1. DEMAND AND SUPPLY

Meaning of demand

Demand is the quantity of a product that buyers are **willing and able** to buy at a **given price** over a given **period of time**.

Factors that determine the demand for a product (determinants of demand)

1. **The price of a product:** if the price is low, more will be demanded, if high less will be demanded.
2. **The buyer's income:** the higher the people's income the higher the demand for gods and services and vice versa.
3. **Government policy**: if the government imposes high taxes on a commodity, it becomes expensive and less of it is demanded. The effects of a subsidy are to lower the price of the product leading to an increase in its demand. The government may also influence the demand of a product by enacting laws that either limits or promotes the consumption of a product.
4. **The population**: with many people available more of the goods are demanded and if the people are few, less is bought from the market.
5. **Tastes, fashions and preferences**: if people have a preference for a product they will demand more of it. If their preferences changes to another product, they will reduce the demand of the product they were using before.
6. **The distribution of incomes**: where income is well distributed, the demand for goods and services is high as opposed to when the income in the hands of a few people.
7. **Future expectations of price changes**: if the prices are expected to go up in the future, more goods will be demanded in the present and if the price is expected to go down in the future, fewer goods will be demanded in the present.
8. **The weather**: certain goods are demanded more during certain weather conditions e.g heavy clothes during cold seasons or umbrellas during rainy seasons.
9. **Price of related products**: for goods that are compliments of one another, e.g pen and ink, a fall in the price of one leads to an increase in the demand of the other. In the case of the goods that are substitutes of one another, e.g soda and fruit juice, an increase in the price of one leads to an increase in the demand of the other.
10. **The terms of sale**: the better the terms of sale, for example, provision of credit or better discounts, the higher the demand for a given product.

Types of demand

Derived demand: a product is said to have derived demand when it is demanded to help in the production of other goods and services for

example the demand of building materials arising from the demand of houses.

Joint demand: items are said to have joint demand if the use of one will require the use of another. The goods are complimentarily used together like pen and ink.

Demand schedule and demand curve

Demand schedule

A demand schedule is a table showing the quantities of a commodity that consumers are willing and able to buy at different prices within a given period of time. A demand schedule can be prepared for an individual or for the entire market.

Demand curve

A demand curve is the graph showing the quantities demanded against the prices. On the y-axis is recorded price and the x-axis the quantities demanded.

Draw a demand curve given the following demand schedule

Price of the product in shs	**Quantity of the goods demanded in kg**
10	40
20	35
30	30
40	25
50	20
60	15
70	10
80	5



The graph shows that the demand curve (DD) slopes from the left to the right, indicating that as prices goes down the quantity demanded increases and vice versa.
This tendency of demand to increase as price decrease and to reduce as the price increase is referred to as the **law of demand.** Therefore a normal demand curve slopes from left to right.

Movement along a demand curve and a shift in demand curve

Movement along the demand curve
A movement along a demand curve refers to changes in quantity of a product demanded as a result of **change in its price only.** As the price of the product increases the quantity demanded decreases. It leads to a movement from one point to another on the same demand curve as shown below:
(i) (ii)

(i) In a movement along the demand curve no new demand curve is created. If price increase from P_0 to P_1 in the diagram above quantity demanded will fall from Q_1 to Q_2 i.e. movement from **a** to **b**.

(ii) If price fall from P_2 to P_3, the quantity demanded increase from Q_2 to Q_3 i.e. movement from **a** to **c.**

Shift of the demand curve

This is when the demand curve moves either to the right or left. It occurs as results of changes in factors influencing demand other than price of the product concerned. This can be illustrated as below:

In (i) at price OP the quantity demanded is OQ. After the demand curve shift from D_0D_0 to DD a different quantity OQ_1 is demanded although the price remains at OP. thus points L and M are on different demand curves.

Similarly when the demand curve shifts from D_1D_1 to D_2D_2 as in (ii) a different quantity OQ_3 is demand at the same price OP_2 as before. Thus the two points R and S are on two different demand curves.

A shift of demand curve to the left (decrease in demand) can be brought about by the following factors:

- ✓ A decrease in people's incomes.
- ✓ A decrease in the price of a substitute product.
- ✓ Lower population in the area.
- ✓ Negative changes in tastes, fashions and preferences towards the product.
- ✓ The introduction of a new but cheaper substitute.
- ✓ Deterioration in the terms of sale e.g. lower discounts

A shift of demand curve to the right (increase in demand) can be as a result of:

- ✓ An increase in the people's incomes.
- ✓ An increase in the price of a substitute product.
- ✓ An increase in population.

- ✓ An improvement in terms of sale e.g. where better discount are given
- ✓ A decrease in the price of a complementary product.
- ✓ An improvement in tastes, preferences towards particular product.

Differences between a movement along a demand curve and a shift of a demand curve

Movement along a demand curve	**Shift of a demand curve**
(i) It involves only one demand curve	It involves two demand curves
(ii) It is brought about by changes in the quantity demanded.	Brought about a change in other factors that influences demand other the price of the product.
(iii) It involves a change in the quantity demanded.	Involves a change in demand.
(iv) A different quantity is demanded only at a different price.	A different quantity is demanded at the same price as before.
(v) A movement along the curve can be traced up and down along the same curve.	A shift causes to move either to the right or left.

SUPPLY

Supply is defined as the quantity that suppliers are willing and are able to take to market at a given price over a given period of time.

Factors which influence supply of a product

(i) **The price of the product**: the higher the price, the higher the supply while the lower the price, the lower the supply.

(ii) **The cost of production**: an increase in the cost of production leads to a reduction in the supply of goods, while a decrease in the cost of production leads to an increase in the supply of goods.

(iii) **The level technology**: an improvement in the level of technology leads to a reduction in cost of production in an increase in supply.

(iv) **The government policy**; this includes the imposition of taxes, subsidies, quotas and price controls. Taxes increase the cost of production hence supply will decrease. A subsidy lowers the cost of production leading to an increase in the supply. Imposition of quotas places an upper limit on the quantity that may be supplied irrespective of the price. Where the government sets prices, firms will react accordingly. If the price set is high, the supply will be high, if the price set is low, the supply will also be low.

(v) **Available of inputs**: shortage of raw materials leads to low production, hence low supply.

(vi) **Future expectations of price changes**: where producers expect the price of goods to increase in the future, they may decide to restrict supply, until that when the prices go up.

(vii) **Natural factors:** bad weather like droughts and floods leads to poor harvests, hence low supply of agricultural products. Favorable weather conditions leads to more harvests hence more supply.

Supply schedule and supply curve

A supply schedule is a table showing the relationship between supply of a commodity and its price. It shows the quantity supplied at various prices. The supply curve is a graphical illustration showing the trend taken by supply as price either increases or decrease.

Draw a supply curve using the figures given in the supply curve below.

Price of x	2	4	6	8	10	12	14	16	18
Supply of x	5	10	15	20	25	30	35	40	45

The supply curve (SS) slopes from the right to the left showing that as the price increases, the supply also increase. For example, at a price Shs. 8, the supply is 20 units. As the price goes up to Shs. 16, the supply also goes up to 40 units.

Movement along the supply curve

This is said to be a movement along a supply curve when the quantity supplied of a commodity changes as a result of a change in its price “all other factors remaining constant”. It leads to a movement from one point to another on the same supply curve as shown below:

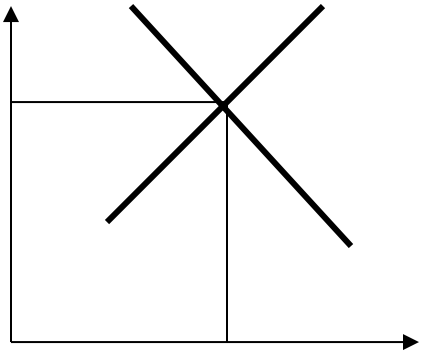
In (i) when price changes from OP_0 to OP_1 the movement is downwards from point X to point Y on the same supply curve S_0S_0. This leads to the supply of OQ_1 instead of OQ_0.
In (ii) when the price changes from OP_2 to OP_3 the movement is upwards from T to point Z on the same supply curve. The quantity supplied changes from OQ_2 to OQ_3.

Shift of a Supply curve

A shift of the supply curve is when the entire curve moves either to the left or right as a result of changes in factors influencing supply other than the price of the commodity involved.

In (iii) the whole supply curves S_2S_2 shifts to S_3S_3 resulting in the reduction of quantity supplied from OQ_3 to OQ_4 at the same price OP_3 as before. Instead a point on curve S_2S_2

EQUILIBRIUM PRICE AND EQUILIBRIUM QUANTITY



2. SIZE AND LOCATION OF A FIRM

1. Meaning of firm and industry

A firm is an individual enterprise or business unit under one control an ownership e.g. a business unit carrying the production of a good or service such as production of soap or a legal service firm.
A firm is a single business unit or enterprise under one ownership, management and control e.g. KCC, Brookside etc.
An industry consists of all those firms producing the same type of products in the same line of production. A sop industry consists of all those firms producing soap while an insurance industry consists of all these firms providing insurance services.
An industry refers to a group of firms producing the same products for a given market e.g. the milk industry which includes firms such KCC and Brookside. In some cases where we have a single firm, the firm becomes the industry.

2. ***Factors which influence the decision on what goods and services to produce***.
    - **Profitability**
      Businesses tend to provide goods and services that would yield maximum profit.
    - **Level of competition**
      In order to survive in a competitive market, firms must come up with products with products that consumers prefer. A firm may therefore develop products that are not currently available or copy rivals ideals and improve on them.
    - **Cost of production**
      A firm would produce commodities for which production costs are low.
    - **Demand/ market**
      A firm will produce commodities that have the highest demand since demand leads to high sales volume.
    - **Availability of resources**
      A firm can only produce commodities for which the necessary resources are available. Such resources include raw materials, labor, equipment, adequate space and appropriate technology.
    - **Government policy**
      A firm should produce goods which are favored by the government policy e.g. low taxation and subsidies. Firms should not produce goods that are illegal as it will be breaking the law.

3. Determining the size of the firm

The following are some of the ways/factors which the size of a firm may be determined:

- **Level of output/volume of output**
  A firm's size may be judged by the level of output. A large firm will produce on large scale, while a small firm will produce on small scale.
- **Number of employs in the firm**
  A small firm is likely to employ only a few employees, while a large firm will most often employ many workers.
- **Floor area covered by the premises**

A firm with large floor area covered by premises may be said to be large.

- **Size of the market controlled by the firm**
  Large firms control large proportions of the total market of a particular product. Small firms may only control a small size of the market.
- **Capital invested**
  The larger the capital of the firm in terms of assets the larger the firm and vice versa.
- **Methods of production adopted**
  A large firm will most often adopt capital intensive methods of technology, where operations will be highly mechanized while small firms use more labour then machinery.
- **Sales of volume**
  Small firms have low levels of sales with a given period while large firms have huge levels of sales.

4. Location of the firm

Location is the site or place from which the business operations/firms would be established. The management has to make appropriate decisions concerning the location of the firm since a good location would lead to success while a bad location would lead to failure of the business enterprise.

Factors that influence the location of a firm

a) Raw materials

The availability of raw materials is one of the factors that determine the locations of a firm. Firms should be located near the source of raw material when:

i. The raw materials are heavy and bulky so as to avoid high transport as cost to the firm.
ii. The raw materials are perishable so as to ensure they get the firm in fresh.
iii. The competition for the raw materials is high should be located near their source so as to ensure that it gets all the raw materials it requires at all times.

Advantages of locating a firm near the source of raw materials

i. Transport cost of raw materials in minimized
ii. Storage cost of raw materials will be minimized.
iii. It is easier for the firm to select the quality of raw materials required.
iv. Easier to get fresh raw materials and undamaged raw materials.
v. Production process can run uninterrupted because of constant supply of raw materials thus continuous production.

b) Labour (human resources)

Labour is a basic factor of production. It can be skilled, unskilled or semi-skilled labour. It is important for firms ton be located in an area where there is large supply of labour so as to ensure adequate supply of this important factor. Location of the firms near the source of labour reduces the cost of transporting labour force to factories and also reduces time wasting in transporting labour from far.

c) The market

Reasons for locating near market

- **i.** If the finished product is perishable, then the firm should be located near the market so as to ensure that it gets to the market in fresh state.
- **ii.** If the finished product is bulky, the firm should be located near the market so as to avoid high cost of transport to the market.
- **iii.** If the final product is fragile, the firm should be located near the market so as to avoid losses that may result from breakages as the product is transported to the market.
- **iv.** If there is high completion, the firm should be located near the market as this will make it easy to get to the customers fast.
- **v.** Where a product is made as per customers' specification, the firm should be located near the market.

d) Transport and communication

A firm should be located in an area that is well served by means of transport. This ensures that both raw materials and finished products can be transported with ease.

A firm should be located in an area that is well served by means of communication. This ensures that the firm is able to communicate with its customers and suppliers, and vice versa.

Poor developed transport and communication facilities may lead to:

- **i.** High transport cost especially where raw material or the finished products are bulky.
- **ii.** Delays in receiving the raw materials and distributing the finished products.
- **iii.** Where communication network is poor, business people will not able to give or get information in time.

e) Availability of power

Industries require electric power to operate. They should, therefore be located where electricity is readily available.

f) Security

Industries should be located in areas with adequate security .

g) Auxiliary services

Firms should be located where auxiliary services such as insurance, banking and warehousing are available.

h) Water

Many firms require water in one or more processes. Such firms should be located in an area where water is readily available.

i) Government policy

The government may formulate policies that may have implications on the location of the firms, especially with regard to physical planning.

Such planning may be aimed at checking rural-urban migration, environmental degradation or for strategic concerns.
The government may therefore encourage the development of firms in some areas by offering concessions to industrialists such as:

i. Offering free land
ii. Reduction on taxes
iii. Offering subsidies
iv. Improvement of infrastructure
v. Offering direct financial assistance

LOCALISATION AND DELOCALISATION

Localization of firms is a situation where many firm are concentrated in a particular area.

Delocalization of firms describes a situation where location of firms is spread in different regions to minimize the problems of localization.

Advantages of localization

i. Firms will benefit from already from established skilled labour pool from which they can recruit their employees.
ii. Firms will benefit from already established infrastructure such as transportation and communication.
iii. Firms will benefit from auxiliary services firms that may already have been established.
iv. Such areas have social amenities such as hospitals and schools.
v. Employment is created in such areas.
vi. Joint management of wastes can be carried out by all firms.
vii. Firms may benefit from already established markets.
viii. Firms may be able to get raw materials easily, as they may use the by-products produced by other industries as their raw materials.

Disadvantages of localization

i. As many people move to such areas in search of jobs, slums may be created.
ii. Land becomes very expensive in such areas.
iii. Congestion and traffic jams are a common problem in such areas.
iv. In case of war such areas can become a target of attacks.
v. Leads to rural-urban migration leaving the old and the young in the rural areas.
vi. A lot of environmental degradation through pollution by many cars, deforestation, discharges of waste and mining in the area.
vii. Social problems such as crime, prostitution and illegal drugs are a common problem in such areas.

Advantages of delocalization

i. It ensures that all areas are developed.
ii. To ensure that employment opportunities are evenly distributed all over the country.
iii. It reduces rural-urban migration since people can get jobs in the rural areas once industries are delocalized.
iv. It promotes the development of infrastructure all over the country.

v. It leads to the establishment of auxiliary services e.g. banks and insurance firms, in rural areas for the benefit of the residents.
vi. It enhances the development of social amenities such as schools and hospitals in all areas of the country.
vii. It lessens losses in case of attack by enemies during war.
viii. People in rural areas are provided with goods and services closer to where they are.

Disadvantages of delocalization

i. Pollution is spread to the rural areas.
ii. The security in such areas may not be guaranteed.
iii. It might be expensive to hire and attract appropriate labour.
iv. Auxiliary services such as banks and postal services may be lacking in such areas.
v. Incentives offered by the government to industries in order to delocalize add to public expenditure, which is an added burden to tax payers.
vi. Industries may not enjoy the benefits that accrue from concentration of industries e.g. developed infrastructure.

Ways in which the government may motivate industries to delocalize

i. By giving entrepreneurs free of cheap land to construct their factories.
ii. By giving tax incentives to those who locate their industries in the delocalized area.
iii. By giving cheap loans to entrepreneurs wishing to establish industries in areas with few industries.
iv. By providing security in the new industrial areas.
v. By providing subsidies to those industrialists who are willing to delocalize.
vi. By providing the appropriate infrastructure in the area.
vii. By providing social amenities e.g. schools and hospitals in areas where the delocalized industries are to be established.
viii. By offering financial assistance to the delocalized industries.

ECONOMIES OF SCALE

Economies of scale are the benefits the firm or industry derives from expanding its scale of production/the advantages of operating on large scale. There are two types of economies of scale;

i) Internal economies of scale
ii) External economies of scale

Internal economies of scale

These are advantages that accrue to a single firm as its production increases, independent of what happens in the other firms in the industry.

Internal economies of scale result from an increase in the level of output and cannot be realized unless output increases.
The internal economies of scale may be achieved by a single plant of the firm or they may arise from an increase in the number of plants.
The internal economies of scale include;

i) Marketing economies (Buying and selling economies)

These are the benefits which a firm derives from large purchases of inputs or factors of production due to the discounts offered in the process e.g. trade and quantity discounts
The firms may also incur less cost per unit in transportation of the goods bought
Selling economies of scale arise from the distribution and sale of the finished product as the scale of production increases, i.e it is likely to incur less cost per unit in areas such as advertising, distribution e.t.c

ii) Financial economies; As a firm grows, its assets also increase. These assets can be used as security to borrow money/loan from financial institutions at low interest rates.
Large firms can also raise more funds through selling and buying of shares and debentures.

iii) Risk bearing economies; Large firms can reduce risks involved in the market failure through diversification of products or markets. Diversification of markets or products can be done so that;

a) Failure of one product is offset by the success of other products
b) A failure of a product in one part of the market may be offset by the success of the same product in another part of the market
-Large scale firms are also able to obtain supplies from alternative sources so that failure in one does not significantly affect the activities of the firm.

iv) Managerial economies/staff economies

Large firms are able to hire/employ specialized staff and management. This increases the firms efficiency and productivity i.e.

a) The staff is able to make viable decisions that can go along way in increasing the firms output.
b) The firm/management is also able to put in place better organizational structures which allow for departmentalization and subsequent division of labour.Division of labour leads to specialization and hence the overall increase in the firms output.
-the costs of hiring/employing the specialized staff/management are spread over a large number of units of output of variable cost of production.Thus,the cost of labour is minimized when production increases leading to increased profits.

v) Technical economies;

These are benefits that accrue to a firm from the use of specialized labour and machinery. Large firms have access to large capital which they utilize to obtain those machines and hire the specialized labour.The machines use the latest technology and are put to full use, making the firm production more

efficient i.e. cost of the machines and labour are spread over many units of output hence less costly but giving higher profits.

vi) Research economies;
Large firms can afford to carry out research into better methods of production and marketing.(Research is necessary because of the increased competition in the business world today) This improves the quality of the products and increases the sales and profits made by the firm.

i) Staff welfare economies;

Large firms can easily provide social amenities to their employees including recreations, housing, education, canteens and wide range of allowances. These amenities work as incentives to boost the morale of the employees to work harder and increase the quality and quantity of output. This leads to higher sales and profits.

ii) Inventory economies

A large sized firm can establish warehouses to stock raw materials and therefore enjoy large stocks of raw materials for use when the raw materials are in short supply.Thus, the firm can avoid production stoppages that can be occasioned by shortages of the raw materials. The suppliers of such material may be sold at a higher price to realize profit.

External economies of scale;
External economies of scale are those benefits which accrue to a firm as a result of growth of the whole industry. They are realized by a firm due to its location near other firms. They include;

a) Easier access to labour; Where many firms are located in one area a pool of labour of various skills is usually available. Therefore firms relocating to the area find it easy to obtain.
b) Improved/efficient infrastructure; Usually where many firms are located, infrastructure would be highly developed e.g. roads, power, water and communication facilities. Firms relocating in that area thus enjoy the services of infrastructure already in place.
c) Firms may be able to dispose off their waste product easily
d) Ready market may be available from the surrounding firms
e) Readily available services such as banking, insurance and medical care
f) Adequate supply of power due to large volume of consumption e.t.c

Diseconomies of scale

A firm cannot continue to expand indefinitely or without a limit.As a firm grows or industry expands, the benefits the firm can reap or get from such growth or expansion have a limit.
Any further expansion in the scale of production beyond the limit will actually create negative which would increase the cost of production.
The negative effects to a firm due to its size or scale of production are referred to as ***diseconomies of scale.***
Diseconomies of scale are therefore the problems a firm experiences due to expansion.

Sources of diseconomies of scale

Diseconomies of scale may arise from;

a) Managerial functions which become increasingly difficult to perform as the firm expands. Communication and consultations take more time than before.
b) Changing consumer tastes which may not be fulfilled immediately because decision-making may take too long.
c) Increase in the costs of transporting raw materials, components and finished products.
d) Labour unrest or disputes and lack of commitment from the employees because they are not involved in decision making
e) Stoppage of production process when disputes arise since all production stages are interdependent and labour specialized.
f) Lack of adequate finances for further expansion of the firm.

There are two forms of diseconomies of scale fiz internal diseconomies and external diseconomies of scale.

Internal diseconomies of scale

These are the problems a firm experiences as a result of large scale production due to its persistant growth. They include;

i) Managerial diseconomies of scale

These are the losses which may arise due to the failure of management to supervise and control the operations properly. This may be because the firm is large resulting into;

a) Difficulties in controlling and coordinating the departments leading to laxity among employees.
b) Difficult in decision making and communication and co-ordination between management and workers. Delays in decision making means lost opportunities.
c) Impersonal relationship between management and workers, and staff problems not easily established which could lead to low morale, disputes, unrests/skills.
d) An increase in management tasks leading to increase in number and impact of risks i.e. any error in judgement on the part of management may lead to big losses.

ii) Marketing diseconomies of scale

These are losses which may arise due to changes in consumer tastes. These may be as a result of;

a) A change in tastes leading to fall in demand for the firms products. A large firm may find it difficult to immediately adjust to the changes in the tastes of consumers, hence it will experience fall in its scale.
b) An increase in the scale of production, which leads to higher demand for factor of production such as labour, raw materials and capital. This will result into higher prices for them. This will push up the prices of the goods and services produced, which will cause a fall in sales.

iii) High overhead costs

When the output of a firm increases beyond a certain limit, some factors may set in to increase the average costs.e.g the overhead costs incurred in production and marketing activities may increase. This is because firms may intensify their promotional campaign, incur heavy transport expenses and be forced to offer generous discounts in an effort to attract more clients. All these are factors that may increase overheads without any corresponding increase in real benefits to the firm.

iv) Financial diseconomies of scale

These are losses which may arise due to a firm's inability to acquire adequate finances for its expansion. This will prevent the firm from expanding further thereby limiting its capacity to increase the volume of its output.

External diseconomies of scale

These are demerits that affirm experiences as a result of growth of the entire industry. These include;

-scramble for raw materials
-inavailability of land for expansion
-scramble for available labour
-competition for available market
-easy targets especially in times of war.

Existence of small firms in an economy

As the firm grows in size, its scale of production increases.However, many firms remain small even though they face stiff competition from larger firms. Some of the reasons for existence of small scale firms include;

a) Size of the market

Large scale production can only be sustained by a high demand for a product. If the demand for a product is low, it may not be advisable for a firm to produce on a large scale, hence it will remain small.

b) Nature of the product;

The nature of the product sometimes makes it impossible to produce in large quantities e.g. personal services e.g. hairdressing, painting or nursing can only be provided by an individual or a small firm.

c) Simplicity of organization

Small firms have the considerable advantage of simplicity in organization. They avoid bureaucracy, wastage and managerial complexity associated with large scale organizations.
Where a firm intends to take advantage of simplicity, the proprietor may maintain its small firm.

d) Flexibility of small firms

Small firms are flexible i.e. one can easily switch from one business to another where an owner of a business wishes to maintain flexibility so as to take advantage of any new opportunity, he/she may have to maintain a small firm.

e) Quick decision making

In a situation where proprietors want to avoid delay in decision-making, they may opt to maintain a small business as this would involve less consultation.

f) Belief that a small firm is more manageable

Many small businesses have the potential of expansion, yet their owners prefer to have them remain small believing that big businesses are difficult to run.

g) Rising costs of production

In situations where production costs rise too fast, such that diseconomies of scale set is very early, the firm has to remain small.

h) Need to retain control

In order to retain control and independence, the owners of the firm may wish to keep it small.

i) Legal constraints/Government policy

In some situations, the laws may restrict the growth of a firm. In such circumstances the existing firms remain small.

j) Small capital requirements

As opposed to large scale firms, small firms require little amounts of capital to start and operate.

Implication of production activities on environmental and community health

As production activities take place in a given area, the environment and the health of the community around may be adversely affected by these activities. Some of these effects include;

a) Air pollution

This is caused by waste which is discharged into the atmosphere leading to contamination of the air. Such waste may be in funs of industrial emissions and toxic chemicals from the firms. These pollutants cause air-borne diseases. Acid rain due to such emission may also affect plants.

3.PRODUCT MARKET

The term ‘market’ is usually used to mean the place where buyers and sellers meet to transact business. In Business studies, however, the term ‘*market’* is used to refer to the interaction of buyers and sellers where there is an exchange of goods and services for a consideration.

NOTE: The contact between sellers and buyers may be physical or otherwise hence a market is not necessarily a place, but any situation in which buying and selling takes place. A market exists whenever opportunities for exchange of goods and services are available, made known and used regularly.

Definition:

- *Product market;* Is a particular market in which specific goods and services are sold and with particular features that distinguish it from the other markets.

  -The features are mainly in terms of the number of sellers and buyers and whether the goods sold are homogeneous or heterogeneous

  -Product market is also referred to as *market structure*.

  -Markets may be classified according to the number of firms in the industry or the type of products sold in them..

TYPES OF PRODUCT MARKET

The number of firms operating in a particular market will determine the degree of competition that will exist in a given industry. In some markets there are many sellers meaning that the degree of competition is very high, where as in other markets there is no competition because only one firm exists.

When markets are classified according to the degree of competition, there are four main types, these are;

- Perfect competition
- Pure monopoly(monopoly)
- Monopolistic competition
- Oligopoly

PERFECT COMPETITION

The word ‘perfect’ connotes an ideal situation.

This kind of situation is however very rare in real life; a perfect competition is therefore an hypothetical situation.

This is a market structure in which there are many small buyers and many sellers who produce a homogeneous product. The action of any firm in this

market has no effect on the price and output levels in the market since its production is negligible.

Feature of Perfect Competition

- ***Large number of buyers and sellers****:* The buyers and sellers are so many that separate actions of each one of them have no effect on the market. This implies that no single buyer or seller can influence the price of the commodity. This is because a single firms (sellers) supply of the product is so small in relation to the total supply in the industry. Similarly; the demand of one buyer is so small compared to the total demand of one buyer is so small compared to the total demand in the market that he/she cannot influence the price.

Firms (suppliers) in such a market structure are therefore *price takers* i.e. they accept the prevailing market price for their products.

- ***Identical or homogeneous products****;* Commodities from different producers are identical in all aspects e.g. size; brand and quality such that one cannot distinguish them. Buyers cannot therefore show preference for the products of one firm over those of the other.

- ***Perfect knowledge of the market;*** Each buyer and seller has perfect knowledge about the market and therefore no one would effect business at any price other than the equilibrium price (market price).If one firm raises the price of its commodity above the prevailing market price, the firm will make no sale since consumers are aware of other firms that are offering a lower price i.e. market price. All firms (sellers) are also assumed to know the profits being made by other firms in the industry (in selling the product)

- ***Freedom of entry or exit in the industry****;* The buyers and sellers have the freedom to enter and leave the market at will i.e. firms are free to join the market and start production so long as the prevailing market price for the commodity guarantees profit. However if conditions change the firms are free to leave in order to avoid making loss.

  In this market structure, it is assumed that no barrier exists in entering or leaving the industry.

- ***Uniformity of buyers and sellers****;* All buyers are identical in the eyes of the seller. There are therefore, no advantages or disadvantages of selling to particular buyers. Similarly, all the sellers are identical and hence there would be no special benefit derived from buying from a certain supplier.

- ***No government interference****;* The government plays no part in the operations of the industry. The price prevailing in the market is determined strictly by the interplay of demand and supply. There should be no government intervention in form of taxes and subsidies, quotas, price controls and other regulations.

- ***No excess supply or demand****;* The sellers are able to sell all what they supply into the market. This means that there is no excess supply. Similarly, the buyers are able to buy all what they require with the result that there is no difficult in supply.
- ***Perfect mobility of factors of production****;* The assumption here is that producers are able to switch factors of production from producing one commodity to another depending on which commodity is more profitable to sell. Factors of production are also freely movable from one geographical area to another.
- ***No transport costs****;* The assumption here is that all sellers are located in one area, therefore none of them incurs extra transport costs or carriage of goods. The sellers cannot hence charge higher prices to cover the cost of transport. Buyers, on the other hand, would not prefer some sellers to others in an attempt to cut down on transport costs.

NOTE: The market (perfect competition) has normal demand and supply curves. The individual buyers demand curve is however; perfectly elastic since one can buy all what he/she wants at the equilibrium price. Similarly, the individual sellers supply curve is also perfectly elastic because one can sell all what he/she produces at the equilibrium price.

Perfect competition market hold on the following assumptions;

- There are no transport costs in the industry
- Buyers and sellers have perfect knowledge of the market
- Factors of production are perfectly mobile
- There is no government interference

Examples of perfect competitions are very difficult to get in the real life but some transactions e.g. on the stock exchange market, are very close to this.

Criticism of the concept of perfect competition

In reality, there is no market in which perfect competition exists. This is due to the following factors:

- Very few firms produce homogenous products. Even if the products were fairly identical, consumers are unlikely to view them as such.
- In real situations, consumers prefer variety for fuller satisfaction of their wants; hence homogenous products may not be very popular in these circumstances.
- There is a common tendency towards large-scale operation. This tendency works against the assumption of having many small firms in an industry.

- Firms are not found in one place to cut down on transport costs as this market structure requires.
- Governments usually interfere in business activities in a variety of ways in the interest of their citizens. The assumption of non-interference by the state is therefore unrealistic in real world situations.
- Information does not freely flow in real markets so as to make both sellers and buyers fully knowledgeable of happenings in all parts of a given market.

MONOPOLY

A monopoly is a market structure in which only one firm produces a commodity which has no close substitutes.

Some of the features in this market structure are;

- ***One seller or producer***; supplying the entire market with a product that has no close substitute consumers therefore have no option but to use the commodity from the monopolist to satisfy their need.
- ***Many unorganised buyers***; in the market the buyers compete for the commodity supplied by the monopoly firm.
- ***The monopoly firm is the industry***; because it supplies the entire market, the firms supply curve is also the market supply curve, and the demand curve of the firm is also the market demand curve.
- ***Entry into the market is closed***; such barriers are either put by the firm or they result from advantages enjoyed by the monopoly firm e.g. protection by the government.
- ***Huge promotional and selling costs***; are incurred in order to expand the market base and to maintain the existing market. This also helps to keep away potential competitors.
- ***The monopoly firm is a price maker or a price giver***; the firm determines the price at which it will sell its output in the market. It can therefore increase or reduce the price of its commodity, depending on the profit it desires to make.
- ***Price Discrimination is may be possible****;* This is a situation where the firm charges different prices for same commodity in different markets.

Price discrimination may be facilitated by conditions such as;

- Consumers being in different markets such that it is difficult for one to buy the product in the market where it is cheaper.
- The production of the commodity is in the hands of a monopolist.
- Market separation.

Market separation may be based on the following factors;

- ***Geographical;*** Goods may be sold at different prices in different markets.
- ***Income;*** Seller may charge different prices for his/her products to different categories of consumers depending on their income.
- ***Time;*** a firm may sell the same commodity at a higher price during the peak period and lower the price during the off peak period.

Sources of monopoly power

- ***Control of an important input in production****;* A firm may control a strategic input or the entire raw materials used in the production of a commodity. Such a firm will easily acquire monopoly by not selling the raw materials to potential competitors.
- ***Ownership of production rights****;* Where the right to production or ownership of commodity i.e. patent rights, copyrights and royalties belong to one person or firm, then, that creates a monopoly. Similarly if the government gives licence to produce a commodity to one firm, then this will constitute a monopoly.
- ***Internal economies of scale****;* The existence of internal economies of scale that enable a firm to reduce its production costs to the level that other firms cannot will force these other firms out of business leaving the firm as a monopoly.
- ***Size of the market;*** where the market is rather small and can only be supplied profitably by one firm.
- ***Additional costs by other firms****;* A firm may enjoy monopoly position in a particular area if other firms have to incur additional costs such as transport in order to sell in the area. These additional costs may increase the prices of the commodity to the level that it becomes less attractive hence giving the local firm monopoly status.
- ***Where a group of firms combine to act as one****;* Some firms may voluntarily combine/amalgamate or work together for the purpose of controlling the market of their **product. Examples are *cartels***
- ***Restrictive*** *practices;* A firm may engage in restrictive practices in order to force other firms of business and therefore be left as a monopoly. Such practices may include limit pricing i.e. where a firm sells its products at a very low price to drive away competitors.
- ***Financial factors;*** where the initial capital outlay required is very large, thereby preventing other firms from entering the market.
- **Government Policy** ;Where the government establishes a firm and gives it monopoly power to produce and sell ‘cheaply’

Advantages of monopoly

- A monopoly is able to provide better working conditions to employees because of the high profits realised
- In some monopolies, high standards of services/goods are offered
- Monopolies always enjoy economies of scale. This may help the consumer in that the goods supplied by a monopoly will bear lower prices.
- A monopolist may use the extra profit earned to carry out research and thus produce higher quality goods and services.
- The consumer is protected in that essential services such as water and power supply is not left to private businesses who would exploit the consumers.

Disadvantages of monopoly

- A monopolist can control output so as to charge high prices
- Consumers lack freedom of choice in that the product produced by a monopoly has no substitute
- Low quality products may be availed to consumers due to lack of competition.

MONOPOLISTIC COMPETITION

Monopolistic competition is a market structure that falls within the range of imperfect competition i.e. falls between perfect competition and pure monopoly. It is therefore a market structure that combines the aspects of perfect competition and those of a monopoly.

Since it is not possible to have a market that is perfectly competitive or a market that is pure monopoly in real world, all market structures in real world lie between the two and are thus known as imperfect market structures.

In a monopolistic market, there are many sellers of a similar product which is made to look different. This is known as *product differentiation.* These similar products are made different through packaging, design, colour, branding e.t.c

The following are the assumptions of a monopolistic competition.

- ***A large number of sellers****;* Who operate independently.
- ***Differentiated products****;* Each firm manufactures a product which is differentiated from that of its competitors, yet they are relatively good substitutes of each other. The differences may be real in that different

materials are used to make the product or may be imaginary i.e. created through advertising,branding,colour,packaging e.t.c

- ***No barriers to entry or exit from industry****;* There is freedom of entry into the industry for new firms and for existing firms to leave the industry.
- ***Firms set their own prices****;* The prices are set depending on the costs incurred in production and the demand in the market.
- ***No firm has control over the factors of production****;* Each firm acquires the factors at the prevailing market prices.
- ***Presence of non-price competitions;*** Since products are close substitutes of each other, heavy advertising and other methods of product promotion are major characteristics of firms in monopolistic competition.
- ***Buyers and sellers have perfect knowledge of the market****.*

OLIGOPOLY

This is a market structure where there are few firms. The firms are relatively large and command a substantial part of the market. It is a market structure between the monopolistic competition and monopoly.

Types of Oligopoly

Oligopoly may be classified according to the number of firms or the type of products they sell. They include;

- **Duopoly;** This refers to an oligopoly market structure which comprises of two firms. Mastermind Tobacco and British American Tobacco (BAT) are examples of duopoly in Kenya.
- **Perfect/Pure oligopoly** refers to an oligopolistic market that deals in products which are identical. Examples of pure oligopoly are companies dealing with petroleum products such as oil Libya, Caltex, Total, Shell, National Oil, Kenol and Kobil. These firm sell products which are identical such as kerosene, petrol and diesel.
- **Imperfect/Differentiated Oligopoly;** this is an oligopolistic market structure where firm have products which are the same but are made to appear different through methods such as packaging, advertising and branding.

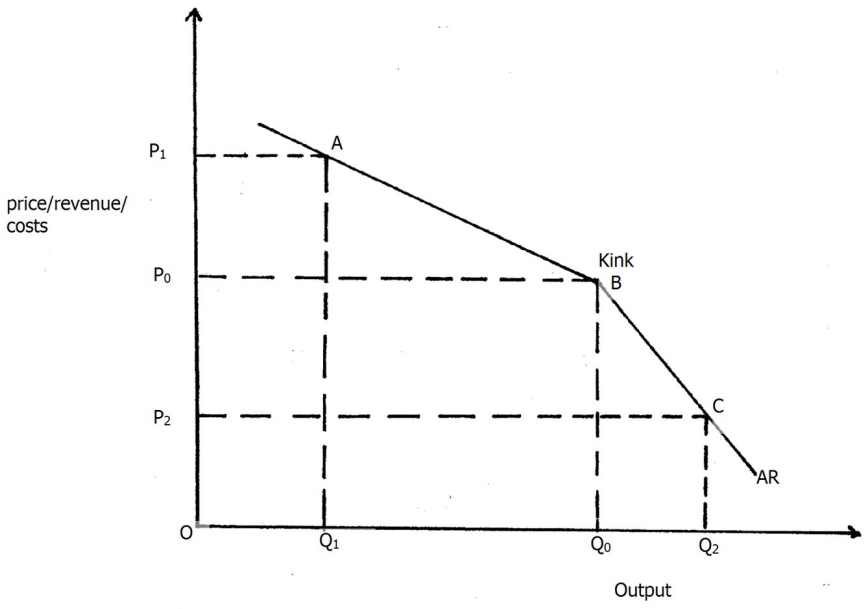
Features of oligopoly

- Has few large sellers and many buyers.
- The firms are interdependent among themselves especially in their output and pricing.
- Non-price competition, firms are in a position to influence the prices. However, they try to avoid price competition for the fear of price war.

- There is barriers to entry of firms due to reasons such as; requirement of large capital, Ownership of production rights, control over crucial raw materials, Restrictive practices etc
- High cost of selling through methods of advertisement due to severe competition.
- Products produced are either homogeneous or differentiated.
- Uncertain demand curve due to the inter-dependence among the firms. Hence the shifting of the demand curve is not definite.
- There is price rigidity i.e once a price has been arrived at in an oligopolistic market, it tends to remain stable.

This feature explains why a firm in oligopolistic market faces two sets of demand curves resulting to a Kinked Demand Curve. One curve, for prices above the determined one, which is fairly gentle and the othere curve for prices below the determined one which is fairly steep.

THE KINKED DEMAND CURVE



i) The kinked demand curve illustrates the rigidity price behaviour oligopolists.
ii) The curve has two parts with different elasticities: AB is elastic and BC is inelastic.
iii) Sellers cannot increase price from price OP_o to OP_1 because the Quantity bought will decrease (fall).
iv) The sellers cannot reduce price from OP_1 to OP_2 because very little amount will
increase in demand.
v) The sellers will stick to price OP_o because it is the most profitable and most popular to both sellers & buyers.

4. CHAIN/CHANNELS OF DISTRIBUTION

Introduction

- Channels of distribution are the paths that goods and or services follow from the producers to the final users.
- The persons involved in the distribution of goods from the producer to consumer are called middlemen or intermediaries.
- There are different channels that different products follow. Some of the channels include the following:
- Producer agent wholesaler retailer consumer.
- Producer co – operative society marketing board wholesaler retailer consumer.
- Producer marketing board wholesaler retailer consumer.
- Producer wholesaler retailer consumer.
- Producer wholesaler consumer
- Producer retailer consumer
- Producer consumer

Costs incurred by middlemen while distributing goods

- **Buying costs.** They incur this cost by paying for them from the producers or other middlemen.
- **Transport cost**. Some middlemen do transport goods from the producer to other middlemen or to the final users.
- **Storage costs.** Middlemen do keep the goods until their demand arises. This will therefore require them to hire or construct their own warehouses.
- **Advertising or marketing costs**. Some middlemen do carry out marketing of goods on behalf of the producers and other middlemen. In the process, they pay for such services.
- **Insurance costs.** Middlemen do insure the goods they are trading in to ensure compensation in the event of loss.
- **Operation costs.** Middlemen just like other businesses do incur operating costs such as salaries to employees, electricity, maintenance among others.

- **Preparation costs.** Some middlemen to prepare goods before they are sold to the consumers. Such activities include packing, assembling and blending. They have to meet such costs on behalf the producer, other middlemen and consumers.

CHANNELS OF DISTRIBUTING VARIOUS PRODUCTS (refer to Inventor book three pages 50 to 53)

ROLES OF MIDDLEMEN

The following are some the roles performed by middlemen in the chain of distribution

- **Bulk accumulation (assembling).** They similar goods from different producers in small quantities and then offering the large amount gathered to buyers who may want to buy in large volumes.
- **Reducing transactions.** The interactions between the producers and the consumers will be reduced since the middlemen are the ones who will be communicating to the consumers.
- **Bulk breaking.** They buy in large quantities and then sell in small quantities as desired by the consumers.
- **Risk taking.** They assume all the risks related with the movement of goods from the producers to the consumers. Such risks include theft, damages, loss due to bad debts.
- **Finance provision.** Middlemen provide finance to the producers by buying goods in large quantities and paying for them in time.
- **Provision of information.** Middlemen gather market information from the consumers then pass to the producers who in turn produce goods in line with the tastes of consumers.
- **Marketing/product promotion**. Middlemen are involved in marketing of goods hence stimulating the interest of consumers.
- **Provision of transport.** Middlemen do transport goods from the producers up to the where the consumers can access them. Both the producers and consumers are hence relieved of transport costs.
- Storage
- Variety provision
- Availing goods to consumers

FACTORS TO CONSIDER BEFORE SELECTING A DISTRIBUTION CHANNEL

Factors that influence the choice of a distribution channel include the following:

- **Product nature.** Perishable products should be sold directly to the consumers because delays may result to losses since they go bad fast. In addition, bulky products need direct selling in order to reduce transportation and stock handling costs.
- **Nature of the market.** Where the market is concentrated in one area, direct selling is appropriate. A longer channel of distribution is preferred where the market is widely spread.
- **Role of intermediary**. The channel chosen should be able to perform the services related to the product being sold e.g. for technical goods, the middleman should be able to offer technical support to the customers.
- **Resources and size of the firm/producer**. If the producer is small, then direct selling would be appropriate. Large firms with sufficient financial resources can opt for long channels of distribution.
- **Channels used by competitors**. If a firm wants its products to compete with those of the competitors, then is it prudent to use similar channels. A firm that wants to avoid competition should use a different channel of distribution.
- **Government policy**. The channel chosen should be able to meet government regulations such as all middlemen distributing pharmaceutical products must be recognized by the relevant government bodies (Pharmacy and Poisons Board).
- **Marketing risks**. In the event the firm wants to avoid risks related to distribution, it will opt for middlemen.

Questions

- State four channels for distributing imported goods.
- Explain five factors that can influence the choice of a channel of distribution.
- Outline five costs incurred by middlemen in the distribution process.
- Describe the roles played by middlemen in the distribution chain.
- Outline the circumstances under which a producer would sell directly to consumers.

5. NATIONAL INCOME

- This is the total income received by the providers/owners of the factors of production in a given country over a given time period.

Terms used in national income

- **Gross Domestic Product (GDP)**. This is the total monetary value of all goods and services produced in a country during a particular year. Such goods and services must have been produced within the country.
- **Net Domestic Product (NDP)**. This is the GDP less depreciation. Depreciation is the loss in value of the assets such as machines used in the production of goods and services.
- **Gross National Product (GNP)**. This measures the total monetary value of all the goods and services produced by the people of a country regardless of whether they in or outside the country. It takes into account exports and imports. The difference between exports and imports is called net Factor Income from abroad. GNP therefore is the sum of GDP and net factor income from abroad.
- **Net National Product (NNP)**. This recognizes the loss in value of the capital used in the production of goods. Capital here refers to capital goods. NNP is the difference between GNP and the depreciation.
- **Per capita income.** This is the average income per head per year in a given country. It is also the national income divided by the population of the country.

CIRCULAR FLOW OF INCOME

- This is the continuous movement of income between the households (providers of factors of production) and the firms (producers of goods and services).
- The factors of production are received from households.
- The firms pay the rewards of such factors to the households (expenditure to the firms and income to the households).

- The households in turn use the income to buy the goods and services produced by the firms (expenditure to households and income to firms).

Assumptions/features of circular flow of income

- **Existence of two sectors only.** It is assumed that the economy has only two sectors that is households and firms. The households provide the factors of production while firms are involved in the production of goods and services.
- **Total spending by households**. It is assumed that the households spend all their income on the goods and services produced by the firms i.e. no savings.
- **Total spending by the firms**. It is assumed that the firms spend the money received from the sale of goods and services to pay for the rewards of production factors.
- **Lack of government intervention.** The government does not influence how the firms and households carry out their activities. Such interventions are in the form of taxes, price controls among others.
- **Closed economy**. Exports and imports do not exist in such an economy.

Factors affecting the circular flow of income

- The factors can either lead to increase in income and expenditure (injections) or lead to a reduction in the volume of flow (withdrawals).

The factors include the following:

- **Savings.** This takes place when the households do not spend all their income on the purchase of goods and services. This reduces the income to be received by firms hence savings is a withdrawal from the circular flow of income.
- **Taxation.** Taxation reduces the amount of money available for spending therefore it is a withdrawal/leakage from the circular flow of income.
- **Government expenditure.** The government may buy goods from the firms or provide subsidies. This will translate in to an injection into the circular flow of income.
- **Investments.** When firms put more capital into the production, output will increase hence an increase in income (injection).

- **Imports.** When goods and services are bought from other countries, money will be spent hence a reduction in the circular flow of income (withdrawal).
- **Exports.** Through exports, a country is able to receive money from other countries (injections)

Injections

- Investments
- Government spending
- Exports

Withdrawals

- Savings
- Taxation
- Imports

APPROACHES USED IN MEASURING NATIONAL INCOME

- **Expenditure Approach**.

National income is arrived at summing expenditure on all final goods and services (that have reached the final stage of production). Such expenditure is divided into:

- Expenditure on consumer goods (C)
- Expenditure on capital goods (I)
- Expenditure by government (G)
- Expenditure on net exports (X – M)

Therefore national income = C+I+G+(X – M)

Problems associated with expenditure approach

- Lack of accurate records particularly in the private sector.
- Approximation of expenditure of the subsistence sector.
- Difficulty in differentiating between final expenditure and intermediate expenditure
- Double counting may exist
- Fluctuating exchange rates may cause problems in the valuation of imports and exports.
- **Income approach**

- In this method, the national income is arrived at by summing all the money received by those who participate in the production of goods and services.
- Such incomes are in the form of rewards to the production factors (wages, rent, interest and profits).
- Public income is also taken into account i.e. it is the income received by the government from its investments (Parastatals, joint ventures).
- Transfer payments are excluded since they represent a redistribution of incomes from those who have earned them to the recipient's e.g.
- National insurance schemes.

Problems related to this method

- Determination of what proportion of transfer payments constitute in the income of a country.
- Inaccurate data may exist since business people may not tell the truth about their income in order to evade tax.
- Price fluctuations may make national income determination difficult.
- Income from illegal activities is not captured.
- Valuation of income from subsistence economy may be difficult e.g. housewives.

Assignment: Read and make short notes on Output approach (refer to Inventor book three pages 65 – 66).

USES OF NATIONAL INCOME STATISTICS

- **Indicators of standards of living.** If the national income is equitably distributed, then the standards of living will be high.
- **Measuring economic growth.** The statistics of one year are compared with previous year to show whether there is improvement or not.
- **Inter country comparison.** They are used to compare the economic welfare among countries hence knowing which country is better off and by how much. However, the following challenges may be faced when carrying the comparisons: different in currencies, different goods and services, disparity in income distribution and difference in tastes and preferences.
- **Investment decisions.** They assist the government and other investors to know the sectors to

  put their money. The statistics provide relevant information concerning the performance of each sector.

- **Basis of equitable distribution of income.** The statistics can be used to spread income to the hands of majority of the citizens incase a few individuals control the economy.
- **Planning purposes.** The statistics will show the contribution of each sector thus helping the government in allocating the funds to the various sectors.

Factors which influences the level of national income.

- **Quantity and quality of production.** If the factors are more in terms of quantity of good quality, the output will be high hence increasing in national income.
- **State of technology.** A country with high level of technology will produce goods in large volumes hence high national income.
- **Political stability.** Countries which are relatively stable politically experience high production hence high national income level.
- **Accuracy of accounting systems.** If the methods used to gather data are accurate, then the overall statistical figures will the accurate hence reliable.
- **Proportion of the subsistence sector.** Subsistence sector's output is not normally included in the statistical figures. If it represents a large proportion, therefore the national income level will be low.

NB. For other factors refer to Inventor book three pages 68 – 69.

Reasons why high per capita income is not an indicator of a better living standard in a country

- **Statistical problems.** The collection of the national income data may be inaccurate meaning that the national income figures might be incorrect hence wrong per capita income.
- **Changes in money value.** If the currency has been devalued, there can be change in the value of money without necessarily representing any changes in the welfare of the people.
- **Income distribution.** The per capita may be high even though the income is in the hands of very few people thus it is not a representative of the majority.
- **Nature of products.** If the products are not meant to satisfy immediate wants of the people, then an increase in per capita income may not lead to a higher economic welfare.
- **Peoples' hard work and attitude.** Increased national income may mean less sleep and more worries. People have no time to enjoy what they produce and their welfare may be low despite the rise in national income.

- **Social costs.** People may migrate from rural areas to urban areas straining family relationships while an increase in industries may create pollution, congestion and other environmental disruptions.

Questions

- State four problems encountered in comparing standards of living in different countries using national income statistics
- Using a diagram, describe the circular flow of income.
- Explain five factors that may influence the level of national income of a country
- Outline four limitations of expenditure approach used in measuring national income.
- Explain five reasons why high per capita income may not translate to better living standards in a country.
- Describe five factors that affect the circular flow of income.

6. POPULATION AND EMPLOYMENT

Introduction

Population refers to the number of human beings living in a particular region at a particular time.

The size of the population is ascertained through national headcount, which is referred to as a national census. It is an international requirement that each country must hold a national census at least every ten years.

Population issues are major concerns to business people because people are consumers of goods and services as well as providers of factors of production.

Basic concepts in population

a) **Fertility** – this is defined as the ability of a woman to give birth to a live child.

b) **Fertility rate** - refers to the average number of children born per woman during her child bearing years in a given population.

Factors that determine fertility rate

- Literacy levels among women.
- The marriage rate among people in the productive age bracket.
- Cost of bringing up children.
- Economic significance of a large family, e.g. children seen as a source of cheap labour e.t.c.
- Cultural beliefs e.g. where many children were a source of prestige.
- Availability of medical facilities.
- Religious factors e.g. where some religions prohibits use of family planning

c) **Birth rate** – refers to the number of live births per 1000 people per year. This is also referred to as crude birth rate and may be calculated as follows:

$$\text{CBR} = \frac{\text{Number of Births} \times 1000}{\text{Total population}}$$

Factors that are likely to lead to high birth rates

- Cultural practices e.g taking children as security during old age.
- Early marriages prolomnging the woman's reprodcutive life.
- Children being seen as a sou=rce of cheap labour.
- Where people are opposed to family planning methods
- Ignorance- lack of knowledge to family planning methods
- Religious beliefs which encourage large families and discourage use of family planning methods.

Factors that may lead to decline in birth rates

- Delayed marriages dues to such things as staying in school for long period
- Craving for high standards of living leading to people having few children
- Where small families are considered fashionable
- Use of family planning methods
- Availability of retirement schemes making people to stop children as security in old age.

d) Mortality/death rate – refer to the number of people who die per thousand people per year. Is also known as natural attrition rate and may be calculated as follows:

$$MR = \frac{\text{Number of death} \times 1000}{\text{Total population}}$$

e) Infant mortality rate- refers to the number of child deaths per thousand children below the age one year per annum.

f) Population growth rate – refers to the rate at which the population of a country is increasing or decreasing. It can be calculated as follows.

9. THE LEDGER

This is a special ledger which is used to record cash and cheque transactions.

It contains only the cash in hand and cash at bank (i.e. cash and bank) accounts

- Nominal ledger

  This ledger is used to record business expenses and incomes (gains).It contains all the nominal accounts.

- Private ledger

  This ledger is used in recording private accounts i.e. confidential and valuable fixed assets and the personal accounts of the proprietors such as capital accounts and drawing accounts.

- The general ledger

  The general ledger contains all other accounts that are not kept in any other ledger e.g. buildings, furniture and stock accounts.

  -Personal accounts of debtors or creditors who do not arise out of sale or purchase of goods on credit are found in the general ledger e.g. debtors as a result of sale of fixed asset on credit and expense creditors.

  C) Private accounts

  These are accounts that the business considers to be confidential and are not availed to everybody except the management and the owners.

  -These accounts may be personal or impersonal.

  -They include capital account, drawings accounts, trading, profit and loss accounts.

<u>Types of ledgers</u>

The following are the main types of ledgers that are used to keep the various accounts

- *The sales ledger (Debtors ledger)*

  This is the ledger in which accounts of individual debtors are kept.

-It is used to record the value of goods sold on credit and the customers to whom the credit sales are made, hence contains the personal names of the debtors.

-It is called a sales ledger because the accounts of debtors kept here in are as a result of sale of goods on credit. An account is kept for each customer to which is debited the value of credit sale. Payment made by the debtor are credited to the account and debited in the cash book.

- *Purchases ledger(creditors ledger)*

  The purchases ledger contains accounts of creditors i.e. contains the records of the value of goods bought on credit and the suppliers of such goods.

  It is a record of the debts payable by the business due to credit purchases.

  An account is kept for each creditor to the credit side of which is posted the value of.

  b) Impersonal accounts

  This category of ledger accounts includes all other accounts that are not personal in nature e.g. buildings, purchases, rent, sales and discounts received.

  Impersonal accounts fall into two types

  - Real accounts
  - Nominal accounts

- Real accounts; These are accounts of tangible assets or property e.g. buildings,land,furniture,fittings,machinery,stock,cash(at bank and in hand)e.t.c

  These accounts are also used to draw up the balance sheet._

- Nominal accounts; These are accounts of items that relate to gains and losses and whose balances at the end of the accounting period._

  -All expenses, revenues, sales and purchases are hence nominal accounts._

  -The main business expenses include purchases,sales,returns,insurance,stationary,repairs,depreciation,heating,discount allowed, lighting interests,printing,wages,rent,rates and advertising.____

  The value of losses is included in the same side as the expenses when drawing up the final accounts though it is not an expense.__

-The income (revenues) include sales,returns,claims out, interest receivable, dividends receivable and commission receivable. Profit is usually categorised together with these incomes when drawing up the final accounts.

Classification of ledger accounts

Many businesses handle few transactions, hence they have few records to keep. Their accounts can thus be kept in a single ledger referred to as the *general ledger*

As a business grows the volume of transactions increases. This single ledger, therefore, becomes very bulky with accounts and it becomes difficult to make reference to it.

In order to simplify the recording of transactions and facilitate reference to the accounts, ledger accounts are usually classified and each category kept in a special ledger.

NOTE (i) Since many transactions are cash transactions which are normally recorded in the bank and cash accounts a need arises to remove them from the main/general ledger to a separate ledger called the cash book.

(ii) The number of ledgers kept depends on the size of the business.

Classes of accounts

All accounts can be classified into either personal or impersonal accounts.

- Personal accounts

  -These are account of persons

  -They relate to personal, companies or associations.

  -They are mainly accounts of debtors and creditors.

  NOTE: capital account is the proprietors personal account, showing the net worth of the business hence it is a personal account.

  -The account balances of these accounts are used to draw up the balance sheet.

  -In the ledger, the trial balance total is not affected.

Purpose of a trial balance

The purpose of a trial balance include;

- *Checking the accuracy in the ledger accounts as to whether;*

i-The rule of double entry has been adhered to or observed/ complied with.

ii-There are arithmetical errors in the ledger accounts

- Gives a summary of the ledger i.e. summary of the transactions which have taken place during a given period
- Provide information (account balances) for preparing final accounts such as the trading account, profit and loss account and the balance sheet.
- Test whether the ledger account balances have been posted to the right side of the trial balance.

Limitations of a trial balance

Even when the trial balance totals are equal, it does not mean that there are no errors made in the ledgers. This is because there are some errors that do not affect the trial balance.

A trial balance only assures the book keeper that the total of debit entries is equal to total credit entries. The errors that do not affect the trial balances are;

- Error of total omission; This occurs when a transaction takes place and nothing about it is recorded in the books of accounts i.e. it is completely omitted such that neither a credit nor a debit entry is made in the ledgers.
- Error of original entry; this occurs where both the debit and credit entries are made using similar but erroneous figures. As the wrong amount is recorded in the two accounts.

- *Error of commission;* This occurs where double entry is completed but in the wrong persons accounts especially due to a confusion in names e.g. a debit entry of shs.2000 was made in Otieno's account instead of Atieno's account.
- *Compensating errors;* These are errors whose effects cancel out e.g. over debiting debtors account by sh.300 and under debiting cash account by sh.300.
- *Complete reversal of entries;* This occurs where the account to be debited is credited and the account to be credited is debited e.g. the sale of goods to Lydia on credit may be recorded as follows;

Dr.sales a/c

Cr.Lydius a/c instead of

Dr.Lydius a/c

Cr.sales a/c

- *Error of principle;* This is where a transaction is recorded in the wrong account of a different class from the correct one e.g. repairs of machinery was debited in the machinery instead of debiting the repairs account.

TRIAL BALANCE

-A trial balance is a statement prepared at a particular date showing all the debit balances on one column and all the credit balances on another column.

NOTE: A trial balance is not an account but merely a list of assets, expenses and losses on the left and capital liabilities and incomes (including profits) on the right.

-The totals of a trial balance should agree if the double entry has been carried out correctly and there are no arithmetic errors both in the ledger as well as in the trial balance itself.

-If the two sides of a trial balance are not equal, it means there is an error or errors either in the trial balance or in the ledger accounts or in both.

Errors that may cause a trial balance not to balance

- *Partial omission;* A transaction was recorded on only one account i.e. a debit or a credit entry might have been omitted in one of the affected accounts.
- *Transfering (posting);* a wrong balance to a trial balance.
- Different amounts for the same transaction might have been entered in the accounts(Amount Dr.different from amount cr)
- Failure to post a balance to the trial balance (omission of a balance from the trial balance.
- Posting a balance to the wrong side of the trial balance
- Recording a transaction on the same side of the affected accounts(partial reversal entry)

- Arithmetic mistakes might have been made when balancing the ledger accounts
- Arithmetic errors in balancing the trial balance