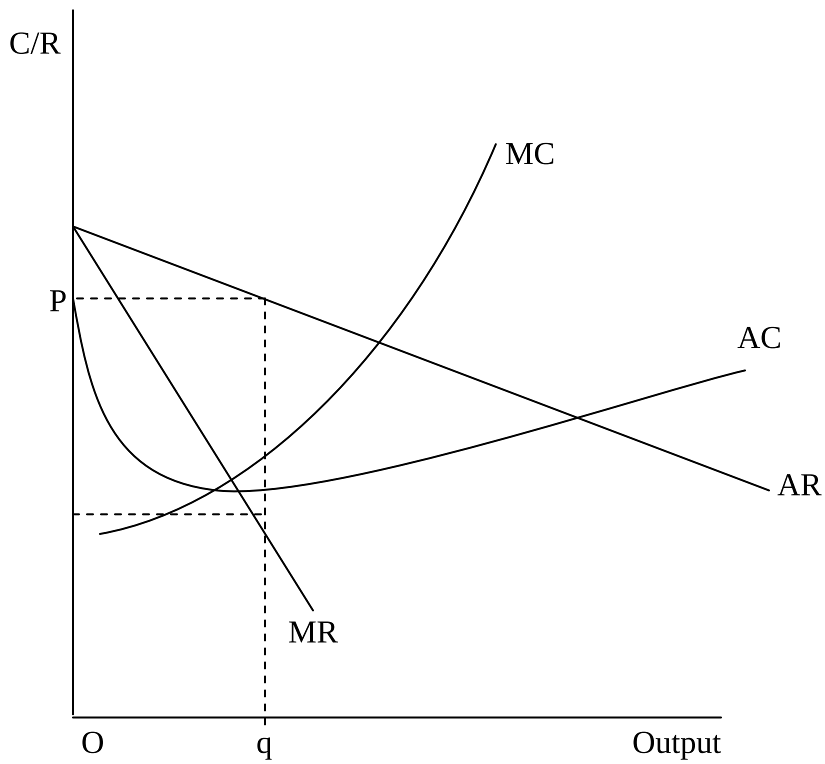


IMPERFECT MARKET STRUCTURES

1) **MONOPOLY**

This is a market structure where production is under the control of a single supplier since it's the sole supplier in the market the demand curve is also the industry demand curve.
Monopolist faces a downward sloping demand curve whereby if the monopolist wants to sell more he must reduce the price.
In monopoly marginal revenue is less than average revenue because when monopolist wants to sell more he must reduce the price not only on the extra unit sold but on all the units.

Equilibrium of a firm in monopoly is at the level where MC=MR as below



Sufficient and necessary conditions are satisfied at part Q and that's profit maximizing part. Unlike the super normal profits and under perfect competition, monopoly profits will persist into the long run since there are barriers to entry into the industry.

Features/characteristics of monopoly

1. A single seller in the market
2. the product sold has no close substitute
3. the monopoly is the price maker
4. the nature of the average revenue and marginal revenue are down ward sloping

5. there are barriers to entry
6. the objective of the firm is to maximize profit
7. Monopoly restricts output in order to change higher prices.

SOURCES OF MONOPOLY POWER

The following factors may constitute barriers to entry hence a source of monopoly power:

a) **Legal barriers**

These include

Statutory monopolies or patents which are established by an act of parliament e.g nationalized industries.

A company's products may also be protected by a patent whereby the firm holding the potent is protected from competition from new firms for a given period of time

b) **Economies of scale barriers**

They arise where existing firms are already operating on large scale production and enjoying technical economies of scale. New entrants would have to achieve a substantial market share before they gain full advantage of potential economies of scale which is difficult

c) **Product differentiation barriers**

It takes the form of advertising, packaging and branding whereby an existing monopolist may exploit his position as a supplier of an established product which the consumer may be persuaded to believe is better.

The initial advertising cost of establishing a new brand is too high.

d) **Transport costs and Tariff barriers**

Tariffs may protect the domestic market from competition from foreign produces by raising the price of the foreign product in the domestic market hence protection of domestic suppliers.

e) **Natural barriers**

The industry may be the sole owner of a natural resource unless new supplies of the resource are discovered there will be no possibility of new firms entering the industry consequently the monopolist will have effective control supply of the resource

f) **Possession of technical knowledge**

If a given industry is the sole owner of a given technology then it will have effective control over the production of a given product

g) **High Entry Cost/Capital**

Some undertakings involve huge amounts of capital which act as a barrier to the entry of new firms.

Case for and against monopoly

1. Case for monopoly

- **Economies of scale**

This lowers the unit costs of production leading to lower prices which is an advantage to consumers

- Since they earn super normal profits and can easily raise capital on the capital market they can afford to spend more on research
- Due to super normal profits rival firms are encouraged into the market and develop rival products.
  Temporary monopolies can stimulate competition in the long run in the interest of consumers.
- It provides some services efficiently since it understands the nature of demand
- The government benefits from the supernormal profits through imposition of taxes
- Creation of employment opportunities in the various undertakings

2) Case against monopoly

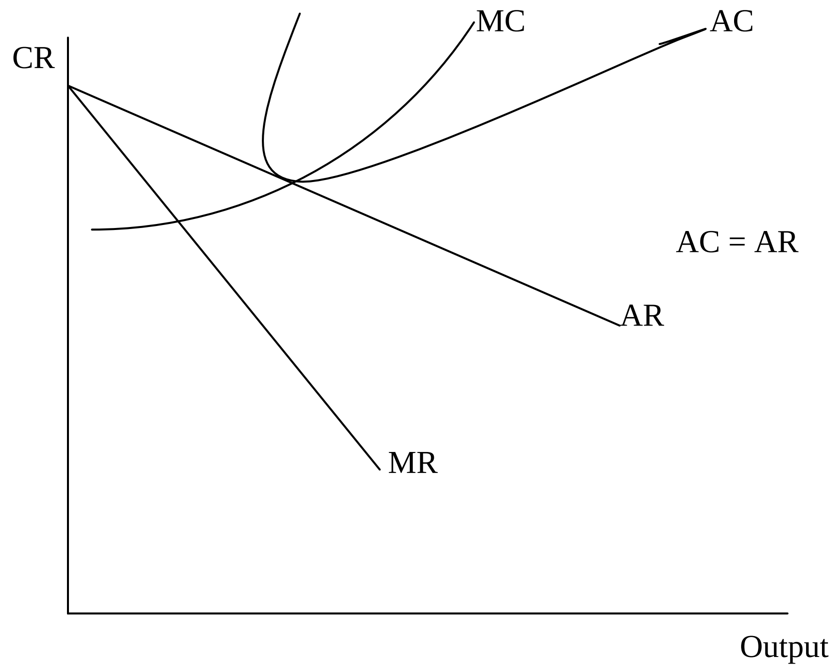
i. It charges high prices for its products hence the welfare of consumers is affected.
ii. It does not take interest to improve the quality of its products hence consumers get poor quality products at high price /costs.
iii. Barriers to entry of new firms which discourages fair competition.
iv. The level of output is restricted leading to low production which may lead to increased unemployment.
v. Due to large scale production positive externalities are likely to arise with its harmful effects on the society.

Short run Equilibrium

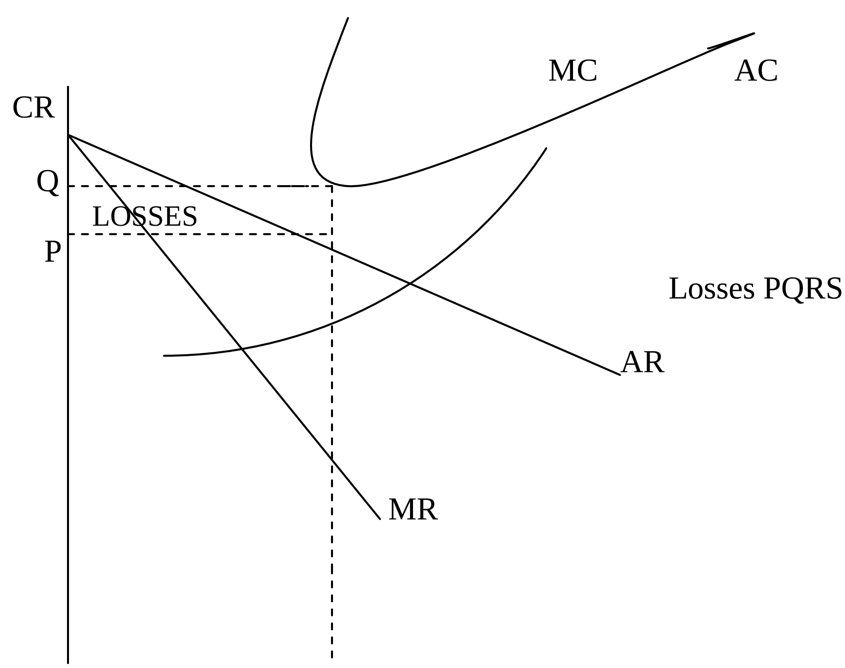
In the short run the firm can earn normal profits, make losses or earn super normal profits.

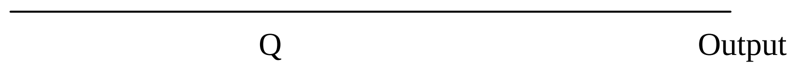
For normal profits the average revenue will equal positive average cost (A C) as below

Normal profits

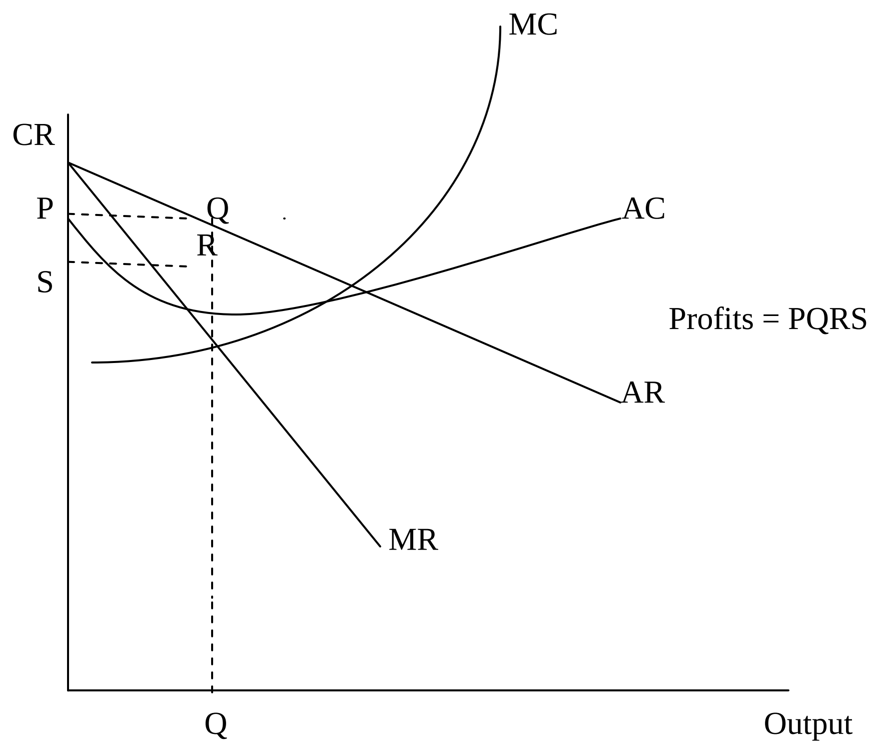


For **loss making monopoly** the AC is greater than the Average revenue as drawn below



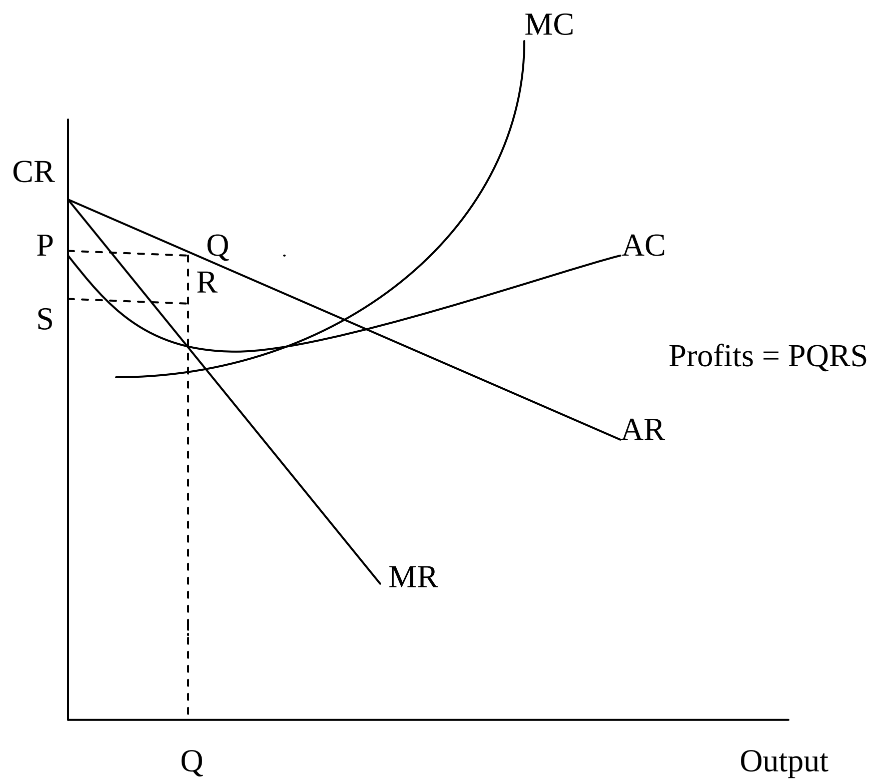


For supernormal profits the AC is less the Average revenue as shown below



Long run equilibrium in monopoly

This is a period long enough for the firm to adjust its scale of production. The monopolist will adjust the scale so as to produce as much as is required by the market. If the market is small the monopolist will built a small plant and vice versa.
The large market would ensure more economies of scale and therefore production at lower costs which will result into abnormal profits


MC
CR
P
Q
AC
R
S
Profits = PQRS
AR
MR
Q
Output

PRICE DISCRIMINATION

This is a practice of charging different prices in different markets for the same product This is done in order to capture more sales and increase profits

Markets are separated in the following ways:

1. **Geographically:**

This is according to different localities e.g different estates with similar commodities have different prices.

2. **Time.**

This is where lower prices are charged in off peak periods and higher prices during peak periods eg. Telephone and travel industries.

3. **Personal discrimination**

This is where services offered by various providers are priced are differently even if similar in nature.

Condition that must exist for price discrimination to be effective

a) The market should be imperfect whereby there is no perfect knowledge concerning price quality and quantity
b) There should be differences in elasticity of demand whereby one group is willing to pay more than the other.
c) The monopolist/seller must be able to control the supply of the product to avoid resale of the product to areas with higher prices.
d) There should be significant difference in the two sub-markets whereby the two markets are separate from each other.
e) Its effective where the use of special orders is in place
f) Cost of separating two markets are separating two markets must be too minimal
g) No purchasing for further sale once monopoly sells to a final consumer only.

MONOPOLISTIC COMPETITION

This is a market structure where we have large numbers of producers of similar but differentiated products.
The market will not face a perfectly elastic demand curve because if a single firm should raise its price it would not lose all of its sales as would be in the case of perfect competition since some consumers would be would continue to buy the product because of the qualities that differentiate it from the competing products i.e i.e brand loyalty exists.

ASSUMPTIONS/CHARACTERISTICS

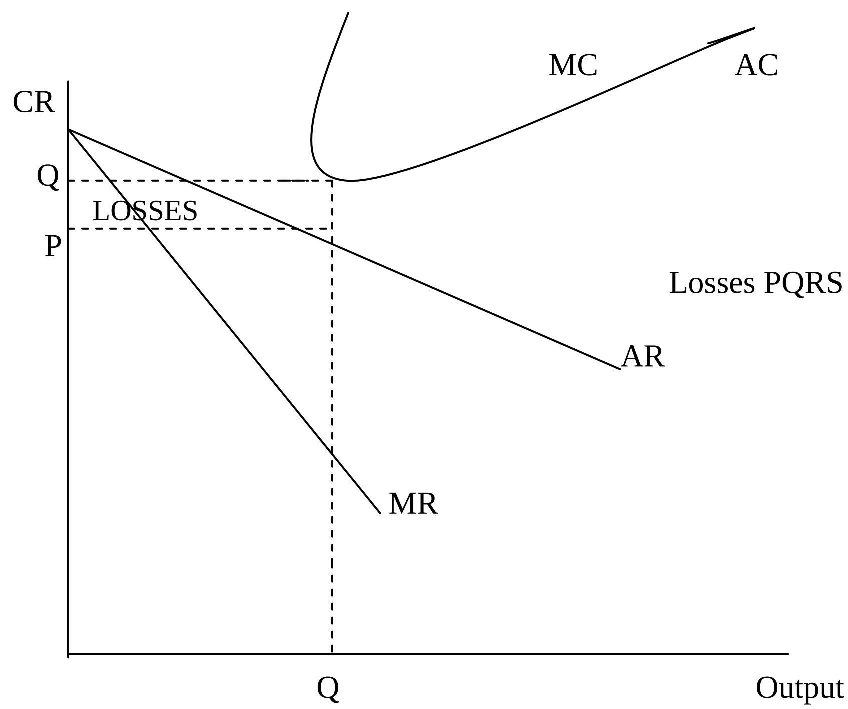
It combines characteristics of perfect competition and monopoly

i. These are fairly large number of buyers and sellers.
ii. There is perfect mobility of factor of production.
iii. There is free entry and exit.
iv. Products are similar but differentiated
v. The marginal revenue and average revenue are downward sloping since the higher the price, the less the demand and vice versa
vi. The products of different sellers have different qualities.
vii. Advertising plays an important role of increasing the sales.

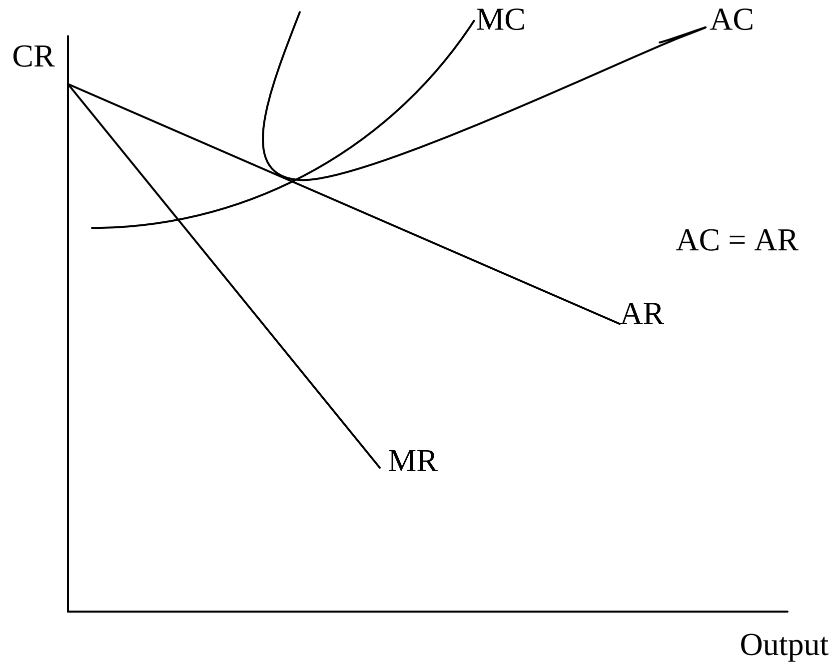
Short run equilibrium of a firm in monopolistic competition

Production is at the part where MC = MR. The firm can earn normal profits, incur losses, or earn abnormal profits.
In all situations marginal cost curve must cut marginal revenue from below.

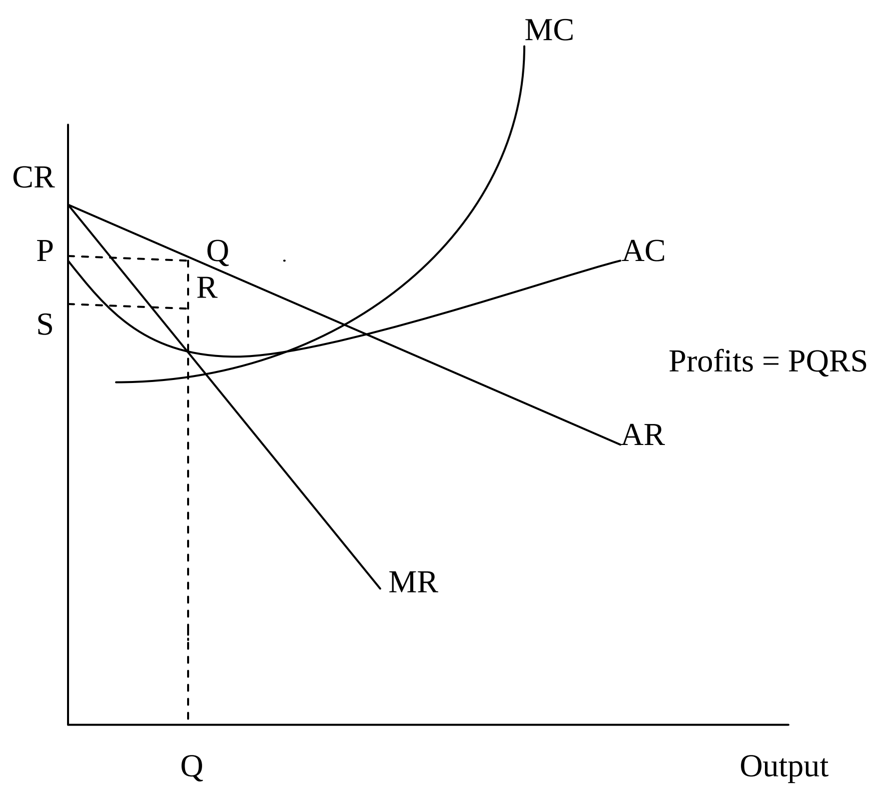
Loss making



Normal profits

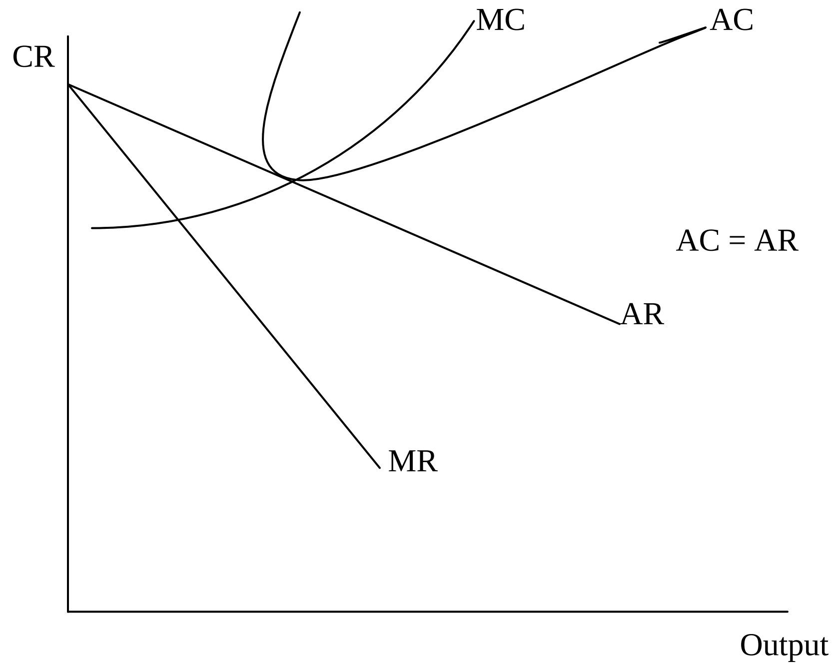


Supernormal profits



Long run equilibrium
The long run will be a time period long enough for loss making firms to leave the industry and new firms in pursuit of profits to enter hence losses and abnormal profits will be cleared resulting to normal profits.

Normal profits



OLIGOPOLISTIC COMPETITION

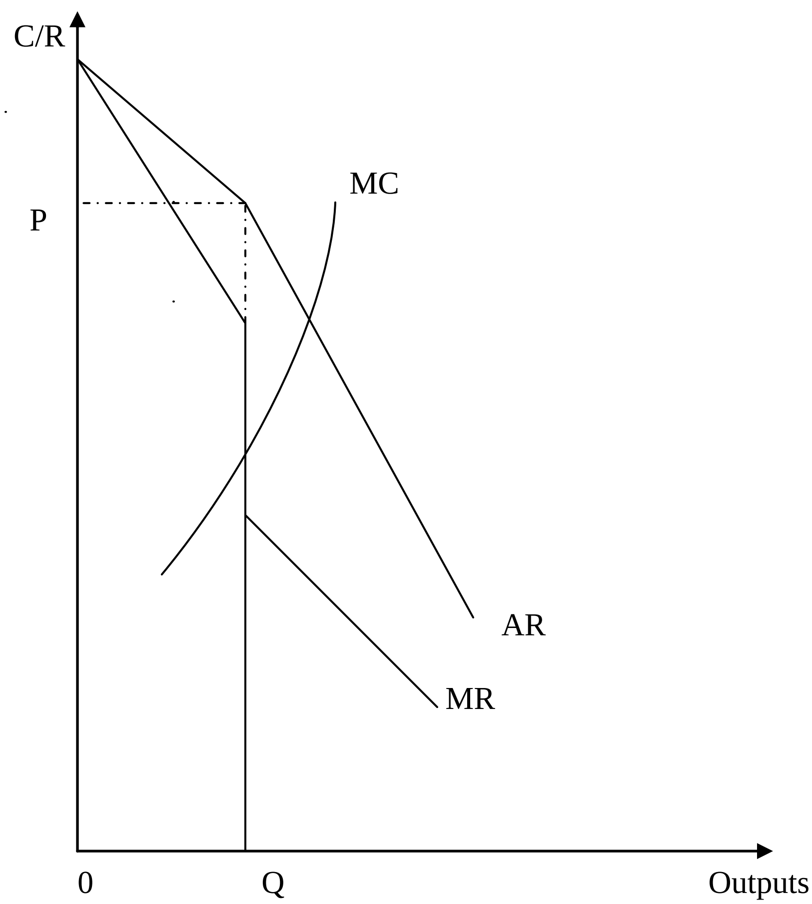
This is a market where the number of firms is small enough for each seller to take account of the actions of other seller in the market. Seller is mutually dependant. It's sometimes called **competition among the few.**

It's common in manufacturing industries such as auto mobile production and oil industries.

FEATURES / CHARACTERISTICS OF OLIGOPOLY

i. Few sellers in the market.
ii. Each seller is aware of its competitors and knows their strategies
iii. Products are differentiated but close substitutes
iv. Demand curve is downward sloping with a kink.
v. Barriers to entry which leads to supernormal profits in the long run.
vi. Different forms of non-price competition because of collusion and the fear of price was e.g packaging, brand names or free gifts.

In Oligopoly the decision of one firm affects the results of the other. Paul Sweezy developed a model to explain the relative stability observed in the policies of Oligopolist.



Suppose the Oligopolies is selling quantity OQ and price OP. if the Oligopolies lowers his price, the rivals would also reduce their prices in order to maintain their market share. For prices below OP will be facing relative inelastic demand curve. The firms profit maximizing price and output are OP and OQ. The marginal cost curve must cut the marginal revenue somewhere in the area of discontinuity

Oligopolies may engage in non price competition eg. Product differentiation to increase their sales.

Price rigidity exist (price tend to be sticky i.e unlikely to change very often)
Its argued that MC will equal MR at the point of discontinuity hence price is rigid but the point is the kink.

No firm will raise the price for so doing it will be completed out of the market and no firm will lower the price for this will lead to unnecessary price competition hence price is rigid at the kink.

MACROECONOMICS

INTRODUCTION TO MACROECONOMICS

Introduction

The terms macro and micro were first used in economics by a Norwegian economist, Ragnar Frisch in 1933. They are derived from the Greek words ‘makros’ meaning large and ‘mikros’ meaning small respectively. The foundation of macro-economics was laid down by a British economist, John Maynard Keynes in 1936.

Definitions of Macro-economics

1. Macroeconomics is the study of aggregates or averages covering the entire economy.

2. Macroeconomics is the study of the behaviour of the economy as a whole. It examines the overall level of a nation’s output, employment, prices and foreign trade.

3. Macroeconomics theory is the explanation of how aggregates or averages covering the entire economy interact and interconnect. These variables include: national income, national output, total investment, total employment, total consumption, total savings, aggregate supply, aggregate demand, and general price level, wage level and cost structure.

MICROECONOMICS AND MACROECONOMICS

DIFFERENCE

1. Microeconomics is the study of economic actions of individual households or firms. Macroeconomics studies the aggregate economic variables.

2. The objective of microeconomics on the demand side is to maximize utility of the household, while the supply sides objective is to maximize the profits for firms at

minimum costs. Macroeconomics main objectives are full employment, price stability, economic growth and favourable balance of payments.

3. Equilibrium under microeconomics is attained by interaction of the demand and supply curve which give rise to equilibrium price and output in the market. Equilibrium under macroeconomics is arrived at by the interaction of the aggregate demand and aggregate supply curves. This position of equilibrium is expressed by the equation Y = C + 1.

TOPIC ONE: MONETARY THEORY

Development of Money

Before the invention of the current paper and coinage money, existed the barter system of exchange. Under the barter system, goods and services were exchanged for other goods and services e.g. one cow was exchanged for ten goats. This system had many complications that led to its collapse. Some of the problems of this system are:

1. Lack of measure of value
2. Indivisibility of commodities
3. Lack of double coincidence of wants
4. Lack of store of value.

In view of these difficulties of barter system, different items emerged and were used as money in different periods and in different parts of the world. The items used as money included: metals like silver, copper, gold etc., hides and skins, stones, arrows, wheat, rice etc. All these items had their short comings and traders kept on re-inventing items of exchange.

Definition of Money

- Professor Friedman of the University of Chicago defines money as "anything that serves the function of providing a temporary abode for general purchasing power".

- Sir John Hicks defines money as what money does i.e. unit of account, means of payment and a store of value.
- Money is universally defined as anything that is generally acceptable as a medium of payment and a means of settling debts.

Functions of Money

1. Medium of exchange
2. Measure of value
3. Store of value
4. Standard of deferred payment
5. Transferring immovable property.

Qualities of Good Money

1. Portability
2. Divisibility
3. Durability
4. Stability in value
5. Acceptability
6. Homogeneity
7. Malleability
8. Cognisibility.

Money and Near Money Assets

- Money consists of currency and bank deposits. Coins and currency notes issued by the central bank of a country and cheques of commercial banks are legal tender or liquid assets. Other forms of money are generally referred to as near money assets.

- Near or quasi money assets are those which serve the value function of money temporarily and are convertible into a medium of exchange in a short-time without loss in their face value e.g. bonds, securities, debentures, bills of exchange, treasury bills, insurance policies, credit cards etc.

Why Is Credit Card not considered as money?

(i) Not generally acceptable as a means of settling debts

(ii) Not homogeneous

(iii) Not a legal tender

(iv) Not durable

THE DEMAND FOR MONEY

Keynes in his general theory used a new term “liquidity preference” for the demand for money. Keynes suggested three motives which led to the demand for money in an economy:-

(i) Transaction purposes
(ii) Precautionary purposes
(iii) Speculative purposes.

The Transactions Demand for Money

The transaction motive of demanding money arises from the need to make regular payments for goods and services. According to Keynes it relates to the need of cash for current transactions of personal and business nature.

The Precautionary Demand for Money

The household and businessmen prefer to hold liquid money to meet unexpected needs. Individuals hold cash to provide for illness, accidents, unemployment and other unforeseen contingencies. Similarly, businessmen keep cash in reserve to tide over unfavorable conditions or to gain from unexpected deals.

The Speculative Demand for Money

The speculative demand for money is for securing profits from knowing better than the market what the future will bring forth. Money held for speculative purposes can be invested at an opportune moment in interest bearing bonds or securities. The Keynesian liquidity theory has been widely accepted as an explanation for demand for money.

THE SUPPLY OF MONEY

Definition of Money Supply

Money supply has been defined as the total amount of money in the economy.

Professor Friedman defines money supply at any moment of time as "literally the number of dollars people are carrying around in their pockets, the number of dollars they have to their credit at banks in the form of demand deposits and commercial bank time deposit".

Determinants of Money Supply

Money supply consists of the release of money into circulation within an economy by the central monetary organ of that economy. Money can be supplied in the form of currency notes, coins and bank deposits.

There are three determinants of money supply:-

1. The required reserve ratio
2. The level of bank reserves
3. Public desire to hold currency and deposits

1. **The Required Reserve Ratio**
   - The reserve ratio is the amount of money that commercial banks must deposit with the central bank as ratio of the cash to current and time deposits as determined by law.

   - The raising of the required reserve ratio has the effect of reducing the money supply with commercial banks for lending purposes and the lowering of reserve ratio increases the money supply with banks for advances.
2. **The Level of Bank Reserves**
   - Commercial bank reserves consist of reserves on deposit with the central bank and currency in their tills or strong rooms. The central bank requires all commercial banks to hold reserves equal to a fixed percentage of both time and demand deposits.
   - The level of bank reserves can be increased to reduce money supply and vice versa.
3. **Public's Desire to Hold Currency and Deposits**
   - If people are in the habit of keeping less in cash and more in deposits with commercial banks, the money supply will be large. This is because banks can create more money with larger deposits.

THEORIES OF MONEY

- Economists have over the years engaged in answering the question, "what causes changes in the price level or the value of money".
- By value of money is meant the purchasing power of money over goods and services within a country. What a shilling can buy in Kenya is the value of the shilling.
- The relation between value of money and the price level is an inverse one. When the price level rises, the value of money falls and vice versa.
- The quantity theories of money attempts to explain the causes of changes in the value of money. They are broadly divided into two.

A) FISHER'S CASH TRANSACTION APPROACH (QUANTITY THEORY OF MONEY)

- The quantity theory of money states that the quantity of money is the main determinant of the price level or the value of money.
- In the words of Fisher "other things remaining unchanged, as the quantity of money in circulation increases, the price level also increases in direct proportion and the value of money decreases and vice versa". i.e. if the quantity of money is doubled, the price level will also double and the value of money will be one half. On the other hand if the quantity of money is reduced by one half, the price level will also be reduced by one half and the value of money will be twice.
- Fisher has presented the following equation of exchange:

$PT = MV$ which was later improved to:

$$PT = MV + M^1V^1$$

Where:

P	=	Price level or $1/P$ = the value of money
M	=	The total quantity of legal money (tender)
V	=	The velocity of circulation of M
M^1	=	The total quantity of credit money
V^1	=	The velocity of circulation of M^1
T	=	The total amount of goods and services exchanged for money

or transactions preformed by money (real output).

- This equation equates the demand for money (PT) to the supply of money ($MV = M^1V^1$). In order to find out the effect of change in the quantity of money on the price level or the value of money, we write the equation as:

$$P = \frac{MV + M^1V^1}{T}$$

- Fisher proposes that the price level (P) varies directly as the quantity of money (MM^1) provided the volume of trade (T) and velocity of circulation (V_1V_1) remains unchanged.
- According to this preposition, if M and M^1 are doubled while V_1V^1 and remain constant, P is also doubled, but the value of money (1/P) is reduced to half.

Example:

(i) The following data relates to economy ABC:

M = 50	$M^1 = 20$	T = 450
V = 10	$V^1 = 20$	

Compute the country's:

(a) Price level
(b) Value of money

Solution

(a) $P = \dfrac{50x10 + 20x20}{450} = \dfrac{900}{450} = 2$

(b) $1/P = 1/2$

(ii) Supposing the politicians in country ABC decide to increase money supply to finance their campaigns by printing more coins and paper money, such that the new M = 100 and $M^1 = 40$. Other factors remaining constant, compute the new:

(a) Price level
(b) Value of money
(c) Interpret your findings

Solution

(a) $P = \dfrac{100x10 + 40x20}{450} = \dfrac{1800}{450} = 4$

(b) $\frac{1}{P} = \frac{1}{4}$

(c) By doubling money supply, the value of money in country ABC has halved and the price levels have doubled.

Example:
If money supply in a given economy equals 1000 while the velocity and price equals 16 and 4 respectively. Determine the level of nominal and real output.

Solution

$$P = \frac{MV}{T}$$

$$4 = \frac{1000x16}{T}$$

$$T = \frac{1000x16}{4}$$

T = 4,000

Nominal output = 4,000

Monetary value of real output

P * Q = 4 * 4,000
=16,000

THE BANKING SYSTEM

A bank is an institution that accepts deposits, allows depositors to withdraw and lends further.

There are two main types of banks:

1. Commercial banks
2. Central banks

Commercial Banks

Commercial banks are those established with the primary goal of profit creation. The main source of earnings of these banks is the interest charged on loans advanced by these banks.

Functions of Commercial Banks

1. Receiving deposits:
   Commercial banks allow individuals to save money with them. The individuals or firms can open.
   (a) Current accounts
   (b) Savings accounts
   (c) Fixed deposit accounts
2. Advancing loans
   Commercial banks give their customers loans in any of the following ways:
   (a) Over drafts
   (b) Discounting of bills of exchange
   (c) Direct loan

3. Creation of credit
   Creation of credit refers to a process under which commercial banks advance loans many times greater as compared to the legal money at the disposal of the commercial banks. For instance if legal money available with commercial banks is 100 million and on the basis of this amount, loans are of 1,000 are issued it is known as creation

of credit. Creation of credit does not mean printing of new notes it means excessive use o the instruments of credit as follows:

(a) Commercial banks accept cash in demand deposits and advance loans on credit to customers.

(b) When a bank advances a loan, it does not necessarily pay the amount in cash. It can open a current account in the customers name and allow him to withdraw the required sum by cheques at agreed intervals. In this way, the bank creates credit on deposits.

4. Agents of stock exchange market.
5. Custodian of valuable items and documents.
6. Transferring of money to foreign destinations or for future payment.

THE CENTRAL BANK

The central bank is an organ of the government that is responsible for the supply of money and regulation of money in circulation within an economy. In Kenya, the central bank was established in 1966 to perform this function.

Functions of the Central Bank

1. **Regulator of Currency**

The central bank is the bank of issue. It has the monopoly of note issue. Notes issued by it circulate as legal tender money. The central bank has an issue department that issues notes and coins to commercial banks. Coins and notes are manufactured by the government mint but they are put in circulation through the central bank which also monitors to ensure that just the right amount is in circulation.

2. **Banker, Fiscal Agent and Adviser to the Government**

- The central bank receives deposits on behalf of the government from such sources as income tax, duties, foreign aid etc. and makes payment on behalf of the government. It keeps the stock of gold of the government.

- The central bank makes short term loans to the government for a period not exceeding 90 days.

- The central bank also advises the government on economic and monetary matters such as inflation, deflation, devaluation or revaluation of currency, deficit financing, balance of payment etc.

3. **Custodian of Cash Reserves of Commercial Banks**

Commercial banks are required by law to keep reserves to a certain percentage of both time and demand deposit liabilities with the central bank. It is on the basis of these reserves that the central bank transfers funds from one bank to another to facilitate the clearing of cheques. Hence it is the commercial banks bank.

4. **Control of Commercial Banks**

All commercial banks in Kenya are under obligation to submit a report of their undertaking to the central bank. These statistics are important in decision making in the financial sector.

5. **Lender of Last Resort**

Commercial banks normally borrow from discount houses, however during times of financial stress, commercial banks can seek funds from the central bank by borrowing at the market rate instead of the bank rate given by the discount houses.

6. **Management and Custody of Foreign Exchange Reserves**

- The central bank keeps and manages the foreign exchange reserves of the country. It is an official reservoir of gold and foreign currencies.

- It regulates the exchange rate of domestic currency interests of foreign currencies. It holds this rate at reasonable limits by virtue of being a member of IMF and ensures stability of the foreign exchange rates.

- The central bank undertakes foreign transactions on behalf of commercial banks and domestic businessmen. It consequently manages outflow of money to other countries.

7. **Controller of Credit**

   The central bank controls the credit creation power of commercial banks in order to control inflationary and deflationary pressure in the economy. The central bank uses monetary policies to reduce inflation in the economy.

INFLATION

THE THEORY OF INFLATION

Inflation refers to the persistent rise in the price levels. John Keynes explained inflation using the concept of inflationary gap. Inflationary gap is the excess of anticipated expenditure over the actual prices of the available output. Inflation rises the cost of living and is a major cause of worry amongst economies in less developed countries.

Types of inflation

1. **Hyperinflation** – This is an extremely high rate of inflation where prices rise at an annual rate greater than 100%. It is usually caused by:

   (a) Economic mismanagement e.g. Zimbabwe
   (b) Excessive printing of money e.g. Germany after World War II

2. **Creeping inflation** – This is a very low rate of inflation, where prizes rise at an annual rate of less than 10%. This inflation is reasonable and often stimulates investment.

3. **Suppressed inflation** – A type of inflation associated with maximum prices imposed by governments. It is accompanied by black markets, hoarding of money etc.

4. **Slump inflation** – A type of inflation that occurs in an economy suffering from a slump, recession or economic stagnation with low economic activities. It often arises from the supply side (rising costs of production).

CAUSES OF INFLATION

(a) Demand Pull Forces
(b) Cost Push Forces

A. Demand Pull Inflation

- It is caused by rising demand and occurs when aggregate demand for goods and services persistently exceeds the aggregate supply of goods and services at current prices.

- Demand pull inflation is said to exist when there is too much money chasing after too few goods. The increase in demand may result from:

  (i) Reduction in taxation – This increases disposable income hence increasing demand for commodities.
  (ii) Depreciation of exchange rate – Make local goods cheaper and more attractive to locals and foreigners, hence they demand more of domestic currency for transaction purposes.
  (iii) Excessive government spending – This increases money supply and hence an increase in demand for goods and services.

B. **Cost Push Inflation**

- Cost push inflation occurs when firms pass on increases in production cost to the consumers in order to maintain their profit margins.
- The increase in production cost may be as a result of:

  (i) Rising prices of raw materials – An increase in the prices of raw materials like oil, rubber, electricity etc. will result in increased production costs.
  (ii) Rising labour cost – When employees and their labour union pressurize the employers for a wage increase, then wages rise faster than the productivity of labour. Labour costs and total production costs results in an inflationary gap.
  (iii) An increase in indirect taxes – An increase in taxes like VAT and import duties rises production costs and causes inflation.
  (iv) Depreciation of currency – Has the effect of increasing import costs of imported raw materials and other inputs. The higher prices lead to higher final price of goods hence inflation.

ANTI-INFLATIONARY MEASURES

These are policies employed to reduce and finally remove inflation. They are broadly categorized into two:

(i) Monetary measures

(ii) Fiscal measure

FISCAL MEASURES

These are policies adopted by the government of a country to regulate the monetary sector. They include the following:

(a) Decrease in public expenditure – A decrease in government purchases, reduces money supply and hence reduces demand for commodities.

(b) Increase in taxes – An increase in taxes reduces disposable income hence decreasing aggregate demand.

(c) Increased public borrowing – The government can borrow from the public by selling its treasury bills and consequently mop up any excess money in circulation.

MONETARY POLICIES

Monetary policies are those adopted by the central bank to regulate money supply within the economy. During inflationary periods, the following monetary policies can be employed:

(i) Increase in bank rate policy – This is the rate of interest the central bank charges commercial banks for borrowing money. To counter inflation, the central bank can increase the bank rate to discourage borrowing.

(ii) Increase in open market operation (OMO) – OMO involves selling and buying of government bonds. During inflationary period, the government sells its bonds and bills and during deflationary period it buys the bills.

(iii) Minimum reserves requirement – Reserve requirement is the minimum amount required from the commercial banks to be deposited in the central bank. During inflationary periods it is increased.

(iv) Consumer selective credit control – Giving credit to specific sectors e.g. central bank can give credit to the agricultural sector and deny the industrial sector credit to regulate inflationary situation.

(v) Margin requirement – Is the difference between the value of security and loan borrowed. To counter inflation, the central bank reduces the minimum margin requirement.

(vi) Rationing of credit – Giving credit up to a given maximum amount only. During inflationary periods, the central bank can place a ceiling of the credit which can be lent.

(vii) Direct action, moral season and publicity.n

DIFFICULTIES OF USING MONETARY POLICIES IN LDC'S

(i) The money market in developing countries is not properly developed so monetary policies cannot be implemented effectively.
(ii) Some financial institutions are not under the control of the Central Bank making it difficult to monitor and regulate their activities.
(iii) Some commercial banks do not fully corporate with the central bank posing an obstacle in the use of monetary policies.
(iv) The prevalence of high inflation makes it difficult to effectively implement monetary policies.
(v) Lack of adequate capital makes the employment of monetary policies difficult.
(vi) In availability of data as most transaction are hardly recorded.

EFFECTS OF INFLATION

Negative Effects

1. People and fixed income experience reduced purchasing power.
2. Creditors and savers lose because the loan or money saved has reduced purchasing power when repaid or withdrawn from banks.
3. Domestic goods become more expensive relative to foreign goods hence causing a balance of payment deficit.
4. Causes structural unemployment – Inflation reduces competitiveness of a country's product both at home and abroad resulting in lose of jobs by residence.
5. Discourages savings – During inflation, the purchasing power of money reduces and consumers prefer to hoard their money resulting in low savings.
6. Adverse Balance of Payments
7. Public may lack confidence in the domestic currency especially for hyper inflation

Positive Effects

1. Firms are able to increase prices and profits before they pay out higher wages.
2. The government is able to collect more income tax since people earn more wages.
3. A creeping inflation has the effect of stimulating economic growth.

UNEMPLOYMENT

Unemployment is defined as involuntary idleness of a person willing and able to work at the prevailing rate of pay but unable to find work.

Types of Unemployment

1. **Frictional Unemployment**
   - Frictional unemployment exists when there is lack of adjustment between demand for and supply of labour.
   - This may be due to lack of knowledge on the part of employers about the availability of workers or on the part of workers that employment is available at a particular place.
   - It is also caused by lack of necessary skills for a particular job, labour immobility, breakdowns of machinery, shortages of raw materials etc.
2. **Seasonal Unemployment**
   - It results from seasonal fluctuations in demand.
   - It is common with agricultural workers who remain employed during harvesting and sowing season and remain idle for the rest of the year.
3. **Cyclical Unemployment/Demand deficiency**
   - Arises due to cyclical fluctuations in the economy.
   - A business cycle consists of alternating periods of booms and depressions.
   - During depressions, income and output of businesses fall leading to widespread unemployment.
4. **Structural Unemployment**
   - It may result from:
     (a) Lack of key factors of production.
     (b) Changes in the economic structure of the society
5. **Residual Unemployment**
   - There will always be a category of unemployment consisting of people who, because of physical or mental disabilities find it very difficult to find work. Some firms attempt to employ a certain number of workers from this group but not enough opportunities exist.

Causes of Unemployment

1. Lack of Capital - The shortage of capital is the hindrance in the establishment of more industries and due to this reason, more employment opportunities are not created.

2. Lack of Education and Training Facilities - Sometimes, employment opportunities are available for skilled and trained persons yet such person do exist in the population.
3. Increase in Population - In various countries, the employment opportunities are not increasing at the rate of increase in labour supply.
   Massive rural to urban migration leading to high levels of unemployment in urban areas.
4. The nature of the education system geared towards white collar jobs
5. Seasonality in production especially countries with agriculture as a predominant activity
6. Massive rural to urban migration leading to high levels of unemployment in urban areas
7. Use of inappropriate technology i.e labour saving or capital-intensive technology is inappropriate for developing countries since they are labour surplus economies.
8. Distortion of relative factor prices where labour is made expensive and capital cheap because of subsidized capital imports.
9. Encouraging foreign direct investment.
10. Encouraging use of domestic resources.

Approaches to Reducing Unemployment

The following methods can be adopted to solve the problem of unemployment:

1. Use of Appropriate Technology - The Government should encourage the use of appropriate technology. In less-developed countries, labour-intensive techniques must be adopted. In this case, more people can be absorbed.

2. Decentralization of Industries - Industries must be established in different regions of a country. The establishment of industries in various parts of the country will provide employment opportunities to greater number of people. It will also induce people not to migrate to other areas of the country.

3. Diversification - When different types of agricultural and industrial goods are produced then there will be demand for more workers. As a result, employment opportunities will increase.

4. Greater Use of Natural Resources - In most of the countries including Kenya, there are uncultivated lands. If these lands are brought under cultivation then more and more people can be employed.

5. Use of Fiscal and Monetary Policies - The Government can use fiscal and monetary policies to create more employment opportunities. Central bank can be encourage to advance more loans to those projects which can provide employment to greater number of people.

6. Education and Training Facilities - Sometimes, there is greater demand for skilled and educated people. The education and training facilities should be provided to the individuals to enable them to increase their knowledge and technical skill.

7. Control of Population Growth -The rapid increase in population is the main cause of unemployment in less-developed countries. The government should take some steps to control the population growth. By reducing the growth rate of population, unemployment problem can be solved in the long run.

8. Increasing effective demand, either by stimulating investment and consumption or both.

9. Pricing policies that encourage use of appropriate technology and economy.

Impact of Unemployment on Society

(a) Lack of jobs translates to lack of self-esteem, mental stress and illness and inability to meet basic physiological needs.

(b) Rise in crime and other anti-social activities.

(c) Low levels of savings and hence low per capita income in an economy

(d) Reduced income for investment purposes hence low economic growth rate.

(e) Higher dependency ratio since the few employed have to support large numbers of dependents.

(f) Overcrowding in urban areas.

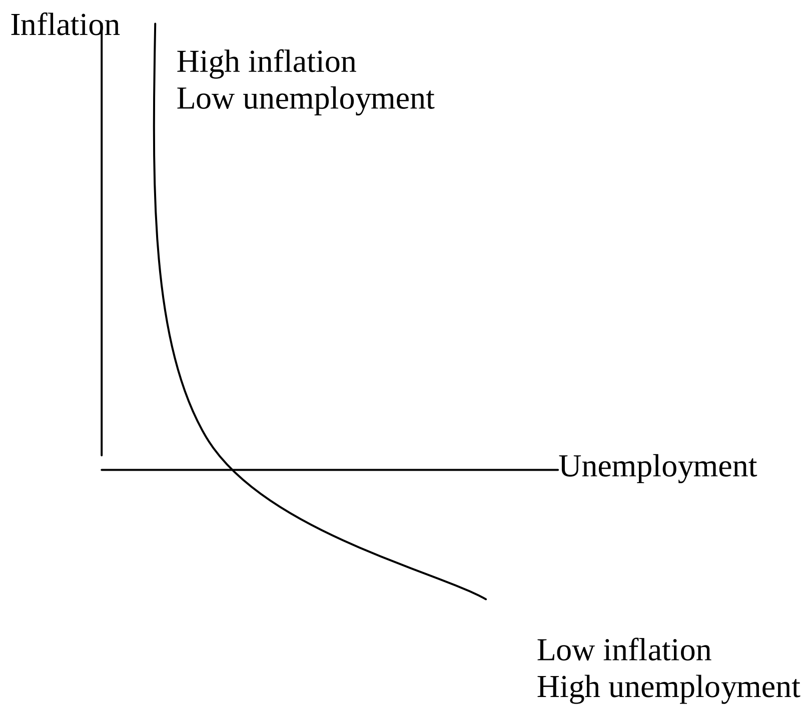
(g) Loss of human capital since unemployed labour will gradually lose its skills.

(h) To maintain the unemployed, the government may be forced to increase its expenditure on social amenities.

UNEMPLOYMENT AND INFLATION

It's possible for a given country to experience some level of unemployment and inflation. Philips pointed out that it's not possible for any country in the world to control inflation and unemployment at the same time as trying to control inflation will bring about unemployment and vice versa.

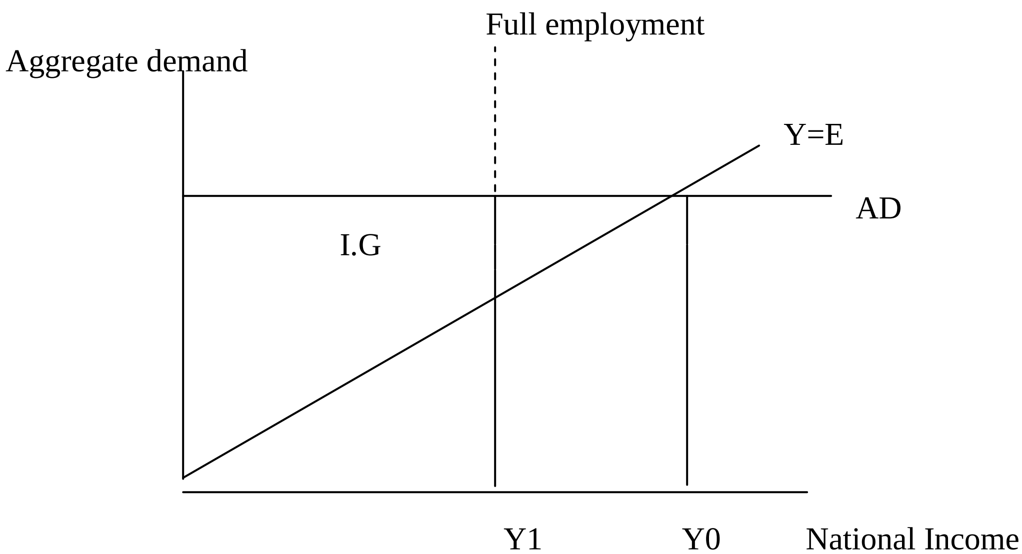
Philips curve.



Keynesians economist have argued that to achieve full employment some inflation is unavoidable, hence a government must be prepared to accept a certain level of inflation as a necessary evil if they have to achieve full employment level as an economic policy objective.

INFLATION AND DEFLATIONARY GAPS.

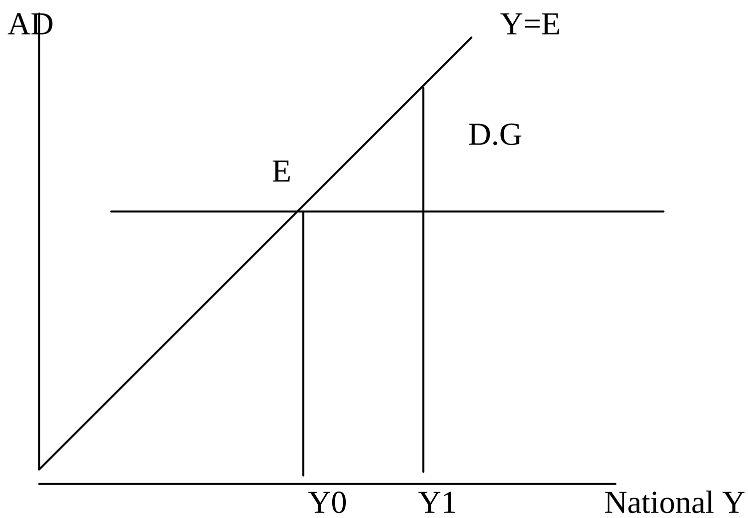
Inflationary Gap
It's said to exist when aggregate expenditure exceeds maximum attainable level of output which results in an upward pressure on the prices.



Y1 represent full employment level of income or level of income where resources achieve the maximum attainable level of output.
Y0 represents the equilibrium level of income which is greater than the full employment level of income as a result there is inflationary gap with associated upward pressure on prices. To combat the reduction in government expenditure or increase in tax will reduce aggregate demand by the full amount of the inflationary gap.

Deflationary gap

This refers to the situation where the aggregate expenditure falls short of that required to produce the level of national income that would ensure full employment. It's the growth by which aggregate demand must be increased to push the equilibrium level of Y to the full employment level.



According to the Keynesian demand management by the government could:

- Eliminate deflation gap and create employment through government expenditure.
- Eliminate an inflationary gap to take inflation out of the economy by reducing government spending or by the increase of total taxes.

It may be possible to shift aggregate demand through government spending to achieve full employment

INTERNATIONAL TRADE

International trade (foreign trade) is the transfer of goods and services from one country to another. Where this transaction takes place between two countries only is called bi-lateral trade. If a country trades with a number of countries the transaction is referred to as multi-lateral trade.

Theories of International Trade

1. Classical theory
2. Absolute advantage theory
3. Comparative advantage theory

1. **Classical Theory**

   (a) **Mercantilism**

   - This is the earliest theory of international trade. Focus of economist between 1500 – 1750 was on the activities of merchants.
   - It was assumed that a countries national wealth was reflected by its volume of precious metals (species).
   - Mercantilist therefore strived to accumulate as much as possible of the precious metals both from within the nation and outside the nation.

   (b) **David Hume**

   - He challenged the mercantalist theory that nations could continue accumulating specie (gold) without repercussion on their international competitiveness.
   - Hume argued that the accumulation of specie through a trade surplus could lead to an increase in money supply which was inflationary because it lead to an increase in prices and wage rates which consequently reduces competitiveness of the national surplus.

2. **Adam Smith: Absolute Cost Advantage Theory**

- Adam Smith advocated for free trade between nations. He argued out that there was no need for government intervention in the market. That the role of the government was to ensure the market is free by removing any barriers to effective operation of the invisible hand of the market (supply and demand forces).
- He developed the absolute cost advantage theory. This theory states that two countries can trade with each other, where each country should specialize in production and export of those goods in which they have absolute cost advantage and import those goods in which the trading partner has an absolute cost advantage.

Illustration

Given goods	X	Y
Country A	10 hours/unit	40 hours/unit
Country B	20 hours/unit	30 hours/unit

In terms of production of good X Country A has absolute advantage, while Country B has absolute advantage in production of good Y, so there exist a basis of exchange.

According to Adam Smith, free trade increased the national wealth of all trading countries and he emphasized that it is a maxims of every prudent master of a family never to attempt to make at home what it only cost him more to make than to buy.

Shortcoming of Absolute Cost Advantage Theory

1. It does not tell who get what from trade hence some countries end up benefiting more.
2. The theory assumes one country will have absolute advantage in production of one product only, where one country has absolute advantage in production of both products, this theory collapses.

3. **Comparative Advantage Theory by David Ricardo**

According to this theory, even if a nation has absolute disadvantage in the production of both goods relative to its trading partner, a basis for mutually beneficial trade may still exist.

The theory of comparative advantage states that two countries can trade where the less efficient nation specializes in and exports the good in which it is comparatively less inefficient or where it is absolute disadvantage is least. The more efficient national should specialize in and export that good in which it is comparatively more efficient i.e where its absolute advantage is more efficient.

Illustration

	Output per unit of labour	
Given goods	Good A	Good B
Country 1	10	10
Country 2	5	8

C_1 has absolute cost advantage in production of both good A and Good B. It has a relatively great advantage (comparative advantage) in the case of good A. Although C_2 is disadvantaged in production of both goods its disadvantage is less in the case of good B. Therefore a basis of trade exist, where C_1 will specialize in and produce good A and C_2 specialize in and produce good A and C_2 specialize in and export good B.

Limitation of Comparative Advantage Theory

(i) It assumes perfect competition which is a rare situation
(ii) It assumes law of constant cost whereas production takes place under conditions of diminishing cost.
(iii) It only explains a two commodity and two countries situation
(iv) The gains from trade are modified by the existence of transport costs and tariffs
(v) It ignores changes in taste and preference.

ADVANTAGES OF INTERNATIONAL TRADE

1. International trade enables a country to get what it cannot produce at home.
2. It enables a country dispose of her surplus goods for an economic gain.
3. It affords the citizens of a country a greater variety of goods.
4. It enables countries to specialize in fields in which they have the greatest advantage over others.

5. It leads to a certain degree of dependence of every country on another, hence promoting international peace e.g. Uganda and Kenya.
6. At times of calamities e.g. droughts, floods etc. supplies may be obtained swiftly from other countries.
7. Movement of people of one country to another promotes international understanding.
8. Enables a country to import capital goods like machinery for production purpose e.g tractor.
9. It is a source of revenue to the government e.g. tax on cars.

DISADVANTAGES OF INTERNATIONAL TRADE

1. If a country exports mainly raw materials and imports manufactured goods, a problem of balance of trade arises.
2. Goods imported from more developed countries pose a threat to the infant industries in developing nations.
3. Supplies of imports are not always guaranteed during an emergency.
4. International trade allows infiltration of harmful products eg drugs into a country.

Visible and Invisible Trade

Visible trade is the export and import of goods buy a country e.g export of tea, coffee and import of cars, clothes etc.
Invisible trade is the export or import of services e.g banking, insurance etc.

Balance of Trade (BOT)

The balance of trade is the difference between the value of visible imports and visible exports of a country. Favourable balance of trade exists when a country's exports of visible goods exceed the imports of the same and vice versa.

Balance of Payment (BOP)

The difference between the receipts (both for visible and invisible exports) and payments (both for visible and invisible imports) is called the BOP on current account. If the receipts exceed payment for both visible and invisible transactions, the difference is called a favourable balance of payment on current account and vice versa.

A country may invest money in another country(s) by either loaning money or establishing industries there. Similarly a country may borrow money from other countries or invite foreign industries to invest in local companies. Receipts and payments of this nature are called capital items. The difference between receipts and payments of capital items is called balance of payment on capital accounts.

The difference between receipts and payments on both current and capital accounts is called the overall balance of payment.

Correction of BOP Deficit

(i) Reduce imports relative exports
(ii) Export more of finished goods
(iii) Adopt import substitution policies
(iv) Encourage development of export promotion
(v) Use more strong protectionist tools
(vi) Employ currency devaluation approach

Devaluation and BOP Imbalance

Devaluation under fixed exchange rate regime means a loss in value of the currency whose price has fallen relative to the value of another currency. Due to devaluation exports become cheaper for foreign buyers and imports dearer which improves BOP.

However the presence of the following conditions might hinder the successful use of devaluation to correct BOP imbalance:

(i) Not good to use when elasticity of demand for exports and imports is less elastic
(ii) If inflation is high it should be avoided.
(iii) If it cancels the benefits expected.

FREE TRADE AND PROTECTIONISM

Free Trade

Free trade is said to exist where goods can be imported or exported from or to any part of the world. Without seeking for approval from the government. This theory was developed by Adam Smith who argued that growth of a productive capacity in a nation was fostered by an environment where people were free to pursue their own self interest.

Arguments for Free Trade

1. It converts the whole world into a global economy (one big market) hence lowering cost of production and increasing output.
2. It gives the consumer an opportunity to buy things at lower prices.
3. It affords consumers greater variety of goods to choose from.
4. It promotes specialization of production by countries.

Trade Protectionism

The policies that a country uses to restrict inter-trade barriers of trade or protectionist policies.

Protectionism tools include:

(a) Tariffs – These are taxes that a country imposes on goods/services as they cross a national boundary. Also called import duty.

(b) Import quotas – Are set quantitative limits. They limit the quantity that can be imported within a given time.

(c) Subsidies – Financial support given to home industries to lower production cost and promote international competitiveness of their output.

(d) Trade agreements – Are agreements between two or more countries to reduce or remove trade barriers amongst themselves for a mutual trade gain amongst member states e.g. EAC, EU, ECOWAS etc.

(e) Total ban – Where the government imposes a complete ban on importation of certain products e.g. bang.

Arguments for Protection

1. Protection of infant industries. A country must protect its domestic industries against unfair competition from foreign industries which are developed and enjoy economies of scale in production.
2. Correction of balance of payment imbalance. By imposing tariffs, a country is able to regulate its performance in international trade, hence correct a surplus or deficit balance of payment.
3. Anti dumping of cheap products. Protectionist policies enable a country to totally ban exploitative to consumers.
4. Employment creation. By controlling foreign trade, a country is able to create employment opportunities to its own residents by promoting growth of new industries, innovativeness etc.
5. Specialization on one product leads to efficiency to production.
6. Tariffs are a source of revenue to governments.

ECONOMIC GROWTH AND DEVELOPMENT

Economic Growth

This is an increase in National income

- It means more output or greater output from greater amounts or greater output efficiency therefore an increase in output per unit for input.
- Growth is related to quantities sustained increase in a countries per capita income accompanied by expansion of national income or total volume of production of goods and services from an economy over a period of time usually a year.
- Economic growth relates to total output regardless of whether or not per capita income increases
- Economic growth addresses itself to such questions as how many universities do we have, how many graduates do we have, how many trade and industry do we have etc
- Growths therefore concern itself with the volume and ignore distributional aspect and quality.

Determinants of economic growth

1. **Labor force**
   The higher the labour force the higher the output and the higher the N.I. and therefore the higher the growth.
2. **The amount of capital available**
   The higher the capital stocks through increased savings the higher the investment and the higher the output and the higher the growth.
3. **The amount of natural resources available**
   The more the natural resources an economy has the higher the output and the higher the growth
4. **The political climate**
   An economy with humble political environment attracts more investors leading to more output and higher growth
5. **The level of technology**
   Advanced technology implies highest output and faster economic growth the reverse is true.
6. **Quality economic resources**
   If resources are quality or qualitative and are many in No. total output will increase and economic growth will be experienced.
7. **Social cultural factors or conditions**
   This includes family structures, class structures, race relationships and religious beliefs together with traditional beliefs which affect the volume and quality of output.
8. **The No. of productive sectors and their sizes**
   The more the productive sector in an economy and the larger in size the more output and higher the growth.
9. The state of balance of payment

10. Favorable balance of payment means high income and faster economic growth

Importance of economic growth

1. Growth leads to increase standard of living. This is because it's associated with increased income.
2. Growth facilitates the solution to unemployment. This is because people living with high income will demand more forcing the producer to employing more people.
3. Growth means a source of government revenue through increased taxes on the productive firms.
4. With growth there is increased output and illumination of poverty.
5. Growth updates women's status as women are liberated and are no longer slaves in the kitchen since they come out to produce to what economic development
6. Growth enables the distribution of income and health without making anyone worse off due health competitor because it opens up an economy for people to compete.
7. Growth gives hope and forestalls social unrests in an economy i.e. people get incomes and there are no social evils.
8. Growth contribute to improvement to technology because its associated with research and development
9. Growth leads to self reliance because a country can produce all that it requires becoming self reliance
10. Growth can lead to improvement in social amenities such as housing facilities water, health etc

Disadvantages of growth

1. It entails individualism which is selfishness and against the traditions particularly as seen in capitalists states.
2. It has an opportunity cost because current consumption is sacrificed for higher consumption in future
3. Because economic resources are finite growth may not be possible for a long time
4. It can create negative externalities such as pollution and congestion which is a social
5. It reinforces inequality particularly in capitalist state which is unfair.
6. It entails mental and physical strains i.e a lot of toiling, loss of energy and time which is unnecessary.
7. It may contribute to unemployment together with high cost of movement from one job to another due to a lot of obsolescence (Loss of skills)

To incorporate both growth and institutional changes development is measured after a very long time.

- It implies both more output and change in technical and institutional arrangement hence implying changes in consumption of output and in allocation of input per sector.
- From this perspective therefore economic development relates quantitative and qualitative changes in economic wants goods incentives and institutions. It includes changes in terms of belifes both religious and traditional.
- It also incorporate changes in the method of production from substance to monetary (Market economy)

There are four basic indicators of economic development which also are taken to be the measure of development.

1. **Gross National product**
   An increase in gross national product income over a long period of time will indicate whether development is taking place or not such that a positive increase of GNP means increase in output and existence of economic development.
2. **Increase in growth per capita income**
   If income per person in an economy is constantly growing for a long period of time then economic development is taking place and vice versa
3. **Sustained secular improvement in material well being**
   An increase in secular improvement of the material well being reflected in an increased floor of goods and services means existence of economic development because people welfare has increased or is increasing.

4. **Increase in social amenities**
   These include amenities such as health facilities roads and nutrition education and employment opportunities.

Other indicators

5. **Changes in perception**
   This includes changes in thinking among the population
6. **The amount of National Income**
   The higher the national income the higher economic development
7. **The quality of product produced**
   The higher the quality of goods and services the higher the economic development
8. **Types of government and management**
   Good governance and management practices leads to high economic development
9. **The amount of quality of investment in an economy**
   The higher the investment and the quality the investments are the faster the economic development.

   NB The opposite of economic development is under development

UNDER DEVELOPMENT

It is a situation of no prospect for development. Therefore under developed countries are those countries which have no potentialities of development. They are also known as developing, underdeveloped countries or 3rd world countries

Characteristics of under development

1) **They are poverty ridden**
   This is reflected in low per capita income of these countries.
2) Most people in these countries live in rural areas and depend on agriculture and in particular substance product
3) They are characterized with underdeveloped natural resources i.e. underutilized economic resources or even mis – utilized economic resources
4) They are dualistic economies i.e. they are both monetary and substance economies
5) These countries have diversities in population sizes, densities age structures etc. Otherwise they posses higher population growth rate.
6) These countries experience shorter life expectancy of majority of their population.
7) They experience high unemployment rates and under employment for the population.
8) They experience economic backwardness manifested in low labor efficiencies factor, immobility economic ignorance etc.
9) They experience a lot of child labor force and women status and position in society are inferior to men
10) Lack of entrepreneur abilities
11) Inefficient capital equipment
12) Technological backwardness
13) Exporter of primary product and importers of capital goods which are expensive.
14) Backward population.
15) They face irrelevant education systems
16) They face structural imbalance et

Question

(a) Differentiate between economic growth development.
(b) What is underdevelopment and what are the characteristics of underdeveloped countries

Causes of underdevelopment

1) Low industrialization
   This is because of lack of technology
2) Higher population explosion

This leads to high subsistence output

3) Poor infrastructure facilities
E.g. poor transport and communication
4) High dependence on imports – external dependence
5) Poor government policies
6) Climate anomalies i.e. Agricultural countries
7) Neo – colonialism – they have been dictated by developed countries
8) Unexploited economic resources.
9) Diseases and pests affect output.
10) Stiff competition from developed countries in international markets
11) Religious and cultural beliefs known as convections – they affect production