

## 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.

In the definition of a market, the following essential features seem to characterize it;

- i. The presence of sellers
- ii. The presence of buyers
- iii. The availability of the commodity (good or service) to be bought and sold
- iv. A medium of exchange which is acceptable to both buyers and sellers.

Other essential aspects of a market include;

- i. The method to be used/employed when carrying to both the transactions.
- ii. The price at which the commodity will be bought and sold
- iii. A place where the exchange process will take place.

**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.

Defn:

- i) ***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.
- ii) ***Demand curve for the firm;*** The condition of demand facing the individual firms differ from product market to product market due to the importance of the individual firm in the market, and product differentiation/homogeneity.
- iii) ***The AR-curve and the demand curve;*** the average revenue curve (AR) of a firm is the demand curve that the firm faces under the market condition in which it operates.
- iv) ***Equilibrium of the firm;*** A firm is said to be in equilibrium when it does not have any incentive to either expand or contract. At such time the firm produces just the right output, at optimal cost, selling is at the best price hence earning maximum profit while minimising losses.

The equilibrium of a firm can be explained in two ways;

- i) With the help of total revenue and total cost curve
- ii) With the help of marginal revenue and marginal cost curves.

Graphically, the equilibrium point is indicated by the quantity of marginal cost (MC) and marginal revenue (MR). At this point, equilibrium quantity is produced and equilibrium price charged.

These conditions of equilibrium are valid for:

- i) The different market conditions (only the shape of the curve is different)
- ii) Both the short period and the long run period.

#### 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, whereas 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 viz;

- i) Perfect competition
- ii) Pure monopoly(monopoly)
- iii) Monopolistic competition
- iv) Oligopoly

#### i) 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.

For perfect competition to exist, the following assumptions are made;

- a) *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 firm's (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.

- b) *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.
- c) *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)
- d) *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.
- e) *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.
- f) *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.
- g) *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.
- h) *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.
- i) *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.

### Pure and perfect competition

-Economists normally distinguish between pure competition and perfect competition, though this definition is purely one of degree

Pure competition is said to exist in a market if:

- i) There is a large number of unorganised sellers or firms in an industry
- ii) There is a large number of unorganised buyers
- iii) Identical or homogeneous products can be bought from different sellers
- iv) There is freedom of entry and exit in the industry

Perfect competition on the other hand, requires the fulfilment of the four conditions mentioned above plus;

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

In perfect competitive markets, adjustments of the economy to disturbances in demand and supply may take a longer time because of incomplete knowledge of the happenings in the market. However, in perfectly competitive markets, such adjustments are instantaneous. Examples of pure or 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.

### Determination of price and output in a perfectly competitive market

As pointed out earlier, the price of a commodity in a perfectly competitive market is determined by the interaction of demand and supply forces (demand and supply curves) as individual buyers or sellers actions have no influence on the price.

Firms in such a market are simply price takers in the industry. This position can be illustrated by the diagram below.

## DIAGRAM

From the above;

-A firm takes the price in the market, which in this case is  $p_e$ . If it raises its price beyond  $p_e$  it will not sell even a single unit.

-The firms under perfect competition can only sell their product at one price—the price set by the market. The firms therefore face a perfectly elastic demand curve as shown below.

## DIAGRAM

-If a firm sell its products at a price higher than the market price, it will make no sales as buyers will simply opt for the substitute products offered by the other firms in the industry. This is because all firms produce homogeneous goods.

-The firms in such a structure can only get more revenue by increasing the number of units sold

-The revenue derived from selling one unit is equal to the revenue derived from selling an extra unit of output since all units are sold at the same price i.e. the market price. This means that *average revenue (AR)*.

-*Marginal revenue (MR)* which is equal to price.

-The market price is therefore equal to the demand curve facing a firm operating in a perfectly competitive market. Therefore  $P=AR=MR=Demand$ .

**NOTE:** Total revenue-This refers to the total income earned by a firm from the sale of its output.

Total revenue=Total output sold price (QXP)

Average revenue (AR) =  $\frac{\text{Total revenue}}{\text{Output}}$  =  $\frac{TR}{Q}$

Output Q

-Average revenue is the same as the price of the commodity. This means that average revenue curve which relates average revenues to output is the same as the demand curve which relates prices to output.

*Marginal revenue*-This refers to the addition to the total revenue arising from the sale of an additional unit of output.

*Example:* If 10 units were sold for sh.15, 000 and all units for 15100/=, the marginal revenue for the 11<sup>th</sup> unit is sh.100

In a perfectly competitive market, all units of output are sold at the same price. It follows then that marginal revenue must be equal to the price and average revenue.

*Example:*

| Units of output | price/unit | TR  | AR | MR |
|-----------------|------------|-----|----|----|
| 10              | 20         | 200 | 20 | –  |
| 11              | 20         | 220 | 20 | 20 |
| 12              | 20         | 240 | 20 | 20 |
| 13              | 20         | 260 | 20 | 20 |
| 14              | 20         | 280 | 20 | 20 |

It can be note from the table that;

- i) The price of the commodity is the same for all units of output
- ii) Average revenue is obtained by dividing total revenue by units of output and is equal to price.
- iii) Total revenue is obtained by multiplying the units of output by price

- iv) Marginal revenue is obtained by subtracting the previous total revenue from the current one and is equal to the price and the average revenue.

#### Firms output Determination in the short-run under perfect competition

The objective of a firm is always to maximise its profits. The profits of a firm are maximised when;

- i) The firms marginal revenue (MR) are equal to the marginal cost (MC). This means that the revenue derived from the sale of an extra unit of output is equal to the cost of producing the extra unit.
- ii) The marginal cost curve (MC) cuts the marginal revenue (MR) curve from below. Under these conditions, the firm is said to be at equilibrium i.e.

#### DIAGRAM

In the short run, at least one factor of production is fixed, while others are variable. The law of diminishing returns will thus be operating.

*Law of diminishing (law of variable proportions)* states that, other factors remaining constant (ceteris paribus) if one factor is held constant, output increases with an additional variable factor unto a certain point beyond which it declines.

From the above diagram, the equilibrium price and output are  $P_e$  and  $Q_e$  respectively. Note that in the short run, time is not adequate for new firms to enter or leave the market; hence output can only be increased via maximum use of the present capacity.

#### *Output and price determination in the long run under perfect competition*

*Dfn: Long term perfect;* the period which is long enough for the firm to be able to vary all the factors of production.

In the long run period, the firm can expand or decrease its production or even leave the industry.

Firms will thus keep on adjusting their plant size until they achieve the equilibrium point. This point will be achieved when the firm attains its optimum size. At this size, the firm will be producing at the lowest point on the long run average total cost i.e.

Diagram

Secondly, in the long run, more firms are likely to enter the industry if the existing firms are making good profits/returns from their operations.

As the new firms enter the market, the quantity supplied of the commodity increases in the market i.e.

Diagram

-With the increase in supply, the supply curve shifts from  $S_0$  to  $S_1$ . When output increased from  $Q_{e0}$  to  $Q_e$ ; there is a price fall to  $P_e$  from  $P_{e0}$

Being a price taker, the firm in a perfectly competitive market will therefore reduce its price to  $P_e$ .

The firm's demand curve will thus be as below.

Diagram

If in the short-run the existing firms are making losses (or there are unfavourable conditions), firms will exit the industry. This will lead to a decrease in prices. This will continue until the remaining firms will start making normal profits. This can be illustrated as below.

Diagram

When the quantity supplied decreases from  $Q_0$  to  $Q_1$ , there is a price increase from  $P_0$  to  $P_1$ . At this price all the firms in the industry will be making normal profits and there will be no tendency of firms to leave or enter the industry.

The firms demand curve resulting from firms leaving the industry is shown below.

Diagram

### 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:

- i) Very few firms produce homogenous products. Even if the products were fairly identical, consumers are unlikely to view them as such.
- ii) In real situations, consumers prefer variety for fuller satisfaction of their wants; hence homogenous products may not be very popular in these circumstances.
- iii) There is a common tendency towards large-scale operation. This tendency works against the assumption of having many small firms in an industry.
- iv) Firms are not found in one place to cut down on transport costs as this market structure requires.

- v) 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.
- vi) 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 assumptions in this market structure are;

- a) *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.
- b) *Many unorganised buyers*; in the market the buyers compete for the commodity supplied by the monopoly firm.
- c) *The monopoly firm is the industry*; because it supplies the entire market, the firm's supply curve is also the market supply curve, and the demand curve of the firm is also the market demand curve.
- d) *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.
- e) *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.
- f) *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.

### Sources of monopoly power

- i) *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.
- ii) *Ownership of production rights*; Where the right to production or ownership of a 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.
- iii) *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.

- iv) *Size of the market*; where the market is rather small and can only be supplied profitably by one firm.
- v) *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.
- vi) *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*
- vii) *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.
- viii) *Financial factors*; where the initial capital outlay required is very large, thereby preventing other firms from entering the market.
- ix) Where the government establishes a firm and gives it monopoly power to produce and sell 'cheaply'

#### Price and output determination under monopoly

A monopoly is a sole producer of a commodity in the industry. The supply curve of the firm is therefore the market supply curve. The demand curve of the firm slopes downwards from the left to the right i.e.

#### Diagram

NB: The angle of the curve will depend on the elasticity of the demand inelastic, the demand curve will be vertical the curve will be

At price P1 the goods are expensive and thus the quantity demanded of the commodity q1 is low.

If the price of the commodity falls to P2, then the commodity becomes more affordable.

The quantity demanded of the commodity increases to q2.

An analysis of the demand curve shows that;

- i) The monopoly firm can only sell more units by reducing the price of its commodity. Therefore, even though the monopoly firm is a price giver, it cannot sell all its commodities at any price it desires.
- ii) For the monopoly firm to sell more of the commodity, it has to reduce the price of the extra units. Therefore, the revenue derived from the sale of an extra unit (i.e. marginal revenue) will

be lower than the average revenue from the sale of one unit of the output thus  $MR < AR$ . The marginal revenue curve will therefore fall more steeply than the average revenue curve and will therefore be below the AR curve i.e.

### Diagram

Like any other firm a monopolist is in equilibrium when it is maximising profits. The firm will maximise its profits at the level of output where  $MC = MR$  and where the MC curve cuts the MR curve from below.

### Price and output determination in the short run.

From the above, we have discovered that;

- i) A monopolist is a price giver and can either determine the price of the commodity or the quantity but not both.
- ii) In monopoly, a firm can only sell more units by reducing the price of its commodity, and therefore the MR curve is below the  $AR = D$  curve.
- iii) The monopolist will maximise profits where  $MC = MR$  and MC curve cuts MR curve from below. The monopolists can therefore determine price and output as illustrated below;

### DIAGRAM

From the above diagram;

-The monopolist will maximise his profits at output  $oq_e$ , where  $MC = MR$  and MC cuts the MR curve from below.

-The price that the monopolist will charge for his commodity is  $P_e$  and the quantity is  $q_e$

NOTE: The price at which  $MR = MC$  is  $P_1$ . However, the monopoly firm can still maximise its profits by charging  $P_e$  using the same output because the demand for the product is equivalent to AR.

-The total costs is represented by the area/rectangle  $oq_e$  and the total revenue represented by the area/rectangle  $OP_e q_e$ . The firm's profit (supernormal profit) is therefore represented by the area  $cp_e q_e$

### Long run equilibrium output and price

One of the assumptions of a monopoly market is that there are barriers to entry into the market in the long run. The price and output levels will therefore remain the same in the long

run as the supply of the commodity is constant. Price and output determination in the long run will therefore be the same as in the short run.

#### Advantages of monopoly

- i. A monopoly is able to provide better working conditions to employees because of the high profits realised
- ii. In some monopolies, high standards of services/goods are offered
- iii. Monopolies always enjoy economies of scale. This may help the consumer in that the goods supplied by a monopoly will bear lower prices.
- iv. A monopolist may use the extra profit earned to carry out research and thus produce higher quality goods and services.
- v. 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

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

#### HOW MONOPOLY POWER CAN BE CONTROLLED

- i. *Through anti-trust laws;* This is where the government prohibits various types of mergers
- ii. *Nationalisation;* the government owns the monopoly firm so that it can have direct control over its operations.
- iii. *Price control legislation;* This is where the government controls the prices of goods and services offered by a monopolist firm.
- iv. *Direct regulation;* This aims at increasing the amount of output produced and sold to consumers. This ensures the monopolist firm does not restrict output in order to raise prices.
- v. *Licensing;* The government can licence other operators to produce similar products to the one being produced by the monopolist firm.

#### 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.

- i. A large number of sellers; Who operate independently.*
- ii. 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*
- iii. 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.*
- iv. Firms set their own prices; The prices are set depending on the costs incurred in production and the demand in the market.*
- v. No firm has control over the factors of production; Each firm acquires the factors at the prevailing market prices.*
- vi. 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.*

Price and output determination under monopolistic competition.

Firms operating in a monopolistic competitive market deal in differentiated products that are close substitutes. Because of this product differentiation, firms under monopolistic competition are able to exercise some influence on the price of the product. This means that a firm can raise prices yet some customers will still buy at these high prices. However, many customers will switch to rivals products.

On the other hand, if the firm lowers the price, it would attract some buyers from the rival firms, thereby increasing its products demands. Firms under monopolistic competition therefore faces demand curves that are fairly/ relatively elastic.i.e (curve sloping downwards from left to right but more elastic compared to monopoly)

**NOTE:** If the nature of product differentiation is so big that the products appear quite different the demand curve tends to be fairly/relatively inelastic because the firm will not lose many customers due to *product loyalty/brand loyalty*.

-The relationship between average revenue and marginal revenue is similar to what of a monopolistic i.e. for the average revenue to be decreasing as more units of output are sold, marginal revenue must be lower than average revenue.

The demand curve and M.R curve facing a firm under monopolist competition are as illustrated below;

## DIAGRAM

From the above diagram;

-The firm is able to sell  $Q_0$  units at price  $P_0$ . If the firm slightly raises its price to  $P_1$ , then the quantity demanded of the product more than proportionally decreases to  $Q_1$ .

-The MR curve is below the  $AR=D$  curve since the revenue derived from the sale of an extra unit (MR) will be lower than the average revenue from the sale of one unit of the output.

-In monopolistic competition, each firm must watch the actions of the other firms in the market closely. If the firm lowers the price i.e. from  $P_1$  to  $P_0$ , the rival firms might do likewise to avoid losing market. The reaction of the other firms will depend on the degree of differentiation.

-In reality, if one firm raises the price of its products, it is unlikely to lose many customers because they have *brand loyalty*.

### Determination of price and output in monopolistic market in the short run.

We have seen that a firm maximises profits when;

- i.  $MR=MC$
- ii. MC cuts the MR curve from below.

This can be illustrated as shown below;

## DIAGRAM

From the diagram above;

-Profits are maximised at  $Q_{qe}$  level of output where  $MC=MR$ , and  $MC$  cuts the  $MR$  curve from below

-The price at which the equilibrium output can be sold is determined by the demand curve and is at  $P_e$ .

-The cost per unit at level of output is determined from the average cost curve and is at  $C$ .

-When the firm produces  $Q_{qe}$  units of output, it makes an abnormal profit/supernormal profit, because average revenue is greater than average cost. For each unit sold, the average cost is  $q_{ey}$  while the average revenue is  $q_{ex}$  giving an abnormal profit of  $XY$  per unit.

-The total revenue earned from  $Q_{qe}$  units of output is  $Ope \times q_e$ , while the total cost of production is  $OCYq_e$ , giving a total abnormal/supernormal profit represented by the area  $CPe \times Y$ .

#### Price and output determination in the long run

In the long run, time is sufficient enough for some firms to gain entry into the market. Existing firms may also increase their production capacity.

This leads to an increase in the supply of the product in the market. This will further result into;

- i. Firms losing some of their customers/sales to the newcomers and their revenue curves will shift to the left so that abnormal profits are no longer earned (as prices will be reduced)
- ii. Firms incurring extra costs of production since they will be forced to invest additional resources in brand improvement, advertising and other methods of product promotion and product improvement. The  $MC$  and  $AC$  curves will therefore shift upwards to the right i.e. the additional costs incurred will lead to an increase in marginal costs and average costs.

The price and output levels will be as shown below;

Diagram

-From the diagram above;

-The firms equilibrium price is  $P_e$  and the equilibrium quantity  $Q_e$

-The equilibrium is reached when  $MC=MR$  and  $MC$  cuts  $MR$  from below. At this time point the average cost curve is tangential to the average revenue curve. This is

because in the long run, the firms incur additional costs in terms of advertising and brand improvement and therefore the MC and AC curves shift outwards. The prices also decrease as a result of increase in supply causing the AR and MR curves to shift downwards.

Summary of main classes of accounts and the ledgers in which they are kept.

DIAGRAM.

All goods bought by the business.

-Payments made are debited to the account and credited to the cash book.

iii) The cash book

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

iv) Nominal ledger

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

v) 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.

vi) 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 available 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.

### Types of ledgers

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

*i. 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.

*ii. 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

- 1) Real accounts
- 2) Nominal accounts

- 1) 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.
- 2) 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.

#### a) 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.

- iii. *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.
- iv. *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.
- v. *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

- vii) *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.

### Purpose of a trial balance

The purpose of a trial balance include;

- a) *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
- b) Gives a summary of the ledger i.e. summary of the transactions which have taken place during a given period
- c) Provide information (account balances) for preparing final accounts such as the trading account, profit and loss account and the balance sheet.
- d) 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;

- i. 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.
- ii. 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.

### 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

- i. *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.

- ii. *Transferring (posting); a wrong balance to a trial balance.***
- iii. Different amounts for the same transaction might have been entered in the accounts(Amount Dr.different from amount cr)**
- iv. Failure to post a balance to the trial balance (omission of a balance from the trial balance.**
- v. Posting a balance to the wrong side of the trial balance**
- vi. Recording a transaction on the same side of the affected accounts(partial reversal entry)**
- vii. Arithmetic mistakes might have been made when balancing the ledger accounts**
- viii. Arithmetic errors in balancing the trial balance.**





