“O” LEVEL ECONOMICS COMPLETE NOTES 2021

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INTRODUCTION TO ECONOMICS

Introduction to Economics

- **Basic economic problem**
- **Basic economic questions**
- **Opportunity cost**
- **Production Possibility Curve (PPC)**
- **Shapes and description of PPC curve**
- **Shifts of the Production Possibility Curve(PPC)**
- **Normative and positive statements**
- **Efficient resource allocation**

Introduction to economics

- Economics is the study of how scarce resources are allocated to meet unlimited needs and wants.
- Resources are inputs that are used by firms and individuals for the production of goods and services.
- Goods are tangible items that satisfy human needs and wants.
- Example of goods are furniture, books, food and clothes.
- Services are activities that are carried out by firms and individuals in order to satisfy needs or wants.
- Examples of services are hair-cutting, health care and teaching.
- Economic resources include land, labour, capital and entrepreneurship/enterprise.
- Economic resources are the limited resources which are used in the production of goods and services.
- Economic resources can also be called factors of production.
- Misallocation of these resources leads to business failure.

Factors of production

- Four factors of production are land, labour, capital and entrepreneurship.

Land

- Land refers to all natural resources used in the production process.
- These include water, forests, soil, trees and fisheries.
- Land is a limited resource which is supposed to be carefully allocated.

Labour

- Labour is the human mental and physical effort that is used in the production process.
- Production is a process of converting inputs into outputs.
- Outputs are goods or services that are produced by firms and individuals.
- Examples of labour include teachers, lawyers, engineers and economists.

Capital

- These are man-made resources used to produce goods and services.
- They include machines, buildings, tools and factories.

Entrepreneurship/enterprise

- Entrepreneurs combine all the other factors of production (land, labour and capital) to produce goods and services.

- Enterprising skills and knowledge are required to facilitate efficient and effective production.
- Entrepreneurs create business plans, acquire resources and manage their businesses.

What are limited resources?

- Limited resources means that there is always a shortage of factors of production required by firms and individuals for production purposes.
- This makes factors of production a part of the central problem of scarcity.

Needs

- A need is anything that is required and that one cannot do without.
- For instance, if one doesn't eat, he or she will eventually die. This makes food a need or a necessity.
- However, there are different types of food that may not be classified as needs. Examples are chocolates or ice cream. One can do without them.
- Other examples of needs are shelter, water, air, clothing and health care.

Wants

- A want is anything that one would like to have but it is not a necessity.
- A want is a good item to have but a person can leave without it.
- An example of a want is music. One does not require music in order to survive. However, music is still required to make life enjoyable.

Unlimited needs and wants

- Unlimited needs and wants means that people have a lot of desires which cannot be met by the limited resources available.
- Human needs and wants are never satisfied using available resources
- Satisfaction is a process of fulfilling human needs and wants.
- Therefore, unlimited resources are part of the central problem of scarcity.

Scarcity

- Scarcity refers to a situation where there are limited resources available to satisfy unlimited needs and wants.
- Scarcity is the basic economic problem.
- Therefore, economics seeks to allocate those limited resources to meet unlimited needs and wants.

- unlimited needs and wants outweigh the available limited resources.
- Therefore, scarcity is when human needs and wants outweigh the available resources.
- Scarcity of resources will then force people to make choices.

- Due to limited resources, individuals, firms and government make their choices on how best they can use the available resources to meet their needs and wants.
- For instance, a country may want to improve the education system by purchasing new textbooks for schools or to improve its health facilities by purchasing medical drugs. Due to limited resources, the government may choose to purchase medical drugs instead of buying textbooks for schools.
- This means that due to the scarcity of resources, the government has made a choice between the two options.

Summary

- Economics is the study of how scarce resources are allocated to meet unlimited needs and wants.

- Economic resources include land, labour, capital and entrepreneurship/enterprise.
- Limited resources are also known as scarce resources.
- People have needs and wants which must be satisfied.
- A need is anything that is required and that one cannot live without.
- A want is anything that one would like to have but it is not a necessity.
- Due to the problem of scarcity, individuals and firms need to make choices.

Basic economic questions

- The existence of scarcity creates the basic economic problem faced by every society, which in turn leads to the derivation of the basic economic questions.
- Good decisions must be made on how to make the best use of limited productive resources to satisfy human needs and wants.
- To solve this basic economic problem, every society must answer these three basic economic questions:
  - What to produce,
  - How to produce it,
  - And for whom to produce.

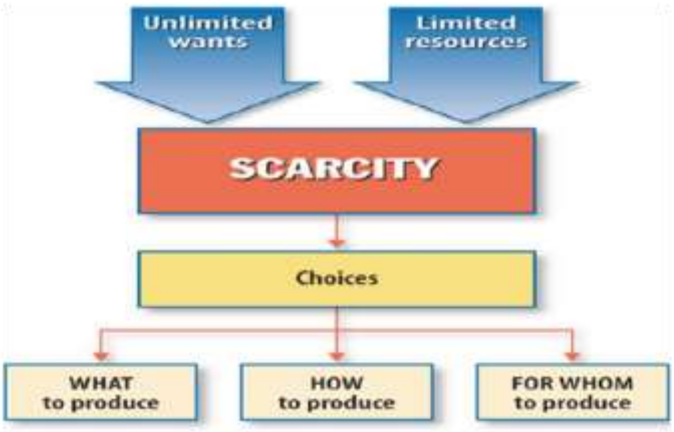


Fig 1.1.1:

Basic economic questions

What to produce?

- What goods are to be produced with the scarce resources, for example:
  - Should we produce bananas or oranges?
  - Should we produce petrol powered cars or solar powered cars?
  - Should we produce military weapons or better hospitals?
  - Should we produce coal fired electricity or solar electricity?

How to produce?

- Given that we have basic resources of labour, land and capital, an economy should decide on how we should combine them to produce the goods and services that we want.
- How to produce deals with methods of production.
- For example, should we use more labour than capital to produce or should we use more capital than labour to produce?

For whom to produce?

- Once we have produced goods and services, we then decide on how to distribute them among the people in the economy.
- For example, will people consume them on a first-come, first-served basis or basing on the ability to pay.
- Should goods be allocated basing on religion, age, gender, race, looks, strength, health or wealth?

Summary

- All economic societies have to answer three economic questions:
    - ‘What should be produced?’
    - ‘How shall it be produced?’
    - ‘For whom to produce?’

Opportunity Cost

- The problem of scarcity leads people and firms to make choices on the use of the available resources. Choice leads to opportunity cost.

- Opportunity cost is the next best alternative foregone.
- When a choice is made between two options, opportunity cost is the value of the product foregone.
- Opportunity cost only applies to economic goods and services.
- An economic good is a product which benefits the people and it has a degree of scarcity in relation to its demand.
- Due to scarcity, economic goods have an opportunity cost.
- Take for instance, bricks used to build a house could have been used to construct a classroom block.
- Therefore, the opportunity cost of building a house is the classroom block that could have been built with the same resources.
- On the other hand, free goods do not have an opportunity cost since they are in abundant supply.
- This means that free goods have zero opportunity cost.
- Free goods are natural and are found in large quantities.
- Air is an example of a free good. If one breathes, there will still be enough air for everyone else to breathe.

Scarcity, choice and opportunity cost

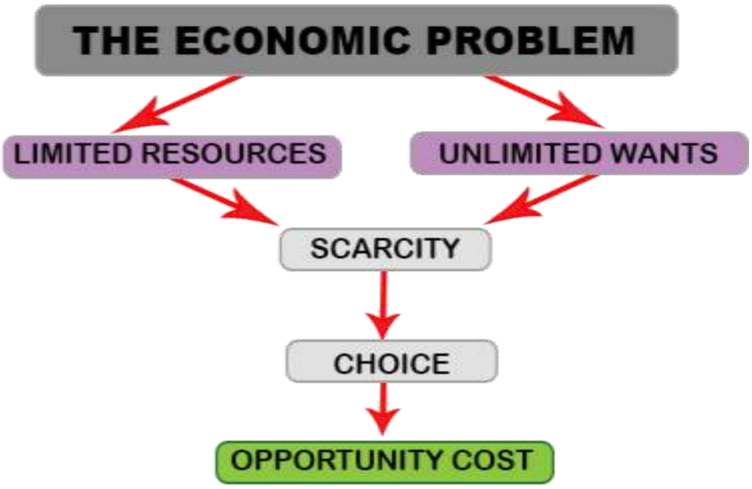


Fig 1.2:
Scarcity and Choice

- The problem of scarcity, choice and opportunity cost can be explained using a production possibility curve (PPC).
- Production possibility curve shows combinations of goods that an economy is able to produce given available resources.
- Ceteris paribus,the production possibility produces only two goods in an economy.
- Ceteris paribus means holding all other things constant.

Assumptions of the PPC are;

- Only two goods are produced.
- Factors of production are limited.
- All resources are used efficiently.
- There are no changes in technology and production techniques.

Construction of the PPC

- Since there is an assumption that an economy only produces two goods, let’s assume that there is production of food and clothes.
- Table 1:1 below shows the quantities of food and clothes produced in an economy.

Table 1.1:Goods Produced in an Economy

CLOTHES	FOOD
0	125
40	100
80	75
100	50
110	0

- From the table above, one can tell that when there is zero production of clothes, there will be 125 units of food produced.

- The opportunity cost of producing 125 units of food is the 110 units of clothes foregone.
    - If we produce 110 units of clothes, 0 units of food will be produced. Hence, the opportunity cost of producing 110 units of clothes is 125 units of food foregone.
- It can also be noted from table 1.1 above that, the opportunity cost of one good increases as the production of another good decreases.
- As more food is produced, less clothes will be produced.
- When the production of food increases from 50 units to 75 units, the opportunity cost is 20 units of clothes foregone.
- The information in the above table can be used to construct the following production possibilty curve.

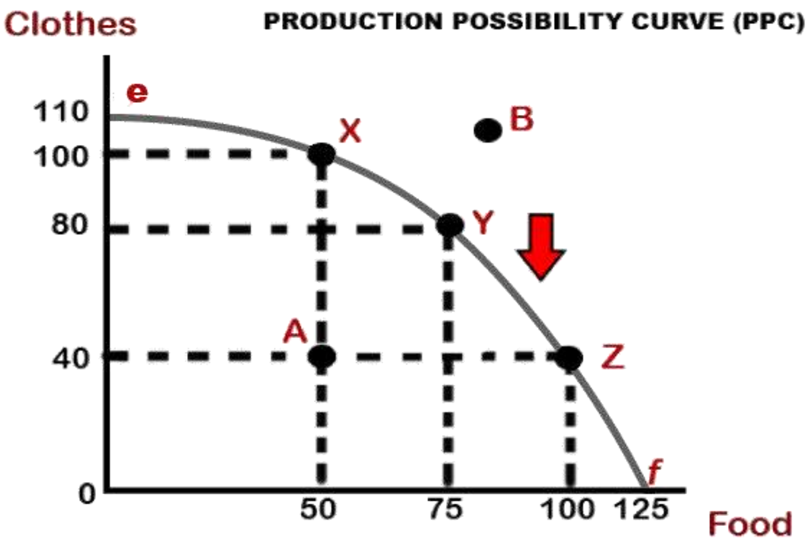


Fig 1.3: Production Possibility Curve

- The PPC shows the combinations of food and clothes that an economy can produce with the available resources.
- Points X, Y and Z show the best possible combinations of output that can be produced when all resources are fully employed.
- These points show the attainable combination when there is full utilization of available resources.
- The firms in the economy desire to produce at Point B but is unattainable due to limited resources available at the moment.
- The production within the PPC, for example Point A, shows the under-utilization of the available resources.
    - At this point, there is inefficient allocation of available resources in the economy.
- Points e and f are the extreme combinations where all resources are used to produce only one good.
- At point e, only clothes are produced, whereas at point f only food is produced.
- Therefore, points A, B, X, Y, Z, e, and f explain different choices that can be made.
- Fig 1.4 below explains opportunity cost.

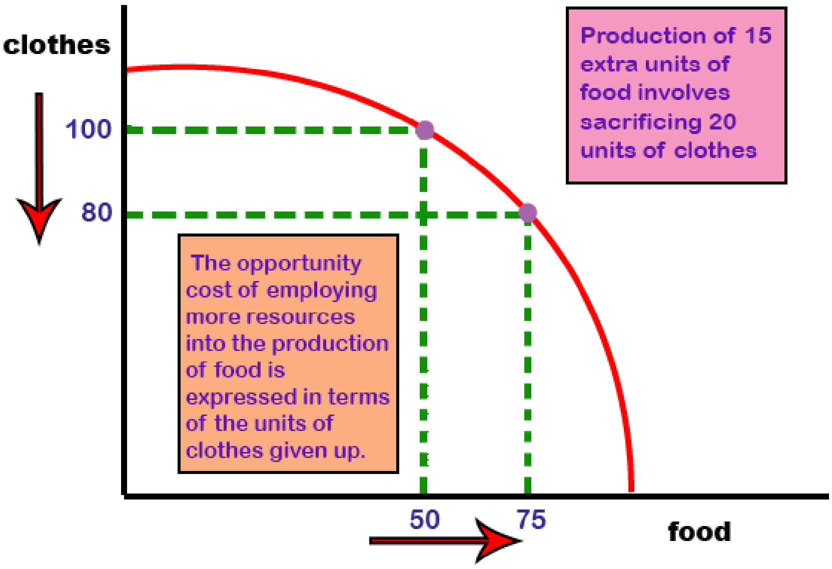


Fig 1.4
Production Possibility Curve

- The highest quantity of goods that can be produced is along the curve.

Efficiency

- The points along the production possibility curve (PPC) indicate efficient allocation of resources

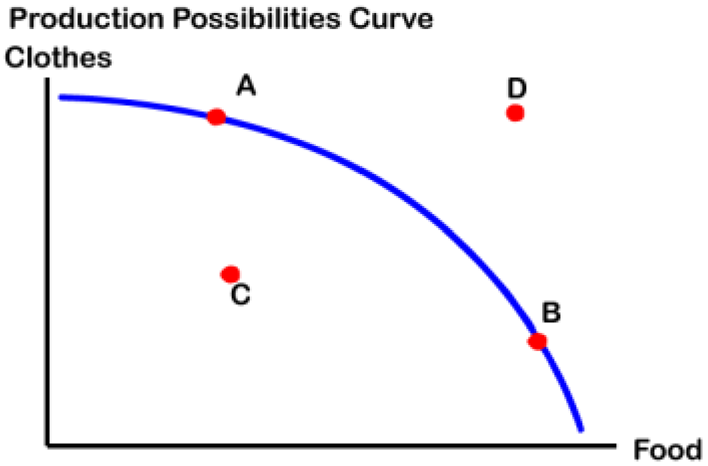


Fig 1.5: Production Possibility Curve

- Therefore, using fig 1.5, points A and B indicate efficiency in the allocation of resources.
- Efficient allocation of resources means that all available resources are fully utilised.
- Full utilisation of resources can also be referred to as Pareto efficiency or Pareto optimality.
- Pareto optimality is a state of resource allocation where it is impossible to make one preference better off without making another preference worse off.
- In other words, the production of food cannot be made better off without making the production of clothes worse off.
- Point C is an attainable point but there is under-utilization of resources. Hence there is inefficient allocation of resources.
- Therefore, points inside the PPC indicate inefficient allocation of resources.
- All points along the PPC indicate efficient allocation of resources.

Shapes and Descriptions of the PPC

- The curved line is called Production Possibility Frontier (PPF) – other names of it include
  - Production Possibility Curve.
  - Transformation curve.
- Production possibility curve shows the maximum combinations of goods and services that an economy is able to produce with available resources.
- The difference between the shapes of the PPCs depend on the opportunity cost.
- Production Possibility Curves can take different shapes.
- The curves can be in the form of Concave PPC, Convex PPC or Constant/Straight Line PPC.

Concave PPC

- Most of the PPF curves are concave due to **the inadaptability of resources.**
- The law of increasing opportunity cost states that as the production of one good rises, the opportunity cost of producing that good increases.
- The increase in the opportunity cost indicates that more units of a good are traded off for the other.
- An example of a concave PPC is shown in Fig 1.1

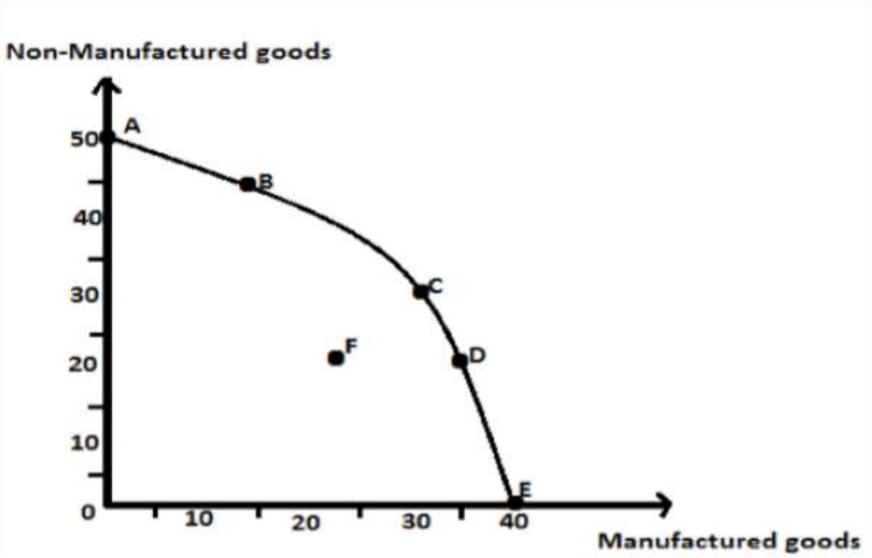


Fig 1.1:
Concave Production Possibility Curve (PPC)

- If all resources in the economy are fully and efficiently employed, the country will produce:
  - At point C, producing 30 units of manufactured goods and 30 units of non-manufactured goods,
  - At point D, producing 35 units of manufactured goods and 20 units of non-manufactured goods,
  - At point A, devoting all of its resources to the production of non-manufactured goods,
  - At point E, devoting all of its resources to the production of manufactured goods.
- Point F denotes that the economy can produce any combination but this will mean that some resources are unemployed.

- Any point outside the PPC is unattainable with available resources.
- Thus, the production possibility curve illustrates clearly the principle of opportunity cost.

Convex PPC

  - The PPC curve can be convex to the origin when the opportunity cost decreases.
  - This can happen only when less and less units of first commodity are foregone when there is production of an additional unit of another commodity.
  - An example of a convex PPC is shown on Fig1.2

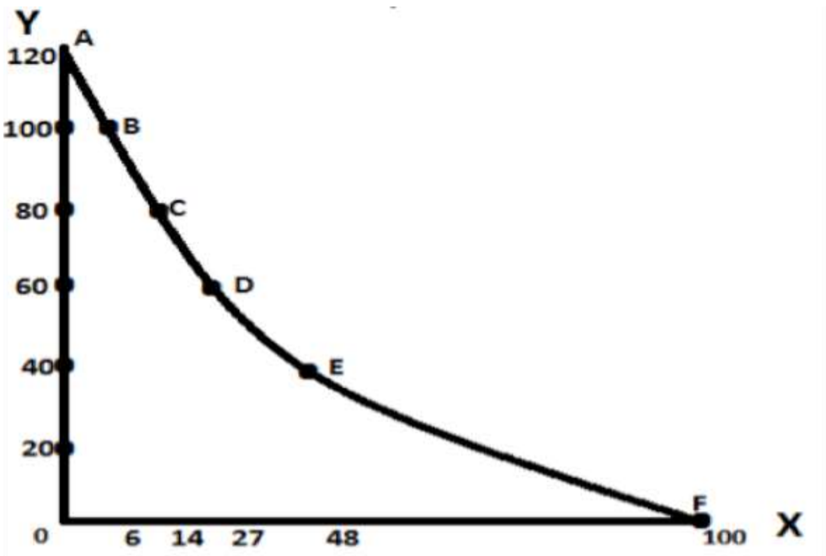


Fig 1.2:
Convex Production Possibility Curve

- The convex line ABCDEF shows increasing returns or (decreasing cost).
- The ratio of exchange of X for Y gets better as we move towards the ends of the line.
- In fig 1.2, moving from position A to position B involves giving up 20 units of Y to gain 6 units of X
- The next 20 units of Y given up gains 8 units of X.
- As stated above, a production possibility line will take a convex shape.

Constant/ straight line PPC

  - If the opportunity cost is constant, a straight-line (linear) PPF is produced.
  - If two products use similar methods of production, there may be constant opportunity cost.
  - The Production Possibility Curve will be a straight line as illustrated in Fig 1.3.

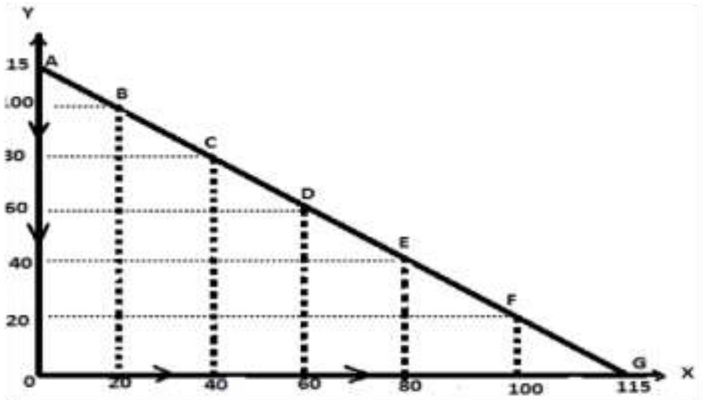


Fig 1.3: Straight line Production Possibility Curve (PPC)

- Fig 1.3 illustrates constant opportunity cost. For example, product X can be exchanged for product Y at a constant rate.
- For example, if a country is producing 60 units of good Y, it also produces 60 units of good X.
- If production of good Y increases to 80 units, there will be a reduction of good X from 60 units to 40 units.
- Therefore, a 20 units increase in good Y results in 20 units decrease of good X.

Shifts of the Production Possibility Curve

- An economy's production potential will constantly change over time.
- The PPC can shift either inwards or outwards.

Outward shift of the PPC

  - Over time, economies are able to achieve economic growth by shifting their production possibility curve outwards
  - If its capacity to produce goods and services increases, the production possibility curve will shift outwards to the right as shown in Fig1.4.

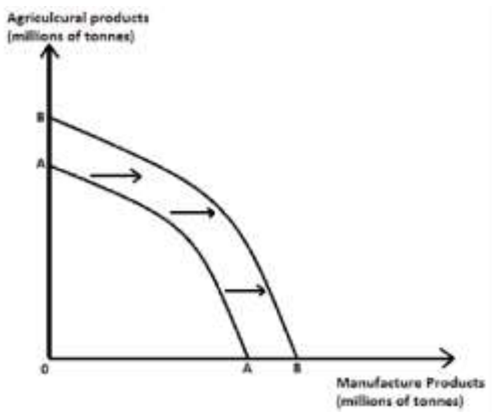


Fig 1.4: Outward shift in the production possibility curve

- An economy will be able to produce more goods and services if the quantity and/or quality of its resources increase.
- The rightward shift can be caused by the following factors:

- An increase in the labour force.
- An increase in the stock of capital goods - machinery, offices, power stations, factories, transport networks.
- An increase in technical knowledge and an improvement in training.
- Technological advancement.
- Discovery of new resources used in production.

Inward shift of the PPC

- The PPC can shift inwards if an economy's production potential declines.
- Fig 1.5 illustrates the inward shift of the PPC.

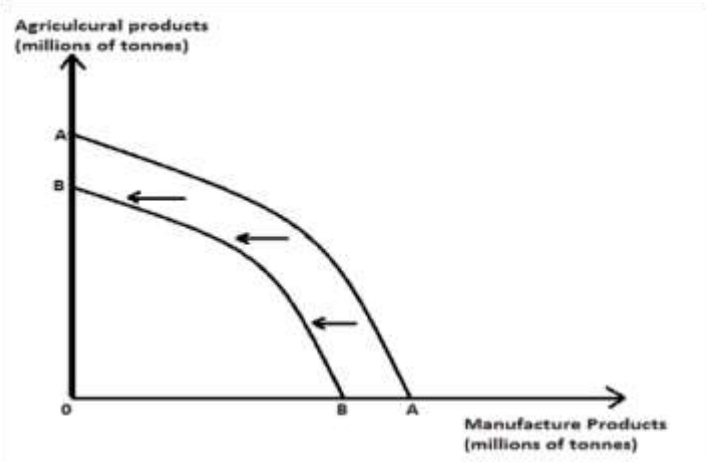


Fig 1.5:
Inward shift in Production Possibility Curve (PPC)

- The inward shift can be caused by the following factors:
- War or political instability.
- Natural disasters for example floods, earthquakes or droughts.
- Under-utilisation of resources.

Efficient resource allocation

- Efficient resource allocation refers to how scarce resources are distributed among producers.
- It also deals with how scarce goods and services are distributed among consumers
- In Economics, raw materials, equipment and human labour are all resources needed for production.
- Unless these resources are efficiently utilized, an economy will not grow.
- Resources are limited and hence should be utilized optimally.
- Resource allocation is the process of dividing up and distributing available, limited resources to satisfy unlimited wants and needs.
- Effective resource allocation means that the available resources are utilized with minimal to no waste during the different processes.
- In order to achieve optimal resource allocation, it is important to determine how much is needed as compared to how much is available.

Sustainable resource allocation

- Sustainable resources are a type of renewable resource.
- These are resources which can be exploited economically but do not diminish or run-out.
- Some examples of renewable resources are forests, water and fish stocks.
- Sustainable resource allocation focuses on the supply, demand and allocation of the earth's natural resources in a way that the resources do not deplete.
- It is the goal of the government to allocate these sustainable resources efficiently in the economy.
- The government should balance the economy, society and the environment to achieve efficiency.

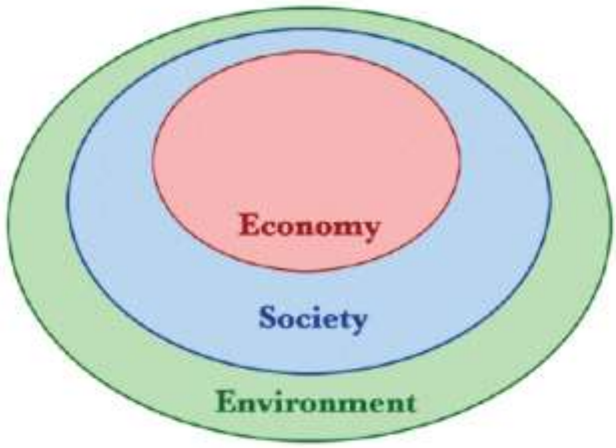


Fig 1.7:
Subsets of the environment

- Fig 1.7 illustrates that the society and the economy are subsets of the environment.
- It is not possible for the societal and economic system to exist independently from the environment.
- For this reason, sustainable resource allocation focuses on allocating these natural resources in order to develop a sufficient and sustainable economy.

Positive and normative statements

Positive statements

- Positive statements are statements that are objective and fact based.
- Examples of positive statements are:
  - Unemployment rate in Zimbabwe is 30%.
  - If the government of Zimbabwe raises the duty on imports, this will lead to a fall in imports in the country.
- These examples are based on facts and they can be tested, proven or disproven.
- If proven, it means that the statement is consistent with the theory.
- Therefore, positive statements are not supposed to be true always but they can be proven whether they are correct or wrong.

Normative Statements

- They are based on value judgment.
- These statements are based on people's opinions and individual preferences rather than facts.
- They usually use the terms 'might' or 'should' or 'ought'.

- Examples of normative statements are :
    - Pollution ought to be the most significant economic problem in Zimbabwe.
    - People are more worried about unemployment than inflation.
- These statements express individuals' opinions but they are not based on facts.

Summary

- Economics is focused on finding means of dealing with the economic problem of scarcity.
- The problem of scarcity, choice and opportunity cost can be explained using a production possibility curve (PPC).
- A production possibility curve shows combinations of goods that an economy is able to produce given available resources.
- Opportunity cost which is also called alternative cost, refers to the best alternative foregone.
- Firms that produce along the PPC use their resources efficiently.
- Efficient allocation of resources means that all available resources are fully utilised, a point where it is impossible to make one preference better off without making another preference worse off.
- In economics, positive statements are different from normative ones.
- Positive statements are statements that are objective and fact based, whereas normative statements are based on people's opinions and individual preferences rather than facts.

ECONOMIC SYSTEM

1. **Define the term economic system**
2. **Explain the economic systems**
3. **State the features of each economic systems.**
4. **Advantages and disadvantages of each economic system**
5. **Describe the relationship between the economic systems and each basic economic question**

- Citizens of every country have got needs and wants which must be satisfied.
- These wants and needs can be satisfied by the goods and services which are produced by firms and individuals in the economy.
- The use of products by households is called consumption.
- In most countries, there are two main economic units namely the households and enterprises.

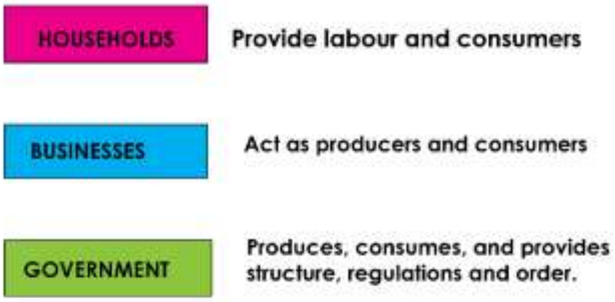
Households

- Households are made up of individuals or groups of people who consume goods and services produced in an economy.
- Households also have a function of providing inputs. These inputs include labour and capital which are needed for producing goods and services.

Enterprises

- Enterprises are the businesses that are found in a country and they produce goods and services.
- Enterprises play the role of combining the factors of production so as to produce goods and services.
- Households offer resources to firms. These resources may be in form of labour and capital.

Government

- In some countries the government has a role to play in the economy.
- 

Economic systems

- An economic system refers to the mechanism used to allocate scarce resources among alternative uses in the economy.
- Economic systems arise in order to find ways to satisfy unlimited needs of consumers using limited resources.
- The problem is solved through allocating the limited resources to the production of various economic goods so as to meet the needs and wants of the people in a society.
- The economic system answers the three questions:
  - How the goods and services are produced in the economy?
  - What goods or services are to be produced?
  - For whom these goods and services are produced?

Types of Economic systems

- There are three basic economic systems which are:
  - **Free market system**
  - **Command economy**
  - **Mixed economy**

Market economic system

- In the free market economy, the factors of production are owned and controlled by private individuals and firms.
- The forces of supply and demand determine what goods to produce and how to distribute them to the consumers.
- The prices of products are decided by the interaction of demand and supply.
- The consumers freely choose the goods and services they want to buy.
- The producers have freedom to use their scarce resources to produce the goods they want to sell, depending on the indicators of demand and supply.

- In other words, the decisions of the individual consumers and producers determine what, how and for whom to produce.
- The government has little or no role in determining the use of economic resources that are in the hands of the individuals and private firms.
- The government has no role in the production and distribution of goods and services in a pure free market economic system.
- Resources are used in the most productive or profitable way because the aim of producers is to maximize profit, whereas the objective of consumers is to maximize satisfaction.
- In a market economy, different goods and services are produced as long as there is demand for them.

What to produce
- Only goods and services that consumers are willing to pay for are produced.
- Producers provide products that give them high returns (profit).
- Goods and services that are not demanded cannot be produced.
- Firms that produce unwanted products will incur losses.
- The market, therefore, signals the type of goods and services to be produced.
- The market, in this case, involves private producers and consumers.

How to produce
- How to produce is influenced mainly by the prices of factors of production that are used in the production process.
- Producers aim to produce at the lowest cost possible so resources will be combined in a way that results in the lowest production cost.
- If, for example, labour is cheap, producers use labour intensive production methods.
- If capital is relatively cheap, producers use capital intensive production methods.
- Capital intensive method depends more on the use of machinery, equipment and tools in the production process.

For whom to produce
- Only those who can afford the goods and services get them.
- Therefore, those who have financial resources to buy the goods acquire them.

Advantages of free economy
- There is efficient allocation of resources since goods and services are produced when there is high demand for them.
    - There is efficiency in production and consumption of goods in the economy.
    - Efficiency in production relates to the production of goods and services which have the best value using available resources.
    - In order to maximize efficiency, wastages are avoided and the best production methods are used.
    - There is efficiency in consumption since goods and services are made available to people who are willing to pay for them.
    - Consumers use their resources economically so as to maximize their satisfaction.
- Goods are produced in response to the forces of demand and supply.
- Prices play a big role in the market place.
- Since producers aim to maximize profit, they will produce goods and services which people are willing to pay for.
- On the other hand, consumers demand goods that satisfy their needs and wants.
- There is a variety of goods and services produced.
- In a free market system, there is freedom for new firms to enter in to the market.

- The more firms they are in the market, the more the varieties of goods and services that are availed to the consumers.
- Consumers have freedom to choose the products they want.
- There is high return on investments.
- In a free market system, individual producers and firms maximise profits.
- Those who are innovative and hardworking produce goods that consumers buy thereby making profit.
- Free market systems tend to promote democratic practice in the economy.
- The producers have the freedom to choose the goods and services they want to produce, in the quantity they can afford.
- Consumers have the freedom to choose the goods and services they want to buy.
- Free market systems promote economic development since there is high chance of innovation and entrepreneurship.
- Innovation and investment lead to an increase in gross domestic product thereby improving the standard of living.

Disadvantages

- Free market system promotes income and wealth inequalities.
- Income inequalities occur when certain people in an economy benefit more than others.
- In the free market economy, some people own more factors of production than others hence they have the potential to create more wealth.
- Asymmetrical information enables others to access more economic opportunities than others.
- There is room for exploitation of consumers and workers in a pure free market system.
- Lack of accurate information leads to some market participants to exploit others.
- Producers and suppliers of goods and services who have monopoly power normally exploit consumers.
- Consumers are exploited when there are shortages of goods and services in the economy, which lead to the existence of the black market.
- Members of the society who cannot read and write are usually exploited by producers and sellers of goods and services.
- It can lead to economic activities that damage the environment.
- Uncontrolled dumping of wastes in the environment takes place in free market economy due to the absence of government regulation.
- Pollution may take place above the socially acceptable levels if there is no government control.
- Some of the pollutants damage the environment.
- Businesses have power to influence the government in various ways such as setting regulations that suit them at the expense of the public.
- There is also over-exploitation of resources in the free market economy.
- The free market system is characterized by high technological advancement leading to high rate of resources extraction and use.
- High competition among economic participants particularly producers, leads to competition on the use of resources.
- The high demand for raw materials such as timber, minerals and energy results in exploitation of resources.
- The free market economy can lead businesses to do unethical activities in order to maximize profits.
- Businesses end up selling harmful products for them to maximize profits.
- Firms can use too much advertisement to entice consumers to buy.

- Sometimes the information supplied in the advertisements is not correct and therefore misleading.
- Private firms tend to produce too much luxury goods on the expense of public and merit goods
- Monopsony power leads to exploitation of employees.
- Monopsony results in paying low wages to their employees, since they are the sole buyers of labour.

Command economy

- The opposite of a pure market economy is the command economy.
- The command economy is also called the planned, socialist, collectivist economy or communist system.
- In a purely command economy, all the factors of production except labour are owned and controlled by the state.
- All decisions on what to produce, for whom to produce and how to produce are taken by the government.
- The Central Planning Authority (CPA) is the organization which deals with these economic questions.
- The central planning authority is made up of all ministries in different sectors in the country.
- There is no private sector participation in this economy.
- Firms, factories and farms are all owned and controlled by the government.
- The total control of economic resources and production processes by the state in a pure command economy enables citizens to have a uniform standard of living.
- There should be fair distribution of income and wealth in such an economy.

What to produce

- The Central Planning Authority which is made up of all government ministries decides on what goods and services should be produced.
- The government creates a plan of how resources are to be used to produce goods and services.
- The local government can also decide on how to allocate its resources.
- Public enterprises are given production targets by the government.
- The government may institute surveys to decide on what to produce.

How to produce

- The various public firms produce the goods and services.
- Public enterprises use labour intensive methods of production since that promotes employment in the country.

For whom to produce

- Goods and services are produced to meet the needs and wants of everyone in the economy.
- The goods and services are sometimes distributed through rationing.
- The government fixes prices of most goods and services.

Advantages of the command economy

- The government provides essential goods and services which cannot be provided in a free market economy.
- The government provides public and merit goods to improve the welfare of its people.
- There is high employment in the country.
- Most production methods undertaken by the government are labour intensive, leading to high employment rate.
- There is low and stable rate of inflation.

- The government puts price controls on goods and services thereby curbing inflation.
- The government does not produce goods and services that harm the consumers.
- The government only produces goods that improve the welfare of the citizens.
- The government does not produce demerit goods
- The government works towards the eradication of poverty.
- The government aims to maximize the welfare of its citizens by providing essential goods and services.
- The products remain affordable to most citizens.
- If there are shortages, it distributes the products evenly among the citizens.
- There are very low income disparities in a command economy.
- The government uses progressive tax policy to reduce inequalities in income.
- With progressive tax, people who have higher incomes are taxed more than those with lower income levels.
- The revenue collected through taxation is redistributed through the provision of social services such as health care, education, infrastructural development, among others.
- The command economy has the ability to invest in large national projects such as hydro-electric stations.
- This is necessitated by the huge resources owned by the government.
- It responds quickly and effectively to emergencies and natural disasters such as earthquakes and tsunamis.
- The central planning authority can release huge resources to help affected people.
- It can respond by producing many goods and services to meet the needs of the affected people.

Disadvantages

- State owned firms usually produce low output which leads to critical shortages of products.
- Shortages of products arise due to price controls that the government uses.
- Therefore, price controls create bottlenecks in production.
- Poor quality goods can be produced since there is no competition.
- In a command economy there is no competition. Therefore, goods and services produced maybe of poor quality.
- There is inefficient use of resources due to the absence of forces of supply and demand.
- Inefficient use of resources means that factors of production are not used in the best way possible.
- Efficiency is achieved only if the allocation of resources is determined by the forces of supply and demand.
- In a command economy, the government determines how the resources are used which is normally wasteful.
- The price system is distorted since there are no market forces to influence decision making.
- People may become over-dependent on the government hence limit creativity in the economy.
- They wait for the government to solve most of their economic problems.
- For example, in case of emergencies and natural disasters, the citizens look to the government for help which is normally provided for free.
- Corruption can also lead to inefficient allocation of resources.
- Corruption involves embezzlement of resources, bribery and exhortation.
- When officials use resources for their personal benefit, profit is reduced.

- The government owned and controlled firms may incur heavy losses and viability of the firms is negatively affected.
- There is low consumer choice of goods and services due to lack of competition in the economy.
- With competition, new products are introduced into the market.
- Competitors may introduce substitute goods for existing products.
- Productivity is low due to low capital investment as the state uses labour intensive methods of production.
- Productivity is a measure of output per task or per employee or per hour.
- Higher productivity is achieved by combining the factors of production in the best way possible.
- Government owned firms fail to use modern technology leading to low productivity
- There is under-utilisation of new technology.
- The government does not adopt to changes in technology as swift as the private sector.
- Command economies are no longer competitive on the international market.
- The reason is that there is no motivation for entrepreneurship and competition.
- Command economies are inefficient due to unproductive use of resources.
- For example, unproductive workers exist in public firms and departments because there is no incentive for them to increase their productivity.
- There are low incentives for innovation and entrepreneurship which slows down economic growth and development.
- The main aim of the command economy is to create a strong economy.
- By focusing on viability of the economy, it losses focus of the needs and wants of the people.
- Command economies may have high crime rates.
- Since the government controls and restricts the production and consumption of certain goods and services, consumers rely on the black market to obtain such products.
- People smuggle these goods from neighboring countries.

Mixed economy

- The main feature of the mixed economy is the presence of the public and private sectors.
- It has some characteristics of the command economy as well as those of market economy.
- Market forces operate in the economy but the government intervenes to correct the anomalies of the free market system.
- There is public and private ownership of resources.
- The government owns strategic industries.
- The public firms also provide essential goods and services such as health care and education.
- The government creates laws that control harmful activities in the economy such as exploitation of consumers by monopolists.
- Government intervention and production of goods and services, among others, help to reduce a situation where some people are extremely poor whereas others are extremely rich.

What to produce

- The businesses in the country decide on the goods and services that should be produced.
- Goods and services that provide high profit will tend to be produced, while loss making products will not be produced.
- Therefore, forces of demand and supply influence the goods and services to be produced.

- The central authority or government also decides on the production of other goods, mainly public and merit goods.
- For example, the government decides on the amount of defense, healthcare and education that should be provided in the country.

How to produce

- Firms decide on how to produce goods and services in the economy.
  - For example, they choose the types of machinery, tools, equipment and technology to use in the production process.
- The government also decides on how some products are produced such as health care and education.
  - The government influences the production methods of private firms through the legislation it makes.
  - For example, the government puts regulations that help in preventing land degradation and pollution.
  - Firms will therefore stop the use of methods that lead to land degradation and that increase pollution levels.

For whom to produce

- Consumers decide on who gets the goods and services.
  - Only consumers who have money buy the goods and services.
- On the other hand, the government has a role to allocate some essential goods and services.
  - The government, for instance, distributes healthcare and education facilities throughout the economy.

Advantages

- The government is involved in the production of essential goods and services such as defence and security.
- This ensures that the welfare of the citizens is catered for.
- It is responsible for producing public and merit goods.
- Public ownership of manufacturing firms ensures that the social needs of the citizens are addressed.
- The government plays an important role of correcting market failures.
- The government increases the consumption of merit and public goods.
- It reduces the consumption of demerit goods.
- It helps in correcting market imperfections.
- It assists in information sharing
- Individuals and private firms own factors of production hence output is high.
- The government provides support services that is essential for increased production.
- For example, the government ensures the availability of adequate energy and road networks.
- There is less income inequalities due to the role of the government in wealth redistribution.
- The mixed economic system is more stable than the free market system.
- Government controls and regulations correct the failure of the free market system.
- There is production of a variety of goods and services.
- Competition leads to efficient allocation of resources.
- There is participation of private firms and individuals which creates fair competition that benefits both entrepreneurs and consumers.
- The government controls monopoly power through legislation and monitoring.
- The system has better equitable distribution of income and wealth than free market system.

- The market system and government regulations balance each other, thereby avoiding a situation where citizens live in absolute poverty.
- The welfare of the citizens is balanced against the viability of the economy.

Disadvantages

- The existence of competing factors creates complications in the economy.
- Since the mixed economy borrows aspects from both the command and free market economic systems, many factors come into play leading to inconsistencies.
- These inconsistencies result in inefficient use of resources.
- Private firms and individual producers in the economy may be unwilling to cooperate with the state.
- There may be inefficient use of resources by the public sector.
- There is market failure from the private sector.
- Private firms and individuals may produce or distribute harmful products.
- The government may impose high taxation to private firms.
- There might be over-exploitation of resources by the private sector.

Summary

- The three major economic systems are command economy, free market system and mixed economy.
- In a pure market economy the production, distribution and consumption of goods and services are determined by the market forces of supply and demand.
- The forces of supply and demand also determine what goods and services are produced and how they are distributed.
- In a pure command economy there is total government control of the economic activities.
- All production and distribution of goods and services are undertaken by the central planning authority.
- A mixed economy consists of private and public sectors.
- Market forces operate in the system, but regulated by the government

The mixed economy has features of both the free market system and the command economy.

Comparison of the economic systems

- With the pure command economy, the government wholly owns and controls all resources.
- There is no private ownership of factors of production.
- Whereas with the market economy, all factors of production are owned and controlled by individuals and private firms.
- With the mixed economy, some of the resources are owned by private firms and individuals and other resources are owned by the government.

Differences among economic systems

FREE MARKET ECONOMY	COMMAND ECONOMY	MIXED ECONOMY

-The types and quantities of goods and services to be produced are determined by demand and supply. -Firms produce goods and services that generate greater profit levels.	The government determines the types and quantities of goods and services that will be produced. -The government prioritises the production of basic goods and services.	-With the mixed economy, both consumer spending patterns and government decision makers determine the type and quantities of goods and services that are produced in the economy. -The private firms produce goods with high returns. -The government focuses on production of essential goods and services.
Firms choose the least cost methods of production so as to maximize profit. Businesses combine factors of production basing on their costs.	The government combines factors of production in a way that maximizes output and in a way that leads to greater welfare of the citizens.	-Firms combine factors of production in a least costly way. -The government combines factors of production in a way that maximizes output and society's welfare.
People who are able to pay for the goods and services get them. Those without the ability to pay won't get the products.	-Central planners choose who gets the goods and services through an allocation system. -The government may also control prices to help people to afford basic goods and services.	The market mechanism will determine the distribution of goods and services. Some essential products can be rationed by the government to allow people to access goods and services.
Economic resources are owned by individuals and private firms.	There is public ownership of resources. All economic resources are in the hands of the government.	-Some resources are owned by the government while some are owned by individuals and private firms. -Normally, most of the resources are privately owned.
Wealth and income are concentrated in the hands of fewer rich people.	Wealth and income are fairly distributed among the citizens.	-Some people are very rich. -Apart from the very rich people, the rest of the people have fair share of the wealth of the country.
The government exerts very little or no influence on the business activities in the economy. The government can just have a low regulatory role in the economy.	-Virtually all economic activities in the economy are controlled by the government. - The government sets and enforces business regulations.	The government has a limited role in the economic activities of the country. It sets regulations, owns some businesses and help in redistribution of income and wealth.

There is competition in the economy. There are many producers who compete for consumers.	There is no competition in the economy. All production of goods and services are done by the government.	There is existence on competition in the private sector of the economy. No competition exists in the public sector. The government produces essential goods and services.
Consumers are normally exploited by sellers. Workers are also exploited as they receive very low wages.	There is no exploitation of consumers and workers in the economy. For example, wages are charged by the government.	Although there is a level of exploitation in the private sector, government helps to regulate on business activities which reduces exploitation. For example, the government sets minimum wages

Table 2.1: Differences among economic systems

Similarities of the economic systems

- All the three systems produce goods and services to satisfy the needs and wants of the citizens.
- Goods and services are assigned prices. The difference only comes on how prices are determined.
- There is a possibility of government involvement in all the three economic systems. Even with the market economy where there is little chance of intervention, the government may still exert influence. The government may, for example be involved in the provision of security and justice.
- In all economic systems, labour and capital play a major role in the production of goods and services. In the case of capital, the difference is based on who provides it.
- In all the three economic systems, firms or government own all other factors of production except labour.
- In both the market economy and mixed economy, there is existence of the private sector.
- In command economy and mixed economy, there is significant government involvement in economic activities.
- In the market economy and mixed economy, consumers have higher choice on goods and services.
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Zimbabwe as a mixed economy

- In Zimbabwe, the government and private firms are involved in producing goods and services.
- Individuals and households have freedom to choose what to buy and sell, how to produce some goods and services or to accept or refuse to buy certain commodities.
- Firms are engaged through direct ownership and production of goods and services.
- There are various private firms in the primary, secondary and tertiary sectors of the economy.
- Many private firms for example are involved in the mining sector.
- Apart from the formal sectors, many individuals are involved in the informal sector.
- The informal sector is that part of the business that is not registered with the government.

- On the other hand, the government owns many firms or public enterprises such as National Railways of Zimbabwe (NRZ) and Grain Marketing Board (GMB), among others.
- Public enterprises are operating in various key sectors such as mining, transport, water provision, telecommunication and energy.
- One of the main roles of the government in the Zimbabwean economy is the creation and enforcement of regulations.
- The Zimbabwean government has created laws that control ownership of property and registration of companies and other businesses.
- As part of regulating the business environment and its operations, the Zimbabwean government has created many agencies such as National Social Security Authority (NSSA).
- Some regulations control externalities such noise and air pollution.
- The government also acts as a producer of merit and public goods such as education, healthcare, defense and justice among others.
- The Zimbabwean government is involved in income redistribution, through collection tax of revenue and its distribution.
- Apart from its participation in infrastructural development such as roads, railway system and airports, it offers welfare assistance to its people.
- The Zimbabwean government strives to create economic conditions that ensure that aggregate economic activity is as high as possible, leading to economic growth.
- It achieves this through the introduction of monetary and fiscal policy.
- The existence of a vibrant private sector and the public sectors indicates that Zimbabwe is a mixed economy.

Measures to correct market failure

1. explain the solutions to the problems of market failure
2. evaluate the solutions to market failure

Market failure

- Market failure has negative effects on the operations of the economy because there is non-optimal allocation of resources.
- Therefore, an inefficient allocation of resources in an economy shows the existence of market failure.
- The main aim of the government is to preserve the interests of the public and to control market failures.
- In order to correct market failure, the government can implement various corrective measures which include pricing policies, wage policies, quantity regulations, trade restrictions or taxation policies.

Measures to correct market failure

Wage policies

- Wage means a payment made for the service that a person makes towards the production of goods and services. It also includes fringe benefits paid to employees.

- The wage policy refers to the regulations that control the determination of wages in the country.
- The government can set regulations that are targeted at reducing wage differentials in the country.
- Very big differences in wages can indicate a market failure hence a need for government to regulate wages.
- The government can set laws that outline how wage rates are decided.
- In Zimbabwe, the labour law requires the employer and the employees to negotiate and agree on a wage favourable to both parties but they are guided by the minimum wage set by the government.
- The minimum wage is set as a means to make sure that workers are able to attain a certain level of standard of living.
- However, in trying to solve a market failure of wage differentials, the government can create another problem.
- The minimum wage usually increases the cost of production, thus some firms may end up reducing the size of the labour force by retrenching some workers.
- Therefore, minimum wages may solve wage inequalities but in turn create unemployment.
- The government can also set laws that disregard wage discrimination.
- Wage discrimination is a process where people who do the same job are paid different wages because of their sex, race, religion or background.
- There are also laws that limit the bargaining power of the trade unions so that they would not bargain more than the competitive wage level.
- Very high wage rates increase costs of production leading to low domestic competitiveness of the products.

Nationalisation

- Nationalisation occurs when the government takes over an industry from ownership and control of the private sector.
- Nationalised firms may be called public corporations or public utilities.
- Usually, the firm is placed under a ministry where the responsible minister works towards the success of such business unit.
- A public enterprise is controlled by the board of directors which in turn employs the managers.

Reasons for nationalising firms

The firms are controlled by the government for strategic reasons.

- Some of the firms produce very important products which should not be controlled by private firms.
- The private firms may overcharge the products or may sabotage the economy at any time hence a need for the government to provide.
- Take for instance, electricity production and oil production are essential to everyone in the economy hence the government should produce them so that all classes of people may be able to benefit.
- In Zimbabwe, the Grain Marketing Board has been formed to store and sell the staple food and it keeps the strategic food reserves.
- Defence sector and security services are also provided by the state so that everyone may benefit despite the classes.

The government can control some natural monopolies in order to curb market failure.

- Natural monopolies refer to sectors where only one firm must exist so as to efficiently allocate resources and distribute the products.

- There is need for very high capital investment since the initial cost of fixed assets is very high.
- If natural monopolies are owned by private firms, they would charge very high prices for the products thereby exploiting the consumers.
- The rail system is an example of a natural monopoly. There would be inefficient allocation of resources if there were going to be two firms operating rail transport since there will be a need for two railway lines joining two urban centres.

Some public firms provide social benefits to consumers.

- Private firms invest in businesses where there are high returns on investment.
- Private firms are mainly focused on their private benefits and private costs not on social benefits or costs.
- However, public firms may operate where the costs are greater than the returns as long as they provide social benefits to the people.

Public corporations are established to provide welfare facilities to the people.

- There are public firms that are created to provide welfare services to the consumers and this is done so as to improve the standard of living of the people.
- Some of these firms provide basic facilities to the citizens such as supply of water.

Some industries require long term investment.

- Private firms are not interested in such investment since they will be able profitable in the long run hence a need for the government to invest in such projects.

Owning large firms enables the government to control some macroeconomic variables such as inflation, employment level and economic growth.

- The government usually takes over some large companies that are likely to close down so that people do not lose employment.

Direct provision of goods and services by the state

- The government owns and controls some firms that produce special products that are not produced by private firms.
- The private costs of these goods exceed their private benefits.
- Private cost is the cost of producing a good or service and private benefit refers to the revenue obtained from selling that good or service.
- Private firms produce goods only when private benefits are greater than private costs.
- The private sector is not willing to produce public and merit goods hence the government will produce them.
- Public goods cannot be provided by the private firms because of free rider problem.
- Free riding means that people who have not paid for the product can still use it.
- In the case of a road, if other people pay for using it, some people who have not paid can still use it.
- The government provides defense and police services because they are public goods.
- Other examples of public services include community drainage, pavements and national disaster relief programs.
- The other types of goods that the government provides are merit goods. These are goods that are very beneficial to all citizens of a country.
- If merit goods are to be produced by private firms, there would be under-consumption of such products and private firms cannot produce enough of such products which prompt the government to take the production responsibility.

Price controls

- The government can also set prices of goods and services so as to off-set market failures in an economy.
- In a price mechanism system, the prices are determined by demand and supply only.

    - However, these prices may not fully represent what the society can afford hence a need for regulation by the government.
- The government can then set either minimum or maximum prices for products in an economy.
- Price ceilings are the maximum prices that are set either by the government or a board appointed by the government.
- However, price controls lead to shortages of goods.
- The use of maximum price requires the government to introduce other methods of allocating the products such as rationing or queuing, where people get the good or service on the basis of first come first served.
- When there are shortages in the economy, a black market emerges.
- The government may set minimum prices of goods or services and the minimum price is called price floor.
- The reason for adopting minimum prices is to enable producers to be viable by ensuring that they get a fair return for their products.
- This is done where the government wants to promote the production of certain products so as to reduce shortages.
- The government uses these price control measures to enable poor members of the society to access some basic goods such as foodstuffs.
- When many people are able to afford the products, their welfare improves.
- Price controls are also used to stop producers from exploiting consumers by charging very high prices.
- Maximum prices are used to create equity in the economy.
- Price ceiling might be used by the government to reduce overproduction and overconsumption of harmful goods.

Trade restrictions

- In a bid to solve inefficient allocation of resources due to externalities, the government can restrict trade through tariffs and subsidies.
- The government can impose taxes that are equivalent to the amount of cost of a negative externality.
- Take for instance, if the government imposes a tax on pollution the tax will increase the price of the good being produced, consequently reducing the demand or consumption of the product.
- Government can also give property rights to polluting firms so as to regulate pollution.
- The government can give certain emission standards allowed for firms to pollute the environment. If the firm exceeds the set standard, then they will pay a certain fine to the government.
- However, some firms may exceed the standard if their businesses are profitable enough to cover the fine.
- If there are two firms, **A** private limited and **B** private limited operating almost in the same area, **A** may be operating upstream and **B** operating downstream.
    - The emissions of company **A**, which is in the production of gases may affect the production of company **B** which owns a cattle range downstream.
    - To solve the problem, the government can give company **A** the permission to pollute the river up to a certain level but they will be paying company **B** a certain percentage of compensation to cover their losses due to pollution.
    - The losses may include the money used to treat the water for their cattle.
    - If company **A** exceeds the set level, then they will be sued.

- For positive externalities, the government can give subsidies to firms in order to boost production and/or consumption

PRODUCTION

1. Explain production
2. List the four factors of production
3. Explain the four factors of production
4. Match each factor of production to its reward.

Production

- Production is the process of combining land, labor and capital to come up with goods and services so as to meet consumer needs and wants.
- It is also the provision of goods and services to satisfy human needs and wants.
- It is any economic activity that is carried out by firms, government and individuals in order to satisfy human needs and wants.
- Land, labor and capital are scarce resources for the production process.
- Those who combine scarce resources (land, labor and capital) to come up with products are called entrepreneurs.
- Entrepreneurs can either work in firms or as individuals.
- The production process ends when goods and services produced reach the consumers.
- land, labour, capital and enterprise are inputs used in production process by firms to produce output which is used by households.

Definitions of terms

- Products refer to both goods and services.
- Goods are tangible items. Examples of goods are books, oranges, pencils and cups.
- Capital goods are assets used by firms and individuals to produce goods and services. Example of assets are machinery, equipment and buildings.
- Consumer goods are products that consumers use to satisfy their needs and wants. Examples are clothes, refrigerator, food and drinks.
- Durable goods are items that have a long life span. Examples are refrigerators, television and mobile phones.
- Non-durable goods are items that have a short life span. Examples are food and drinks.
- Services are intangible products which we cannot touch. Examples are banking and insurance.
- Consumers are firms and individuals who buy goods and services for their own use.
- Needs are products that are basic in our lives and we cannot do without them. Examples are shelter and clothes.
- Wants are products we can live without. Examples are televisions, chocolates and ice creams.
- Firms are business organizations which produce goods and services, then sell them at a profit. Examples are delta beverages and National foods.

Factors of production and their rewards

- Factors of production are resources which are needed by firms and individuals in the production process.
- There are four factors of production namely
  - land,
  - labor,
  - capital
  - entrepreneurship.

Land

- Land comprises of the actual place and other natural resources.
- It includes all natural resources both renewable and non-renewable. Examples are water, soil, diamonds, gold and animals.
- Land is a limited resource and it cannot be expanded geographically.
- So, firms and individuals should produce goods and services on the limited portion of land that is allocated to them.
- Land owners earn rent from the land they lease to firms and individuals.
-
- **Rent is the price for hiring land.**
- No one can operate a business without a piece of land, it could be a mere office or a factory.
- In business some people use land that belongs to others.
- For example, farmers may use other people's land to grow their crops.
- Rent does not involve the payment for use of premises and buildings on the piece of land.
- Rent is payment for the use of the ground where production facilities can be constructed.
- The value of rent depends on natural differences of the land involved.
- Some pieces of land are fertile while others are infertile.
- If the land is required for farming, fields that are fertile should be more expensive than infertile ones.
- The land that is close to urban centres may be more expensive than the land which is far away from towns and cities.
- Probably the land that attracts highest rent is that found in the urban centres.
- The reason for the high cost of land in urban centres is that it is limited.
- Such land cannot be increased in size, so it is expensive.

Labour

Labour is the human mental and physical effort used in the production of goods and services.

- When workers carry out tasks within a given period of time, their payments are in form of wages and salaries.
- Labour is paid either hourly, daily, weekly or monthly depending on the payment system suggested by the firm.
- Labour is a scarce resource because there is need for funds to pay for services provided.

- **Reward for labour is wages and salaries.**
- Wage is the payment for a service that is provided by people during the production process.
- People who provide mental or physical services are rewarded through wages/salaries.
- Therefore all types of workers, unskilled, semi-skilled and skilled are given wages/salaries.
- When economists use the term wages, they also refer to salaries.
- The term wage mean anything that is paid for the provision of human effort, such as salaries or bonuses.
- Wages can be paid in cash or kind.
- An employee is paid in kind if he/she is given goods or services as a payment.
- For example, an employee can be given grocery items as part of his/her payment.
- If the employee is given cash, that is referred to as nominal wage.
- This includes the money that is deposited in the employee's bank account.
- Apart from nominal or money wage, there is real wage.

- Real wages refer to the quantities of goods and services that a worker is able to acquire using the money he earns.
- Employees can be paid daily, weekly or monthly.
- The amount of money an employee is paid per unit of time or activity is called a wage rate.
- A piece rate is the amount of money that is paid to a worker after completing a given task at work.
- A time rate is the amount of money that is paid to an employee basing on the unit of time spend at work.
- Employees can also be given bonuses at work, basing on agreed criteria.

Capital

Capital refers to man-made resources that are used for the production of goods and services.

- These resources include machinery, equipment and tools.
- Capital resources are subject to lose value overtime.
- **The reward of capital is interest.**

Interest

- Interest is the reward for capital.
- Capital are all the man-made resources that are used to produce goods and services.
- Most often, businesses borrow money to finance various investment projects.
- In other words, money is required to secure capital assets such as machinery, vehicles, factories and other equipment needed for production purposes.
- Businesses that borrow funds will return the money with interest.
- For borrowers, interest is the cost of borrowing money.
- Interest is normally charged as a percentage of money borrowed.
- The rate of interest fluctuates, going up or down depending on the demand for loans in the economy.

Why there should be interest for borrowing money?

- Interest is levied on borrowed money (loan) for a number of reasons:
    - Businesses use capital in producing goods and services, as a result the borrowers pay interest from part of the money they earn from the sale of their products.
    - Interest is paid as a payment to compensate the lender for the risk involved in lending out money.
        - By lending money, the lender is open to a possibility of failure to recover such funds.
    - Interest is paid to cover for the inconvenience of the lender in parting with his/her money.
        - When the money has been lent to other people, the owner can no longer use it.
        - Therefore, interest is paid to compensate for the inconvenience that arises to the owner when s/he parts with his/her money.
    - Interest is used to compensate for any possible fall in the value of money (inflation).
    - Part of the interest is used to cover for administrative charges.
        - In order to issue out a loan, a firm needs to do a lot of paperwork.
        - The lender may need to carry out reference checks which uses resources.

Entrepreneurship/ enterprise

- Entrepreneurs are individuals who combine land, labour and capital to produce goods and services at a profit.
- Business planning and acquiring of financial and material resources is done by an entrepreneur.
- An entrepreneur decides on what to produce, how to produce and for whom to produce.
- The reward for entrepreneurship is profit.
- Profit is the reward for entrepreneurship or enterprise.
- The entrepreneur offers services to the business in various ways such as managing the business.
- The entrepreneur is also paid for risk taking.
- A risk is a possibility of incurring a loss so when the entrepreneur invests in the business, he/she risks the possibility of incurring a loss.
- However, a profit is only a payment for taking non-insurable risks.
- Non-insurable risks are the risks that are least anticipated, for which there is no insurance.
- Some risks such as loss that arises from accidents and fire, for example, can be insured against.
- Profit is the difference between the cost of production and the revenue generated from production.
- Profit = value of output – value of inputs.
- If we subtract the value of total output from the value of total input, we get gross profit.
- Gross profit is defined as the total income that the entrepreneur gets from the business.
- The gross profit is composed of the following components:
    - Rent for the land owned by the entrepreneur
    - Interest on the capital that has been provided by the entrepreneur
    - Payment for the services offered by the entrepreneur to his/her business,
    - Payment for bearing the business risks and uncertainties
    - Payment for introduction of new innovations
- Therefore, pure profit for the entrepreneur can be obtained by subtracting the above components, which could have been paid to any other hired worker, if it was not provided by the entrepreneur.
- To arrive at pure profit, the following must therefore be subtracted from the gross profit:
    - Rent for land owned by the owner
    - Interest on capital provided by the owner
    - Payment for service provided by the owner
- Pure profit can also be called net profit.
- To arrive at net profit, taxes must be subtracted from it.
- However, profit can be used by the entrepreneur in several ways, such as:
    - Reinvestment in the business
    - Introducing new technology and innovation
    - Part of the profit that is reinvested into the business is called retained earnings.
    - At times the business also makes a loss. This is when the value of inputs is greater than the value of outputs or when total cost is greater than total revenue.

Table 3.1: Rewards of factors of production

FACTOR OF PRODUCTION	REWARD
Land	Rent

Labor	Wages and salaries
Capital	Interest
Entrepreneurship/enterprise	Profit

Summary

- The production process involves combining the factors of production to create goods and services that people require.
- The four factors of production are land, labour, capital and enterprise.
- Entrepreneurs are people who combine the other factors of production to produce goods and services.
- Each factor of production has its own reward.
- The reward for land is rent.
- The reward for labour is wage or salary.
- The reward for capital is interest.
- Whereas, the reward for enterprise is profit.

Stages of production

- Production of goods goes through various stages until they reach the final consumer.

Primary stage

This is the first stage in the production process.

- This involves the extraction of raw materials from the land.
- Most of the products that are extracted need to be processed before they are used.
- Some production activities that are found in this sector include farming, mining, fishing, oil extraction and forestry, among others.
- Once the products are obtained from the earth's surface, they are passed on to the second stage which is called secondary production.

Secondary stage

- The secondary sector consists of all industries that change the raw materials from their original state into finished or semi-finished goods.
- The secondary sector has got two main activities which are construction and manufacturing.
- The manufacturing industry is involved in processing the raw materials that are produced in the primary stage into semi-finished or finished state.
- The manufacturing sector includes firms that produce furniture, clothing and chemicals.
- The construction sector involves making different goods from the semi-finished products.
- Some examples of construction firms include car assembly and building industry.

Tertiary stage

- This stage involves the movement of goods from the producers to the end users.
- The tertiary sectors also deal with provision of commercial and personal services to the primary and secondary sectors.
- Commercial services are all the activities that assist in the movement of products from the producers to the consumers.
- The production function ends when the consumers access the goods and services.
- Some of the commercial services are insurance, finance and transport.

Division of labour

- Division of labour refers to a situation whereby the production process is divided into various tasks, where each individual or team does a single task on a continuous basis.

- Each worker or team is expected to do the allocated activity every time.

Advantages of division of labour

- Production increases if employees specialize.
  - As each worker does the same activities day after day, he/she becomes very experienced therefore does the job accurately and in a fast way.
- Time is saved because each employee does the tasks very fast.
- Experienced workers are more likely to reduce wastage of raw materials and other resources. This leads to low costs of production.
- It becomes easier to set aside other activities that can be done by machines. Each employee or team becomes reliable in the use of some tools and equipment as they use these for long periods of time.
- Due to division of labour, there is better quality of work.
  - Since employees are specializing in certain activities, they become very accurate in their tasks leading to high quality products and services.
  - Standard products are easy to produce since each department becomes efficient.
- Division of labour enables workers to be given tasks in areas that they are interested in, where their skills and knowledge are best used. For example, someone who is interested in driving will have to concentrate on that while at work.
- It becomes easy to train the employees since they focus on their special tasks. They do not need to learn other skills that are not related to their activities.
- Management of production becomes easier because estimation of output and costs becomes reliable per specific period of time.

Disadvantages of division of labour

- The job becomes boring if an employee does a similar task now and again and for a long period of time.
- The feeling that they are efficient in doing these tasks may lead to some employees to lose concentration leading to serious mistakes.
- This may lead to damage of the equipment, tools and products and even injury to oneself.
- Due to the high level of interdependence in the production activities, a breakdown on production on one section leads to work stoppage in other areas.
- Unemployment may increase in the country. If an employee who has been specializing in a certain activity leaves the current job, he/she may not find similar work where he/she can use such skills and expertise.

Specialization

- Specialization has resulted from division of labour.
- Specialization means that individuals, firms, countries and even regions use their natural and man-made resources on producing the goods and services for which they are best at.
- Specialization has been in existence for a long time.
- In the traditional society, girls concentrated on specific tasks such as washing and cooking, whereas boys had their own tasks at home such as herding and hunting.
- In the feudal system, tradesmen specialized. There were locksmiths, hunters, pastoralists and gathers.
- For specialization to be effective, the people need to trade their goods and services.
- People who produce certain goods and services need to exchange with others so that they have enough products to live on.
- Farmers must exchange their produce so that they can have medicine, education or entertainment.
- Nowadays, people no longer use barter trade but they use money as medium of exchange.

Individuals

- Many individuals specialize in producing certain goods and services.

- Individuals specialize in doing various trades and professions.
- Some people are doctors, nurses, farmers, lawyers, carpenters and welders, whereas others are teachers, mechanics, lecturers, electricians and builders, among others.
- Nowadays, many young people depend on sporting activities such as soccer, tennis and rugby for survival.
- Farmers produce crops and sell. This gives them money to buy clothes and to pay for services such as the education for their children.
- People specialize in doing jobs for which they have skills and experience.
- People whose skills are in high demand are paid well. Soccer players and some musicians earn a lot of money because they have specialist skills.
- Individuals whose skills are not in demand are paid less and at times may fail to find the job.
- With increased mechanization and automation, many people are finding their skills to be redundant.
- Redundancy means that their skills and expertise are no longer needed in the modern world and they need to acquire new skills through training.

Firms

- Many firms have noted that they can produce more if they choose to concentrate on producing a single product.
- Producing a single product ensures that all the workers in the firm use their skills and knowledge towards the production of the good or service.
- Such firms also use all its man-made and natural resources towards the production of the product they are best at. This results in increased productivity.
- In Zimbabwe, many companies specialize in mining, farming, food processing, manufacturing and insurance.
- However, some firms choose to produce a variety of related products as a means to reduce risk that arises from producing a single product.
- The greatest risk of producing a single product arises from the fact that if the demand of the product falls, the company faces viability problems.

Advantages of specialization

The following are some of the gains of specialization:

- There is high output of goods and services in the country, region and the world at large.
- As a result, consumers have access to a variety of products to meet their needs and wants.
- Producers of goods and services enjoy economies of scale.
- Since goods and services are produced in many countries but accessible to all, the prices of products tend to remain low.

Disadvantages of specialization

- Specialization leads to loss of flexibility to workers.
- Work becomes boring to the workers if they continue to do the same work every time.
- Workers cannot learn other skills because they concentrate on their own jobs only.
- It creates shortages if one worker is absent.
- Increased risk of unemployment due to lack of various skills on the part of the employees.
- Specialization also leads to overdependence of countries on others.
- Some countries will face trade restrictions thereby losing markets for their products.

Interrelationship of the three stages of production

- From the picture, forestry is the first stage of production where raw materials are produced.
- Trees from the primary industry will be processed into timber in the secondary production stage.

- The processed timber is transported to the construction site by a vehicle.
    - Transport falls under the tertiary stage of production.
- After delivery, the timber is used for the construction of a building.
- The tertiary stage is found in all the production stages of the economy.

Value addition

- Value addition is a process of transforming inputs from their original state to a more valuable state during the production process.
- Value addition is shown by the difference between the price of inputs and the price of finished goods.
- The value of products can be increased by excellent delivery services, offering convenience, improving product features and benefits.
- Fig 3.5 below shows the process of value addition from wheat to bread.

Fig 3.5: Value addition

Importance of Value Addition

- It increases the price of the product thereby maximising profits.
- It improves the quality of the product which result in increased living standards.
- It improves the reputation of firms that manufacture the products.

Methods of Production

- There are two methods of production namely direct and indirect production.

Direct production

- In direct production, goods are produced by individuals specifically for their own consumption.
- Goods and services are produced to satisfy individual needs and wants.
- For example, production of crops and animals are for own consumption.
- Direct production is done to attain self-sufficiency.
- With direct production, there is little or no surplus goods produced for sale.
- An example of people involved in direct production are communal farmers.

Fig 3.6: Communal Farmers

Indirect production

- Indirect production involves the production of goods and services in large amounts for sale.
- The goods and services produced during indirect production also satisfy the needs and wants of individuals who were not directly engaged in the production process.
- Indirect production requires more capital because of the need to produce large volumes of goods and services.
- The firms and individuals engaged in indirect production gain revenue after selling their goods and services.
- Fig 3.7 below shows the production of drinks at a large scale.

Fig 3.7: Production of drinks

Land Reform Programme in Zimbabwe

- Land reform is a program that is undertaken by the government to redistribute agricultural land to people who want to do farming.
- Land reform involves the changing of laws and regulations pertaining to land governance and ownership.
- The land reform and redistribution programme is carried out by the government.
- After Zimbabwe gained independence in 1980, the government aimed at distributing land among the citizens.
- The land reform programme in Zimbabwe began around 1990.

Fig 3.8: Production of crops

The aims of the Land Reform programme in Zimbabwe

- To resettle deserving and landless people.
- To extend and improve agricultural base in the economy.
- To alleviate population pressure in communal areas.
- To improve the standards of living of the poorest sector of the population.
- To increase food security.
- To stimulate economic growth.
- To create employment in the country.
- To achieve national stability and progress in Zimbabwe.
- To increase land utilisation in the country.

Economic effects of the land reform programme in Zimbabwe.

Positive effects of land reform programme

The land reform programme:

- enabled the citizens to have land thereby producing their own food.
- enabled the citizens to access education on farming. The education they received by the farmers enables them to increase production while conserving land.
- reduced over population in communal areas.
- resulted in increased infrastructure in the economy such as dams leading and irrigation schemes.
- enabled the country to export more agricultural products thereby increasing foreign currency earnings.
- led to stability in the economy through increased food production.
-

Negative effects of land reform programme

- The government used a lot of funds to finance the land reform programme as it developed new infrastructure such as roads, schools and hospitals.
- It resulted in to under-utilization of land in some areas due to lack of resources such as tractors, combine harvesters and chemicals.
- The land reform programme increased the debt of the government as it financed the land reform programme using borrowed funds.

Summary

- Production is the provision of goods and services to satisfy human needs and wants.
- The three stages of production are primary, secondary and tertiary.
- The primary stage of production involves the extraction of raw materials from the land.
- These raw materials are used in the secondary stage of production.
- The secondary production stage involves the conversion of raw materials from their original state into finished and semi- finished goods.
- Manufacturing and construction sectors are the dominant industries in the secondary production stage.
- The tertiary sector deals with the provision of commercial and personal services.
- Commercial services are all the activities that assist in the distribution of products from the producers to the consumers.
- Value addition mainly takes place in the secondary stage of production.
- Value addition is a process of transforming inputs from their original state to a more valuable state during the production process.
- Value addition improves the quality of the product which results in increased standard of living.
- The two methods of production are direct and indirect.
- Direct production refers to the production of goods and services by individuals for their own consumption.
- With indirect production, goods and services are produced in large amounts for sale.

- The Zimbabwean government embarked on the land redistribution plan soon after attaining independence.
- Land reform involves the changing of laws and regulations pertaining to land governance and ownership.
- The main aims of Zimbabwe's land reform programme were to resettle landless people, improve agricultural base in the economy, improve the standard of living of the people, stimulate economic growth and increase food security.

1. Describe productivity
2. Calculate productivity
3. Describe ways of improving productivity

Productivity

- Productivity is a measure of the efficiency of resources in the production function.
- It is a measure of the relationship between the inputs and the outputs in a production function.
- The inputs are the factors of production namely labour, capital and land.
- The output is the amount of products that the firm gets as a result of production process.
- The output is in terms of goods or services or a combination of both.
- Productivity can either increase or decrease.
- Productivity increases when there is an increase in the amount of goods or services that are produced using similar amounts of factors of production as before.
- There is a decrease in productivity when there is a fall in the amount of goods and services that are produced using similar amounts of factors of production as before.
- Productivity increases in either of the two situations:
  - There is an increase in output using similar combination of factors of production,
  - When the quantity of output remains the same after there has been a reduction in the factor input.
- Generally, an increase in productivity results in an increase in profit or a reduction in loss, all other things remaining constant.
- A firm with lower productivity will have difficulty in competing with firms that have higher productivity.

Measuring productivity

- In theory, we can measure the productivity of all the factors of production. However, most firms measure the productivity of capital and labour.
- At times, firms can calculate combined productivity of all the factors of production using multiple factor method.
- Productivity is obtained by dividing the total amount of output by the value of factor input.
- Productivity= outputs/inputs

Measuring the productivity of labour

- Firms use this ratio to get each employee's contribution to production.
- It measures the efficiency of labour.
- Labour productivity is obtained by dividing total output by the average number of employees within a specific period of time such as hour, week or month.

- Labour productivity = total revenue/Average number of employees

Example 3.1.1

If a firm employees 500 workers and it produces 1000 shirts per day, then the average output per employee is obtained by dividing 1000 by 500.

- Labour productivity = 1000500
- This means that on average each employee produces 2 shirts per day.
- If the number of shirts produced per day increases to 1 500, then the average output per employee becomes 3 shirts.
- Assuming that all other factors of production remain unchanged, there has been an increase in productivity.
- If on the other hand, output decreases to 750 shirts per day, the average output per employee is 1.5 shirts per day.
- In this case productivity has declined.
- In the above example, the calculation of labour productivity is straightforward. However, complication arises if there is production of a service.
- It is difficult to measure output of service in terms of complete units.
- The best way is to calculate average productivity using the revenue generated, for example within a day.
- In this case, the following formula of productivity is used:
  Labour productivity = total revenue/Average number of employees

Example 3.1.2: Labour productivity

If a restaurant employs 15 people and generates $1 200 per day, then the productivity of employees is obtained by dividing $1 200 by 15.

- Labour productivity = $1 20015
- The productivity of each employee is $80.00 per day.

Productivity of capital

- Capital refers to all the machinery, equipment and infrastructure that is used to produce goods and services.
- Capital productivity = outputcapital employed

Example 3.1.3: Capital productivity

If a company that produces candles use 30 candle making machines to produce 180 000 candles per day, the productivity of the machines will be calculated as follows:

- Capital productivity = 180 00030
- Each machine therefore produces 6 000 candles per day.

- However, the improvement of the machine performance does not solely depend on the efficiency of capital.
- At times, it is difficult to separate the efficiency of capital from the efficiency of labour.

Multifactor productivity

- Labour productivity and capital productivity are examples of partial factor productivity.
- However, at times firms calculate the productivity of more than one factor of production, all at once.
- This is referred to as multifactor productivity.
- Multifactor productivity simply refers to the relationship between output and the combination of resource input.
    - Multifactor productivity = output labour+capital+material etc.
    - Total output is divided by the weighted average factor input.
    - Weighted average simply means that all the combined factors have been given different weights.
    - With multifactor productivity, the value of factors can be presented in monetary form.

Example 3.1.4: Multifactor productivity

50 000 units are produced at $0.50 per unit, labour cost $250.00, raw materials cost $350.00 and overhead costs $10 000.

- Capital productivity = $25 00010 600
- The Multifactor productivity is 2.36
- This productivity ratio is used to establish whether productivity is increasing or decreasing.
- The ratio can also be used to find the best combination of factor inputs in order to cut production costs.

Measuring factor productivity in the short run

- The short run period is a period in which there is at least one factor of production that is fixed.
- Therefore, in the short run firms study how output changes as a result of a change in the quantity of one factor input.
- Normally in the short run, capital and land are fixed factors while labour is variable.
- In the short run, we assume that only labour is the variable factor.
- When only one factor of production varies, the law of diminishing returns applies.
- The law of diminishing returns states that when one factor in the production process continually increases, the output will at first rise then later declines.
- To better understand the law of diminishing returns and productivity, economists study the relationship between three related concepts:
    - Average product
    - Total product
    - Marginal product

Total product

- Total product refers to the total output produced by a firm, using available resources within a period of time.
- To get total product, we multiply units of output by the unit price.

- Total product is used to analyze the relationship between a change in variable factor of production and the quantity of units produced.
- After obtaining the total product, a firm may derive related concepts of marginal product and average product.
- It is unlikely that total product would increase in proportion to the increase in the variable factor of production.

Average product

- The average product of a firm is obtained by dividing the total product by the number of units produced within a period of time.
- Average product therefore indicates the amount of inputs that are used in producing each unit of a product.
- The average product is an essential figure that is used in setting the selling price of a product.
- The average product when used with marginal product can indicate efficiency in production.
- Average product = Total ProductUnits of input

Marginal product

- Marginal product refers to the number of units of output that arise due to an increase of input by one unit.
- In other words, it is a change in output as a result of an increase in input by one unit.
- Marginal product = Change in total productChange in quantity of input

Example 3.1.5: Marginal product

If a firm has been producing 50 000 candles, using 30 candle making machines. When it increases its machines to 31, it produces 52 000.

- Marginal product =52 000-50 00031-30
  =2 0001
- Therefore the marginal product is 2 000 candles.
- These relationships arising from change in input and output can be represented in graphical or tabular form.
- In this case, we will use labour as the factor of production in the production of candles per day.

NUMBER OF WORKERS	TOTAL PRODUCT	AVERAGE PRODUCT	MARGINAL PRODUCT
1	2 000	2 000	2 000
2	4 100	2 050	2 100
3	6 250	2 083.33	2 150
4	8 325	2 081.25	2 075

5	9 900	1 980	1 575
6	10 700	1 783.33	800
7	10 700	1 528.25	0
8	10 000	1 250	-700

Table 3.1.1: Labour productivity

- As the number of workers continued to increase from worker 1 to 6, total product continued to increase as well.
- However, average product and marginal product did not continue to increase.
- After employing the third worker, the average product reached its peak.
- From the fourth employee, the average product has been falling.
- When the average product and marginal product start to fall, it means that the combination of the factor inputs is no longer efficient.
- There is a decline in productivity.
- When the number of employees increased up to a certain point, the marginal product started to decline.
- This is in line with the law of diminishing returns.
- This information can be presented graphically.

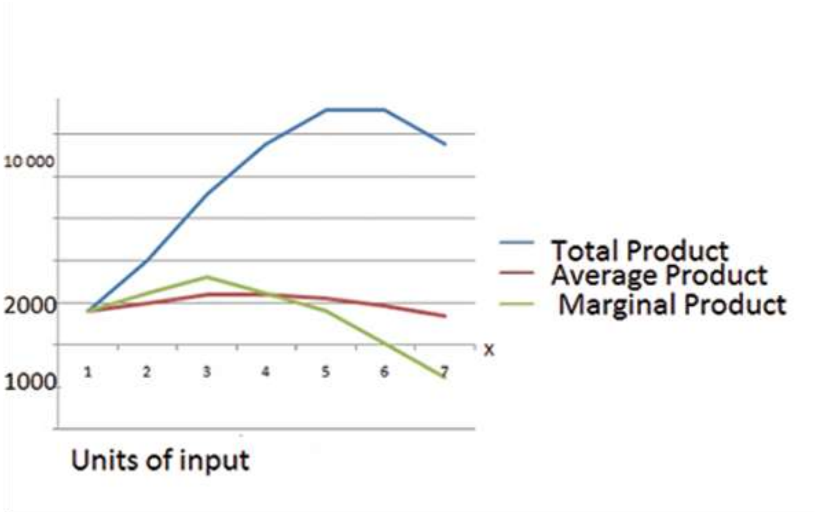

Fig 3.1.1: Labour productivity

- The total product curve is generally positive in nature, meaning an increase in variable factor leads to an increase in total product.

Ways to improve productivity

- Productivity in firms can be improved in various ways.

Training workers.

- If a firm trains its workers, it increases their skills levels which help them to perform better and faster at work.
- Better trained employees are more productive than untrained ones.
- For example, workers are trained to reduce wastages that may occur in the production process.

Companies may also use incentives to motivate their employees to work harder.

- The use of production bonus for example, is an incentive for workers to meet their targets.
- Another strategy used to motivate workers to perform better is to use the share schemes.
- If workers have shares in the company, they will work harder as they will get higher dividends in return.

Firms will help to increase productivity by introducing modern technology, new machines and equipment.

- Newer machines and equipment are faster and more efficient than older ones.
- Old machines and equipment can also easily breakdown thereby affecting productivity.
- Machines may be used to replace labour in performing some tasks.
- Machinery can be more reliable and faster than human beings in performing some critical work tasks.

Firms can also introduce new production techniques and methods which may be faster and efficient.

- Some techniques may be essential in reducing wastages and increasing the quality of products.

Improving working conditions.

- Employees need good resting time, safety at work, good accommodation and healthcare among others.

Firms may introduce specialisation and division of labour at the workplace.

- When there is specialisation and division of labour, employees do the tasks that they are very good at.
- Due to repetition in doing the tasks, employees become faster and accurate in doing the activities.

Firms may source cheaper and better quality raw materials.

location of industries

1. explain factors affecting location of industry
2. describe methods of government intervention in influencing location of industry
3. outline reasons for government influence on location of an industry

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Introduction

- There are various industries in Zimbabwe.
- An industry is a group of firms that are related in that they produce similar goods and services.
- The main categories of the industries are primary, secondary and tertiary sectors.
- These industries must be located at convenient places in order to be productive and viable.
- The following factors influence the location of industries depending on the nature of goods and services they produce.

Factors that influence the location of industries

Markets

- Market refers to the people who are willing to buy the goods or services that a firm produces.
- When a firm produces its products, consumers must buy them.
- As a result, industries must be located closer to the people who are willing to buy the goods or services.
- Many consumers create a high demand for goods and services.
- The largest markets of goods and services are found in cities and towns.
- That is why most industries are located in Bulawayo, Harare, Gweru and Mutare among others.
- Closeness to the market is particularly important to producers of perishable goods.
- The service sector must be located closer to the market.
- That is why hair salons, restaurants and banks are located in areas where there are many people.

Raw materials

- Raw materials are the inputs that industries use to produce their goods and services.
- All manufacturing and construction industries need these inputs in order to produce goods and services.
- Industries that use perishable raw materials are usually located closer to these resources.
- The primary industries are located where the raw materials are found.
    - Mining companies are located at a place where there are minerals.
    - Timber processing companies are located near the source of wood.
- In cases where the raw materials easily lose weight, the processing firms must be located close by.
- An example of raw materials that can easily lose weight is sugar cane.

Source of energy

- Most industries need a lot of energy to make their goods and services.
- Therefore, they must be located close to power supply.
- Electricity is the main source of energy in Zimbabwe.
- Factories must be located where there is reliable supply of electricity.

Availability of reliable water sources

- Most industries need water for a number of reasons.
- Water is needed for cooling, cleaning machinery and tools.
- Water may also be used as part of the input in the production process.
- For example, water is needed in the building industries to make mortar.
- Steel processing firms need to be located close to reliable sources of water.

Transport system

- Firms need to move their goods from one place to the other.
- Finished goods must be transported to the market.
- Raw materials need to be transported from the source to the factory or production centre.
- The main forms of transport used by industries are road and rail.
- Most industries are located closer to the main tarred roads for easy transportation of goods and raw materials.

Labour supply
- Production depends on the availability of the four factors of production that include labour.
- Therefore, firms must be located where there is good supply of the type of labour they want.
- Some firms require the availability of skilled, unskilled and semi-skilled labour.
- Agricultural firms need to be located where there is enough supply of unskilled and semi-skilled workers.
- The need for reliable supply of skilled and unskilled labour makes many firms to locate in growth points, towns and cities.

Land and site
- The gradient of a place may influence the location of industry.
- Some firms require places where there are large flat pieces of land so that right sizes of structures are erected.
- The type and nature of the soil may influence the presence of some industries.
- For instance, agricultural firms may need fertile soil with good drainage.

Capital
- Capital is important for the operations and viability of the business.
- There are two forms of capital namely fixed and working capital.
- Fixed capital includes machinery, land, infrastructure that cannot be transferred to another place.
- These can include some social capital such as hospitals and schools.
- Fixed capital also includes road infrastructure and railway line.
- Working capital includes the short term materials which are needed to finance the day to day running of the firm.
- Working capital includes unfinished goods and finished goods that have not yet been sold and raw materials in stock.
- Most sources of capital are found in cities and towns. Therefore, some firms locate in these areas so that they can easily access such resources.

Industrial inertia
- This is a factor that affects firms which are already established in certain places.
- Inertia refers to the reluctance of a firm to relocate to another place.
- The existence of fixed assets such as factories forces these firms to avoid relocation.

Government Policy
- The central government plays an important role in the economy through planning processes.
- It is responsible for setting aside areas for development.
- For instance, in Zimbabwe, the government has established many growth point centres where businesses can make investments.
- It also influences the location of public firms such as Grain Marketing depots, Agribank and Zimbabwe Electricity Supply Authority (ZESA) among others.
- The government also establishes labour laws in the country as well as taxation policies.

Special circumstances
- There are other factors that influence location of industries such as the climate of the area.
- Most agricultural firms do their businesses in areas where there is reliable rainfall.
- Alternatively, these agricultural firms may locate near large dams to enable them to practice farming under irrigation.

Methods of government intervention in influencing location of industries

- Most governments influence the location of industries.
- Different governments use various methods depending on the economic outlook in the economy.
- The government can introduce direct measures or can use regional agencies and local authorities- urban councils.

The government may develop various infrastructures as a way of luring firms to invest in certain places.

- Normally, firms locate to places where there are good infrastructures such as roads, railways, airports, schools, health centres, security and telecommunication among others.
- Therefore, the government develops such infrastructures in some places as a way to attract investments.
- At times, the government sets offices in these areas as well as ensuring that there are banking and other tertiary services which industries require.
- The government may ensure that there are necessary utilities such as electricity and water in such areas.
- For example, if the areas do not have water, the government may build reliable dams in the designated places.
- In areas where there are tourist attractions, the government can construct modern airports.

The government may set aside large tracts of land for industrial purpose.

- Land is one of the four factors of production and is limited in supply.
- The government may choose to unveil large pieces of land so that various industries have space to do business.
- The government may set low prices on land so as to reduce the cost of starting businesses.
- In its planning, the government usually sets aside industrial sites in cities, towns and growth points.
- With mixed economies such as Zimbabwe, the government may set up its enterprises in designated areas.

The government may introduce business terms to attract investment in certain areas.

- For example, the government may reduce or eliminate import duties for certain industries that are located in particular zones.
- It can provide subsidies to industries located in some places such as growth points and new industrial towns.
- The government can make it easy for firms to get licenses.
- It may reduce or scrap off corporate tax for some industries for a certain period of time such as one year.
- Sales taxes on certain raw materials or certain finished products may also be scrapped.

The government may introduce industrial zones in urban centres.

- Industrial zones are areas designated by urban councils for industries and factories.

The local government may put in place various measures to influence the location of industries and factories in their areas.

- They can offer incentives such as grants to firms that want to establish industries in their areas.
- They can also provide cheap land for industrial purposes.
- Local authorities may advertise the business opportunities that are in their areas through newspapers, websites and business meetings.
- It can build and rent out cheap offices and other supporting structures.

The government may establish training facilities close to the targeted site so that there is availability of skilled workforce.

- For example, Zimbabwe has established forestry colleges in Manicaland where there are many forestry and timber industries.

In some countries, governments have introduced regional development agencies which are responsible for attracting investment in the areas that they represent.

- Such agencies advertise the existing business opportunities and facilities.

Legal provisions

- The laws that are enacted by the government can influence the location of industry.
- In some areas, laws are established to prohibit the production of material that may pollute the environment.
- For example, some industries that produce heavy smoke may not be allowed to locate in areas where wind blows from into residential places.
- In some developed countries, nuclear industries are prohibited in certain areas.

Reasons for the government to influence location of industries

- The government may influence the location of industries for a number of reasons.

The government influences the location of industry as a way to reduce the level of unemployment in a certain area or region.

- One of the main objectives of the government is to have low levels of unemployment.
- By putting conditions that allow for the establishment of industries in a certain district, province or region, the government allows for creation of employment opportunities.

The government also puts measures to attract investment in certain geographical areas so as to increase the level of business activities in such areas.

- High business activities result in the provision of goods and services.
- The government may also aim to attract foreign direct investment in some of these areas.

The government may attract industries in certain places to enhance development of backward areas.

- The coming of new industries and firms leads to economic development in some areas.
- Services such as banking, insurance, healthcare, security and education may be created in areas where there are firms operating there.
- Creating opportunities for firms and industries to be established across the entire country helps to create balanced economic development.

To disperse economic activities around the country.

- The dispersion of industries and firms helps to reduce congestion in some urban centres.
- This may also help to solve some social problems that affect the country such as shortage of accommodation.

The government may create investment zones in rural areas so as to reduce rural to urban migration.

- If the government helps in establishment of industries and factories in growth points, many people will find employment there.
- As a result, there will be no need for such people to go to urban centres.
- The improvement in service provision as a result of investment in growth points will attract people to stay there.

The government will influence setting of industries in some areas as a drive to ensure that there is efficient utilization of economic resources.

- The government may help setting of industries in areas that have vast untapped resources such as minerals, wildlife or fishery.

To help in reducing income and wealth inequalities in the country.

- If industrial activities are spread across the country, it means that there is fairer distribution of income.

CHAPTER 4 LABOUR

1. explain the meaning of labour
2. state the reward of labour
3. list employees' interests in employment
4. identify the types of workers
5. describe the different types of workers

Labour

- Many people earn their living through working for other individuals or firms, from whom they get paid.
- Companies or businesses require the service of people to produce goods and services.
- Labour means the physical or mental effort which people use to produce goods and services.
- Teachers, for example, use their mental effort to provide a service to students.
- A gardener uses manual effort to produce vegetables which other people need.
- In other words, labour is the effort that is required to do an economic activity in which the person who performs the task is paid.
- An economic activity refers to a process of producing goods and services that the society requires to meet its people's needs and wants.
- If a person does a service for which he/she is not paid, then that is not labour.
- A woman who is employed to cook at a hotel provides labour. However, the effort of a woman who cooks food at home for her children's consumption is not classified as labour because it is not an economic activity.
- A person who plays soccer for a big team is paid for providing labour. However, an individual who plays soccer for leisure is not paid and cannot be classified as labour.
- Therefore, labour has a reward which is called a wage or salary.
- At times the term labour refers to the total number of people who are involved in the production system of a firm or a country.

- ## Reward for labour

- The price paid for the provision of labour is called wage or salary.
- The wage rate is the amount of money that is paid for a unit of time or a piece of production.
- Some firms charge their wages per period of time such as hourly, daily, weekly or monthly.
- Other firms and individuals charge their wage rate per unit of production.
- For instance, one can be paid basing on a chair produced.

Time rate

- A time rate is the amount of money that an employee is paid per unit of time such as an hour or a day.
- All employees who spend the same length of time doing the same job are paid the same amount of money.
- Usually the amount of time which a person works per day is recorded down in a document called a job sheet.

WEEK 1 TIME SHEET

Employee Name: John Dura	Title Cotton Picker
Employee Number 0321	Status Casual Employee
Department Harvesting	Supervisor Grace Bute

Date	Start time	End time	Regular time	Overtime	Total
01/02/2017	08.00	17.00	8		8
02/02/2017	08.00	17.00	8		8
03/02/2017	08.00	17.00	8		8
04/02/2017	08.00	17.00	8		8
05/02/2017	08.00	18.00	8	1	9
					41

Time Sheet

- Table 4.2 above shows the time, in hours, worked by Mary Garai in week 1, of February 2017. The total number of hours worked is 41. John is only paid for these 41 hours.
- The employer has a duty to pay the employees the agreed amount of money regardless of the work output.
- If a person, for instance, is paid $3 per hour and works for 9 hours per day, he/she gets $27.00 per day.

Piece rate

- With piece rate, a worker is paid according to the number of units of products that are produced or sold.
- People who pick up coffee, for example, can be paid a certain amount of money per kg of output.
- Vendors who sell airtime are paid certain cents per juice card sold.
- Therefore, the faster one works, the more output one produces and the more that person earns.
- If a person works for a company that is in the process of planting trees, one can be paid per every seedling planted. If a person is paid $2 for planting a tree, a person who plants 15 trees per day gets paid $30.
- Another employee who plants 9 trees is paid $18.

Performance related pay

- Performance related pay refers to the money that is paid to an employee that is based on how well one has achieved some targets.
- Commission is an example of performance related pay.
- Commissions are mainly paid to sales persons. The more revenue they generate to the company, the more they are paid.
- Usually commissions are set as a percentage of the revenue that an employee generates for the company during a period of time.

- There are also performance related bonuses that employees can get.

Fixed annual rate

- Fixed rate is also called salary.
- This is paid regardless of the number of hours one has worked or regardless of the units of production.
- Salaries are usually paid to senior employees such as managers and other professional employees at a company.

Gross and net pay.

- Gross salary or wage mean all the money you have earned as pay before any deductions are made.
- The gross pay may be constituted of basic wage, overtime payments, commissions and bonus you receive during the working period.
- The net pay is the actual amount of money which is left after all the deductions are done from your pay.
- Some examples of deductions include tax, levies and pension.

The difference between a wage and a salary

- A wage is a payment for the provision of labour based on an hourly, daily, weekly or unit rate.
- A salary is a payment made for the provision of labour based on a period of time, such as per month or per year.
- The total amount to be paid to an employee is agreed before an employee starts work and is normally written on the contract of employment.
- A contract of employment is a written document that stipulates all the conditions of employment, which both the employee and the employer must abide by.

Employee Interests at work

The following are aspects that employees normally value at their workplaces:

- Good wages
- Healthy and safety
- Fringe benefits
- Job security
- Good working conditions
- Growth opportunities

Wages

- Most employees want fair wages at their work places.
- Fair wage means that employees who are doing similar jobs are paid the same amount of money.
- In many countries, the governments set minimum wages for people doing certain types of work.
- The employees expect their employer to pay them at least the minimum wage set by the government.
- The employer is also expected to pay the agreed wage rate, which is usually written on contracts of employment.

Health and safety

- Employees expect to work at a safe place.
- The employer has the responsibility to ensure that all employees are safe when they are at work.
- All possible causes of danger at the work place must be eliminated.
- When dangerous chemicals and equipment are used, the employer should ensure that employees are safe.

- They should have protective clothing or training on how to use dangerous equipment.
- The company must help in giving first aid service to injured employees.
- If someone is injured, he/she must be taken for further health care at hospitals and clinics.
- Injuries at work place increase the costs since employees need medical care.
- Therefore, firm must create rules and laws that help to maintain a safe and health workplace.

Fringe benefits

- These are all other benefits that employees get from their employer apart from their wages and salaries.
- Usually fringe benefits are provided to the workers so that they work for company for a long time.
- Some companies provide health care through their own clinics at the premises.
- Other companies give medical aid services to their workers.
- Maternity leave is an example of such benefit.
- Maternity leave refers to the off work days that are given to a pregnant employee, so that she gives birth while away from work.
- Other firms give vehicles to their senior employees.
- Some employees may be given accommodation to stay at the company premises while others may be given housing allowances.
- Other benefits include telephone allowances, educational assistance, subsidised meals and transport allowance.

Job security

- Job security is a guarantee that an employee will not lose his/her job.
- The employee feels that he/she is secure at the company and will not lose employment in the short term.
- Employees who have long term contracts such as five or more years feel more secure than those who have short term contracts such as one month.
- Permanent employees have got more job security than casual employees.
- A permanent employee is one who has a contract which does not tell when his/her employment with the company will end.
- A casual employee is a worker who is employed on a short term basis and may not be hired again when the contracts end.
- Employees who have job security are motivated to perform in the best way they can.

Working conditions

- Working conditions involve a number of aspects such as time employees spend at work, rest time and the work schedules.
- The time that employees spend at work must be reasonable and must not stop them from doing other things they want.
- In Zimbabwe, the normal working time is eight hours a day.
- If employees work for twelve or more hours per day, then the working conditions are not favourable.
- Employees need breaks during their working day. Some firms give their employees tea breaks and lunch so that they rest.
- Employees may need day off work if they are sick or if any of their close family member dies.

Growth opportunities

- Growth opportunities at work include promotions and training.
- Employees always look forward to be promoted at work.

- The company can train its employees or can send its employees for training outside the company.
- Promotion means that an employee has been given a better and higher work position that he/she had.
- A clerk, for example, can be promoted to become a supervisor.
- Growth opportunities attract people to work in a company for a long time.

Wage factors and non-wage factors that influence employee's interest in the job

- The level of interest of an employee in the job is influenced by a number of factors which can be wage related.
- Wage factors refer to the basic pay the employee gets, the wage rate, the bonus, overtime payments and commission among others.
- Non-wage factors are other factors that influence a person's choice of a job that are not financial in nature.
- The examples of non-wage factors that influence an employee's interest in the job include hours of work, pension entitlements and promotion opportunities.
-

Types of workers

- Workers can be put into different classes basing on their skill levels.
- Workers can be skilled, semi-skilled or unskilled.

Skilled workers

- Skilled workers are those employees who have special skills and experience that are required to do certain jobs.
- These workers usually have many years of training in their fields as well as advanced knowledge and ability to perform the required tasks.
- Most skilled workers have attended universities, colleges and technical schools.
- However, some skilled employees may have acquired their skills due to the training and experience they get at their work places.
- Doctors, teachers, lawyers, electricians and computer operators are examples of skilled workers.
- Employees who are very educated and have high skill levels, such as lawyers may sometimes be known as professionals.

Unskilled workers

- Unskilled workers are those individuals who do not need to have special knowledge, skills, training and experience to do certain tasks.
- Usually these employees do manual work.
- People who perform the tasks are given instructions and demonstrations.
- They do not need to make any serious decisions.
- The tasks which they do are simple and repetitive.
- Unskilled workers are usually monitored and directed by their supervisors.
- The simple training they do at the workplace does not usually exceed a month.
- Gardeners, farm workers and cleaners are examples of unskilled workers.

Semi-skilled workers

- Semi-skilled workers have some basic skills and knowledge to perform their tasks.
- They, however, do not need to have specialised knowledge and training to do these tasks.
- Individuals who have finished high school can do such jobs.
- The tasks that are done by these workers are routine ones.

- The major decisions related to these tasks are done by someone superior at work.

Summary

- Labour is the human effort that is required in order to produce goods and services.
- Human effort needed to produce goods and services can either be manual or mental.
- Employees are attracted to certain jobs due to factors that include good wages, safe work environment, competitive fringe benefits, job security, opportunities for growth and good working conditions.
- Workers can be classified into skilled, unskilled or semi-skilled.
- Skilled workers are employees who have special skills, acquired through special training, education or experience that are required in the performance of certain tasks.
- Unskilled workers are employees who do not need any special training and experience to perform certain work tasks.
- Semi-skilled workers are employees who possess basic skills and knowledge in order to perform their jobs.

Trade unions

By the end of this sub-topic, learners should be able to:

1. Identify employers' associations
2. Identify employees associations
3. Explain the roles of employers and employees associations

Trade unions

- A trade union is an organization formed by workers of an industry, occupation or trade to promote their interests and rights.
- A trade union is formed by the workers only without the involvement of the employer.
- It is focused on improving working conditions and the living standards of the employees.
- Various sectors in the economy have their trade unions.
- For example, workers in the agriculture sector are free to join a union called General Agricultural Workers' Union of Zimbabwe (GAPWUZ)
- Trade unions pursue common goals of their members.
- Some types of trade unions in some countries act as the suppliers of labour.
- On the other hand, the employers demand the service of labour.

Functions of trade unions

- The main aim of the trade union is to improve the welfare of its members through negotiating with their respective employers for the improvement of their remunerations, benefits and working conditions.
- The trade unions perform the following functions:
  - Negotiating for increase in wages and related benefits.
    - Some of the benefits that are negotiated for include housing allowances, transport allowances, bonuses and medical attention.
  - Bargaining for improved conditions of services.
    - The conditions of work that trade unions aim to improve include reasonable working hours, rest time and improved health and safety standards.
    - Other conditions of work which the unions bargain for include leave entitlements, pension schemes and overtime.
  - Discussing with management on expected changes to the production system.

        - Some of the changes include the introduction of new equipment and machinery.
        - Assisting in dealing with employee grievances and disciplinary process.
        - Providing educational and training services to its members.
        - Bargaining for better recreational facilities and activities.
        - Recommending industrial action if there is a deadlock in collective bargaining processes.
        - Negotiating with government for legislation that protects the rights and interests of the workers.

Reasons why employees join the trade unions

- The following are some of the reasons for employees to join trade unions.
    - By joining trade unions, workers aim to strengthen their bargaining power.
    - Workers expect to have educational and training opportunities which trade unions organize.
    - Others want to be represented in case of disciplinary and grievance issues.
    - Some workers join unions as a means to deal with issues of favoritism and discrimination at the work place.
    - The employees believe that if they are united, they increase their strength to deal with the employer in collective bargaining effort.
    - They aim to benefit from the advices and emotional support when dealing with their employer or in times of problems such as bereavement.
    - They seek job security since the unions will fight on their behalf when there are cases of unjustified dismissals and retrenchment.

Restriction of labour supply

- In some countries, trade unions act as the suppliers of labour.
- In such circumstances, the union controls the supply of labour in the industry.
- The following are some ways in which unions restrict the supply of labour:
    - The unions may lobby (bargaining) for the increase in the minimum working age.
    - It can bargain for a higher retirement age.
    - This applies to unions where all workers in industry or occupation must be union members as a prerequisite for employment.
    - Reducing the number of working hours decreases the supply of labour, in terms of man-hours.
    - The union can set higher qualification levels than before. This reduces the number of eligible job seekers. By reducing the labour supply, the unions have a better bargaining position.

Collective bargaining

- Collective bargaining is a process that involves negotiations between the employer and the employee representatives on issues that deal with working conditions and remuneration.
- Remuneration means the money and benefits which are given to an employee by the employer in the exchange for the service he/she offers.
- Collective bargaining involves discussions between the employer and employees.
- The term collective is used because the negotiation is done between a group of people who represent the rest of the workforce and the employer or employer organization.
- Collective bargaining is aimed at improving the working relationship between the employees and the employer.
- A good outcome from collective negotiation must be accepted by both parties.
- The employer and the employees usually negotiate on the following matters:
    - wage or salary,
    - How the wages or salaries must be calculated,

    - Fringe benefits such as allowances for transport and housing, among others,
    - Overtime and work shifts,
    - Work place policies such as health and safety,
    - Working hours and rest periods.
- Collective bargaining can be done at company level between the employer and the employee representatives.
- It can also be done at an industry level between the trade union and the employer organization.
- In Zimbabwe, such negotiations are done at National Employment Council (NEC) level.

Importance of collective bargaining

- Collective bargaining creates peaceful industrial relations which is suitable for high level of productivity.
- It creates a platform for the employees and the employers to share ideas on various issues such as employee performance, productivity and working conditions.
- It affords the employee to take part in the decision making process of the company.

Types of trade unions

Closed shop union

- This type of union has complete control of its members.
- In this arrangement, only union members can be employed in a particular industry or firm.
- However, this type of union is no longer allowed in many countries.

Open shop

- This is a type of union where workers may choose to be members or non-members.
- It is not compulsory for people to become members of the union before they get employed in the industry or the firm.

Craft unions

- Members of this union possess a particular trade or skill.
- The members have certain qualifications related to the trade.
- Electricians or plumbers are people with specific trades who can form their own craft union.
- Employees from different industries but in the same trade are free to join.

General Unions

- General unions represent employees from any industry or trade.
- People who work in different firms are free to join.

Industrial unions

- Such unions represent people in a particular industry.
- In Zimbabwe, people who work in the agricultural industry have got their own union.
- In this union, members who do different trades join as long as they work in the same industry.
- The General Agriculture Union of Zimbabwe represents workers in the agriculture sector.

White collar unions

- The members of this type of union do non-manual jobs.
- Most of its members work in the service industry.
- Teachers' unions are examples of white collar trade unions.
- In Zimbabwe, most teachers are members of Zimbabwe teachers Association (ZIMTA) and Progressive Teachers Union of Zimbabwe (PTUZ).

Occupational Union

- Only members of a particular occupation can join this union.
- The members must have certain qualifications.
- Most of such unions exist in the service sector.
- People who work in banks or insurance firms can form occupational unions.

- Teachers unions are examples of occupational unions as well.

Workers' committees

- A workers' committee is a group of employees that are elected by the rest of the workers at a firm so that it represents their interests.
- The workers' committee cooperates and liaises with the trade union in promoting the interests and the rights of the employees.

Duties of the workers' committee

- The workers' committee represents the interests of all the employees at the work place.
- The members of the committee participate in negotiations with the firm's representatives on all issues related to working conditions and wage.
- The workers' committee is involved in collective bargaining at the work place.
- It works alongside management to make sure that all agreements between them and the employer are followed.
- It is involved in finding solutions to the employees' grievances.
- It represents other employees during disciplinary processes.
- It cooperates with management in improving productivity.
- It ensures that the work place is safe to work at.

Employers' organization

- The employers' organization is an organization that is formed by employers from the same industry.
- Its aim is to work towards achieving the interests of its members.
- It is involved in negotiation with the trade unions in issues relating to working conditions and remuneration.
- It bargains with the government and other business organizations for the interest of its members.
- The employers' associations often liaise with trade union representatives on issues that affect both organizations.
- This organization gets involved in collective bargaining with trade unions.
- These organizations negotiate with government on policies that relate to their business activities.
- The following are some of the employers' organizations in Zimbabwe:
    - Zimbabwe National Chamber of Commerce (ZNCC) and
    - Bankers Association of Zimbabwe

Demand and supply of labour

By the end of this sub-topic, learners should be able to:

1. Explain derived demand for labour,
2. Identify factors affecting demand and supply of labour,
3. Explain factors affecting demand and supply of labour.
4. Describe the role of trade unions
5. Explain government intervention in wage determination.

Demand and supply of labour

- Labour is one of the most important factors of production.
- Labour consists of all the number of people who are available and willing to take part in the production process.
- It includes the physical and mental effort required for production.
- The labour market involves the interaction of potential suppliers and buyers of labour.
- The individuals and households sell their labour while firms buy the labour.
- In the labour market, there is the exchange of information between the suppliers and buyers of labour. They can exchange information regarding conditions of work and the wage rates.
- There is a labour market for each type of occupation.
- Industries and firms demand labour with certain skills and expertise.
- People are willing to supply their labour depending on the wage rate and other non-wage factors.

Demand for labour

- The demand for labour refers to the man-hours that firms are willing to have to produce goods and services at a given wage rate and during a specific period of time.
- Man-hours are the total amount of time, in hours, that employees spend in the production process.
- The demand for labour is derived demand, meaning that labour is required to produce goods and service that consumers desire.
- Labour is required to produce goods and services not for its own sake.
- If demand for certain products increases firms employ more people so that more goods and services are produced.
- The higher the demand for goods and services, the more labour is required to produce more of such products.
- If the demand for products goes down, firms are forced to reduce the number of employees who produce such goods.
- Therefore, the wage rate and the productivity of the employee determine the number of employees that a firm require.
- The higher the wage rate, the lower the number of employees recruited by a firm.

Individual firm demand for labour

- The individual firm's demand for labour is determined by the average output of each employee per hour and the revenue generated from each unit of output.
- Whether or not more labour will be employed is also determined by the wage rate and prices of factors of production that can be substituted for labour, such as capital.
- An increase in price of a substitute factor of production such as capital leads to an increase in the demand for labour.
- There will be an increase in the demand of labour if there is an increase in the price of the good produced or an increase in labour productivity.
- The individual demand for labour is a downward demand curve for labour curve as shown in fig 4.1 below.

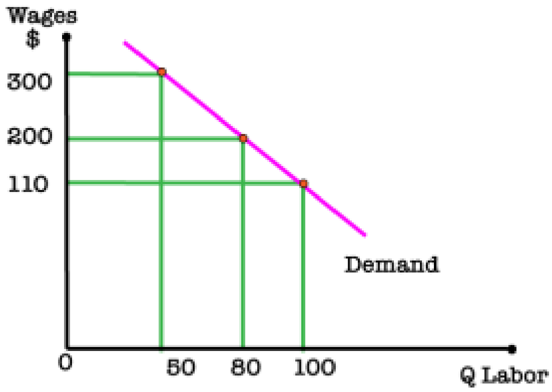


Fig 4.1: Demand curve for labour

- A firm employs more workers if the wage is low.
- If the wage increases, a firm reduces the number of its employees.
- In the diagram above, the firm employs 100 workers when the wage is $110.
- If the wage increases to $200, the firm reduces its employees to 80.

Market demand for labour

- The total demand for labour in the economy is called aggregate demand for labour.
- The aggregate demand for labour is obtained by adding the different demand curves of firms requiring the same type of skills or expertise.
- For example the aggregate demand of accountants is obtained by adding up all job vacancies for accountants in the country or economy.
- The aggregate demand curve for labour is downward sloping as shown in figure 4.2 below:

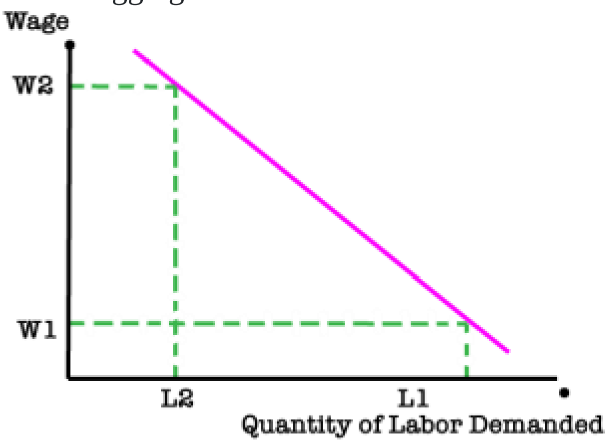


Fig 4.2:

Aggregate demand Curve for labour

- The graph shows that if the wage rate increases, the demand for labour decreases.
- When the wage decreases, the demand for labour increases.
- More labour will be required if the economy is expanding.
- In the diagram above, if the wage is at w1 firms employ at L1.
- If the wage increases to W2, the number of employees decreases to L2.

Factors that influence the demand of labour

The following are factors that affect the market demand of labour:

- When there is an increase or decrease in the number of firms in an economy, the market demand of labour is affected.
  - For example, if there is a recession, many firms close down, leading to the aggregate demand of labour to decrease.
  - If there is an economic boom, new companies are created hence the aggregate demand of labour increases.

- A change in the price of a good or service will cause companies to employ more people.
    - For example, an increase in the price of a product leads to an increase in the demand of labour that is required to produce that product.
- If a new substitute for labour is introduced, then the aggregate demand for labour decreases.
    - For example, an introduction of a new machinery or equipment that does the activity used to be carried out by workers leads to a decrease in the demand for labour.
    - A specific example has been the introduction of the automated teller machine which has led to the reduction in the number of bank tellers.
- A change in the level of economic activities in a country leads to a change in the total demand for labour.
    - An economic boom increases the demand for labour whilst a recession leads to a fall in the demand of labour.
- A change in government regulations on labour may affect the market demand of labour
    - For example, new regulation compelling employers to provide certain safety equipment to workers affects the cost of labour thereby affecting its demand.
- Changes in the demand of goods and services affect the demand for labour that produces such products.
    - When consumers demand more goods and services, firms respond by employing more labour to meet the new demand level.
    - Firms may increase the number of hours the existing employees work or choose to employ more people.
    - Changes in consumer demands over time is influenced by population change and changes in preferences.

Supply of labour

- The aggregate supply of labour is the total number of all the people who are available and willing to offer their services in the production process.
- It is composed of all the people who are in the working age who are willing to offer their services for the exchange of a wage or salary.
- Therefore, supply of labour is the total number of hours which all active people are willing to offer in return for payment at a given wage rate.

Factors affecting the supply of labour

- The change in the wage rate determines the supply of labour.
    - If the wage rate for a class of workers increases, there will be more supply of that labour.
    - For example, if the wage of insurance workers increases, more workers will be willing to join the insurance sector.
- Changes in non-wage factors.
    - Changes in the working conditions or fringe benefits affect the supply of labour for a particular firm or industry.
    - For instance, a decrease in the working hours, introduction of pension scheme or improved safety measures in an industry attracts more labour.
    - The other non-wage factors that influence the supply of labour include chances for promotions, job security and support during time of illness or bereavement.
- Changes in educational and professional qualifications required for a particular job influences the supply of labour.
    - The increase in number of universities in the country means more labour force acquire degrees and diplomas more than before.

- Certain professions have introduced first degrees as requirement for employment. This means that people without such qualification can no longer be available to supply their labour to such occupations.
- Change in population structure affects the supply of labour.
  - The change in age structures and other demographics affect the supply of labour.
  - For example, if there is an increase in the ageing population and a decrease in the economically active group, the supply of labour falls.
  - If more economically active people leave the country to work in other countries, the supply of labour decreases.
  - Zimbabwe has experienced the outward movement of people to South Africa, UK and Australia, for example, thereby decreasing the aggregate supply of labour in the country.
  - The supply of labour can also be influenced by population trends such as a change in school leaving age and a more acceptancy of women as a reliable source of labour.
- Labour mobility affects the supply of labour for certain industries or trades.
  - Labour mobility refers to the ease with which workers switch from one occupation to the other or moving from one geographical area to the other in search of employment.
  - If more people move into the country, the supply of labour increases.
  - If people move out of the country, the supply of labour decreases.
- Emergence of a pandemic such as Hiv/Aids or Ebola may lead to the death of the economically active people, thereby reducing the supply of labour.

The individual supply of labour

- The number of hours an individual is willing to spend in employment is determined by personal preferences.
- Each individual decides how he or she divides his or her time between leisure activities and work.
- The number of hours an employee is willing to spend at work tend to increase as the wage rate increases, but up to a certain point.
- Once an individual is able to raise the amount of money one desires, he/she may choose to limit the amount of time spent at work, in order to have time to spend with family or doing leisure activities.
- Therefore, the individual labour supply curve bends backwards as shown in fig 4.3 below.

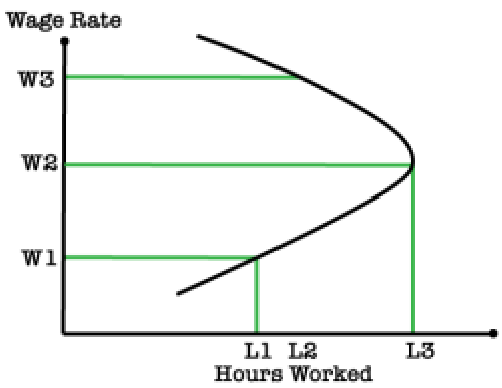


Fig 4.3:
Individual labour supply curve

Market labour supply

- The market supply of labour is influenced by a number of factors such as skills level, qualifications required and behaviors of trade unions.
- The backward bending supply curve that applies to individual supply of labour does not apply to the entire market.
- The reason is that an increase in the wage rate attracts many people to enter the labour market.

- The limiting of hours worked by individual workers cannot occur at the same time, making the market demand curve to be downward sloping.

Wage

- When workers sell their labour, the price they charge is influenced by several factors on the supply side and demand sides.
- The most basic determinant of wage is the number of workers available (supply) and the number of workers needed (demand).

Wage determination under perfect competition

- Under perfect competition, the wage is determined by supply and demand of labour.
- A perfectly competitive labour market exists when:
    - Many firms compete for specific labour.
    - The employees have identical skills.
    - Both the firms and the workers are wage takers, since neither can influence the wage rate.
    - In this situation there are no trade unions, since union negotiated wages are generally not the result of market supply and demand.

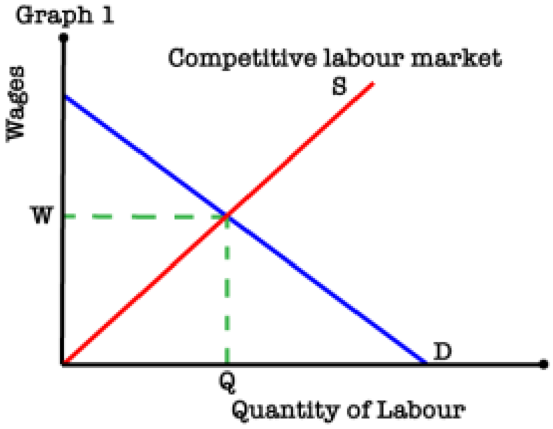


Fig 4.4:
Competitive labour market

- Fig 4.4 illustrates how the wage rate is determined by the demand and supply of labour.
- WQ represents the wage rate that is determined by the supply and demand of labour.
    - Under pure competition, the wage rate is set at the intersection of the labour supply curve and the demand curve.
    - As is true of supply curves in general, the higher the wage rate the lower the demand. The higher the supply of labour, the lower the wage rate.

Imperfect labour markets

Most labour markets operate under imperfect competition.
The main cause of this imperfection is the absence of accurate information to employees and employers
The following are some causes of imperfection in the labour markets:

- In some labour markets, there is a sole buyer of labour who is called a monopsonist.
    - The excessive power of monopsonist make them dictate the wages they want to pay their workers.
- Both the suppliers and buyers of labour have imperfect knowledge about the existing market situation.
    - For example, job seekers are not aware of all employment opportunities in the economy.
    - Employers do not know the existence of all potential employees, their abilities and qualifications.

- Imperfect labour market exists because labour is heterogeneous and not homogenous.
  - This simply means that workers can never be the same.
  - Even two employees who have the same qualifications are not the same because they have different abilities, aptitudes, personalities and experience.
- Labour mobility is usually limited.
  - Potential employees are not always free to move from one occupation to the other or from one area to another.

Trade Unions

- In order to gain bargaining power over working conditions and remuneration, employees form their associations which are called trade unions.
- On the other hand, the employers form their own associations referred to as employers' organizations.
- A trade union is an organization formed by workers of an industry, occupation or trade to promote their interests and rights.
- It is focused on improving working conditions of employees as well as determining the wage rate for the workers.
- Trade unions are involved in determining wages by either controlling the supply of labour or by directly negotiating with the employers.
- Trade unions can also take measures to increase the demand of goods and services in the country.
- This may involve participation in the advertisement of certain products.
- Trade unions can help in increasing productivity of employees, which leads to higher wages

Restriction of labour supply

- Trade unions, sometimes, act as the supplier of labour.
- In such circumstances, the union controls the supply of labour in the industry.
- The following are some ways in which unions restrict the supply of labour:
  - The unions may lobby (bargain) for the increase in the minimum working age.
  - It can bargain for a higher retirement age.
  - This applies to unions where all workers in industry or occupation must be union members as a prerequisite for employment.
  - Reducing the number of working hours reduces the labour supply, in terms of man-hours.
  - The union can set higher qualification levels than before. This reduces the number of eligible job seekers.
  - By reducing the labour supply, the unions have a better bargaining position.

Collective bargaining

- Collective bargaining is a process that involves negotiations between the employer and the employee representatives on issues that deal with working conditions and remuneration.
- Remuneration means the money and benefits which are given to an employee by the employer in the exchange for the service he/she offers.
- Collective bargaining involves discussions between the employer and employees.
- The term collective is used because the negotiation is done between a group of people who represent the rest of the workforce and the employer or employer organization.
- A good outcome from collective negotiation must be accepted by both parties.
- The employer and the employees negotiate on;
  - the wages or salaries that employees should get,
  - How the wages or salaries must be calculated,

    - Fringe benefits such as allowances for transport and housing,
    - Overtime also be negotiated on,
    - Working hours and rest periods.
- Therefore, trade unions bargain with the employers for high wages.

Base for wage increment demand by trade unions or employees

- The bargaining power of a union depends on a number of factors.
- An increase in productivity leads to most unions to demand a rise in wages.
- If the cost of living in a country rises, trade unions tend to demand an increase in pay so as to offset the decrease in the real income of the workers.
- An increase in the profit of the firm leads to trade unions to demand a pay increase.
- If the wages of employees in similar jobs but who work elsewhere has increased, the employees may demand a pay rise.
- The type of product that is produced in a firm determines the bargaining power of the employees.
    - If employees who work in critical services of the economy demand a pay rise, the employer is most likely to be willing to reach an agreement.
    - Examples of such essential services include the health care and security departments.
- A union that controls the supply of labour has a strong bargaining power.
- However, if the employer can easily get non-union employees, it will not concede easily to the demands of the employees.
- The elasticity of demand of the good or service determines the bargaining power of the employees.
    - The firm that produces goods with an inelastic demand can easily increase the wages, because it can pass on the cost of labour to the consumers by increasing the price of the product.
    - It is difficult to pass on the cost of labour to the consumer if the elasticity of demand of the product is very elastic.
- The ease to shift from using labour to machinery influences the bargaining power.
    - If it is easy to substitute labour for machinery in production, the union will have very low bargaining power.
    - They will be afraid that most of the employees may be laid off.
- When a firm has a very high proportion of labour costs, it will be very difficult to increase the wages.

Government involvement in wage determination

- The government influences the wage levels in the country through setting the wage policy and introducing the minimum wage.

Wage policies

- Most governments make laws governing wage structure and payment in the country.
- The wage policy refers to the regulations that control the determination of wages in the country.
- The government sets regulations that are targeted at reducing wage differentials in the country.
- It also sets laws that set out how wage rates are decided.
- In Zimbabwe, the labour laws require the employer and the employees to negotiate and agree on the wages which the different categories of employees in an industry must earn.

- The negotiation is done between the employer associations and trade unions in a process that is called collective bargaining.
- During collective bargaining, the national minimum wage for that industry is set.
- The government is also involved in enforcing the payment of the minimum wages.
- The wage structure that is arrived at during collective bargaining reduces the wage differentials in the industry.
- In setting the minimum wages the productivity of the sector is taken into consideration.
- The government also sets laws that disallow wage discrimination.
- Wage discrimination is a process where people who do the same job are paid different wages because of their sex, race, religion, background and so on.
- There are also laws that limit the bargaining power of the trade unions so that they would not bargain more than the competitive wage level.
- Very high wage rates increase costs of production leading to low domestic competitiveness of the products.
- The wage policy also stipulates how the wage calculation must be done.
- In Zimbabwe, the wage policy points out how the daily, weekly and monthly rates must be paid.
- It also stipulates what the employee must be paid in case of sickness, during vacation, injury at work and so on.

Minimum wage

- The minimum wage is set as a means to make sure that the workers are able to attain a certain level of standard of living.
- The minimum wage can lead to the supply of labour to increase but unemployment may rise as firms aim to employ fewer employees in order to cut the wage bill.
- However, the minimum wage exerts an impact on the industry.
    - The minimum wage usually increases the cost of production.
    - As a result, some firms reduce the size of the labour force by retrenching some workers.
- Fig 4.5 illustrates the effect of the minimum wage.

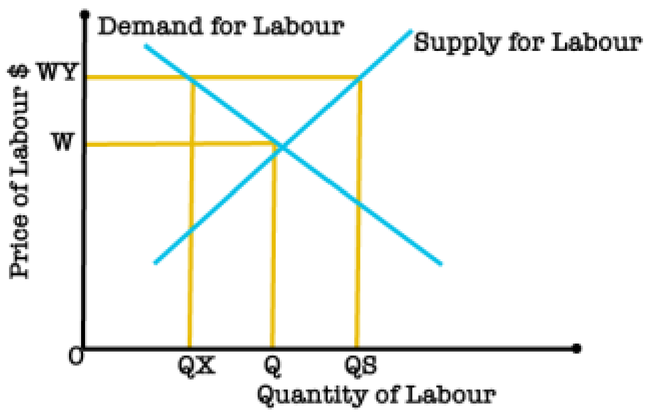


Fig 4.5:
Minimum wage

- As the wage rate rises from W to WY, the firm reduces labour from point Q to QX.
- A wage rise from W to WY causes excess in supply of labour because demand of labour is less than the supply of labour.
- Sometimes minimum wage creates unemployment as firms try to match the wage rise with the profit they obtain from such labour

Summary

- Labour consists of all the number of people who are available and willing to take part in the production process.
- The demand for labour is referred to as derived demand, meaning that labour is required to produce products that consumers desire, not for its own sake.
- The total demand for labour in the economy is called aggregate demand for labour.
- The demand for labour is affected by changes in number of firms in the sector, the price of the product, the level of economic activities in the country, government regulations, consumer demand and the introduction of substitute goods in the market,
- On the other hand, the supply of labour is affected by changes in wage rate, non-wage factors, required qualifications to do the job, population structure, labour mobility and natural pandemics such as HIV/Aids.
- Wages in the economy are determined by government influence, lobbying by trade unions and collective bargaining.
- Collective bargaining is a process that involves negotiations between the employer and the employee representatives on issues that deal with working conditions and remuneration.
- The wage policy refers to the regulations that control the determination of wages in the country.

Wage determination

By the end of this sub-topic, learners should be able to:

1. explain how wages are determined
2. identify basis of wage differentials
3. explain the basis for wage differentials

Wage determination

- Wage determination is the process whereby firms set wages for its workers.
- After a firm establishes the wage rates for its workers, it comes up with a wage structure.
- A wage structure is a list of jobs in the firm and their agreed wage rate.
- The differences in wages may arise as a result of the performance and ability of the workers at work.
- The trade unions can influence the wage differences through their bargaining powers.

Wage

- Wages refer to the price that workers receive for their labour in the form of bonuses, royalties, commissions, and fringe benefits such as paid vacations, health insurance and pensions.
- The wage rate is the price per unit of labour.
- Wages differ among nations, regions, occupations and individuals.
- When workers sell their labour, the price they can charge is influenced by several factors on the supply and demand sides.
- The most basic determinant of wages is the number of workers available (supply) and the number of workers needed (demand).
- Wage levels are shaped by the skill sets workers bring to the work place and the skills that the employers need as well as the location of the jobs being offered.
- Wages will be higher where the demand for labour is greater than the supply.

Wage determination under perfect competition

- A perfectly competitive labour market exists when:
- Many firms compete for specific labour.
- The employees have identical skills.
- Both the firms and the workers are wage takers since neither can influence the wage rate.
- In this situation, there are no trade unions since union negotiated wages are generally not the result of market supply and demand.

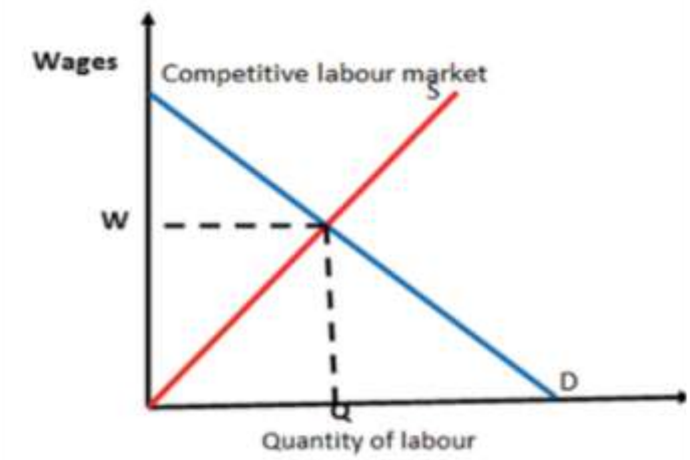


Fig 4.1:

Wage determination

- Fig 4.1 illustrates how the wage rate is determined by the demand and supply of labour.
- WQ represents the wage rate that is determined by the supply and demand of labour.
- Under pure competition, the wage rate is set at the intersection of the labour supply curve and the demand curve of employers as shown in fig 4.1.
- As is true of supply curves in general, the higher the wage rate the lower the demand.
- The higher the supply of labour, the lower the wage rate.
- Wage rate can also be determined by productivity of labour as shown in fig 4.1

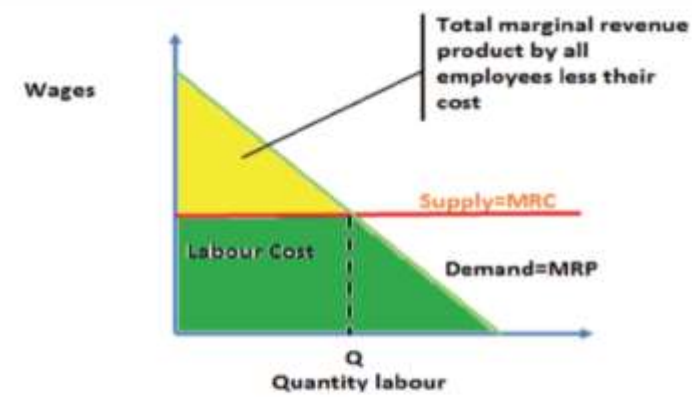


Fig 4.2:

Marginal Revenue Product

- The price of labour is represented as a marginal resource cost (MRC) and the employer's demand for labour is represented by the marginal revenue product (MRP).
- Employers will continue to hire workers as long as the marginal revenue product of the last worker is greater than his marginal revenue cost.
- As long as the revenue earned by the workers is greater than their cost, the employer will increase profits by hiring more workers.
- The labour market equilibrium occurs at the intersection of labour supply curve and the labour demand curve.
- In a perfectly competitive labour market, the supply of labour is perfectly elastic, so a firm can hire all the workers that it wants at the prevailing market wage rate.
- The firm will hire enough labour until the MRP of the last worker is equal to his MRC.
- MRC is constant and is equal to the resource price, or in this case, the wage rate as indicated in fig 4.2.
- The area represented under the MRC line is equal to the cost of labour.
- Above that line and below the MRP line is the cost for land, capital and entrepreneurship which includes a normal profit.

Wage differentials

- Wage differential refers to the differences that exist in the wages of workers who have different or similar skills in an industry or the economy.
- In some cases there is a lower wage difference between certain jobs, whereas in other circumstances there are huge differences between the wage rates of different jobs.
- Wage differentials may be influenced by factors such as qualifications, training, risk involved and government policy.

Skills and qualifications.

  - Demand for skilled labour is higher than the demand for semi-skilled workers yet the supply of skilled labour is low. The supply of semi-skilled labour is fairly high.
  - The high demand for skilled workers and its low supply leads to a high wage rate.
  - Highly skilled workers are often in inelastic supply and a high demand for them makes the wage rate to increase in an industry.
  - For that reason, a qualified lawyer earns a higher salary as compared to a cleaner.
  - The supply of unskilled and semi-skilled labour is elastic. Therefore, their wage rate is generally lower than that of skilled labour.
  - Fig 4.3 shows the supply and demand conditions of skilled and unskilled workers in an unregulated economy.

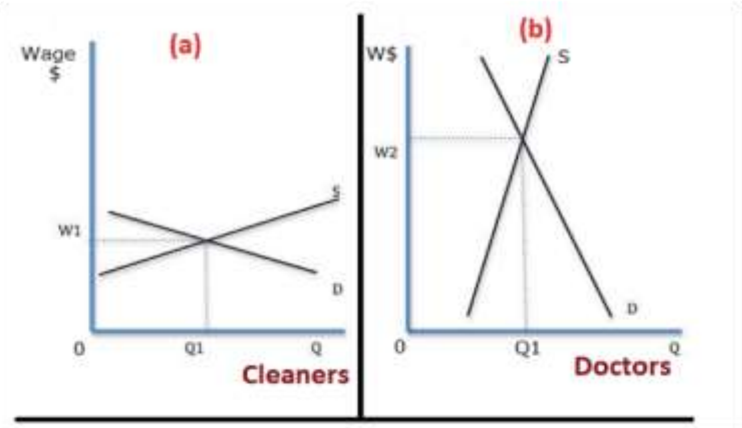


Fig 4.3:

Supply and demand of labour

- W stands for wage rate.
- Graph (a) in fig 4.3 shows that the supply of cleaners is elastic.
- Cleaners have low wages because they have a high supply since no special skill or qualification is required.
- Doctors supply curve is inelastic as shown in graph (b), giving rise to higher wages.

Differences in labour productivity and revenue creation

- Highly efficient workers have the ability to generate more revenue for a firm and are rewarded with higher wages.

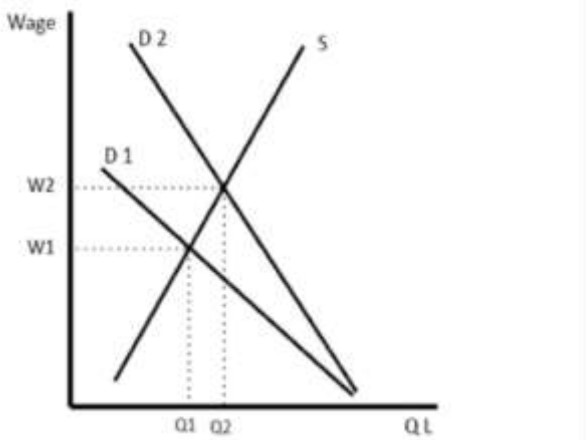


Fig 4.4:

Wage based on productivity of labour

- Other things being equal, if a worker has higher productivity s/he deserves a higher wage.
- Workers with productivity represented by D2 deserve to earn more wages at point W2.
- Workers with low productivity represented by D1 earn low wages at point W1.
- Top sports stars can command top wages because of their potential to generate extra revenue from ticket sales since many people would like to watch them playing.

Monopsony

- The theory of monopsony suggests that employers will have market power in determining wages and therefore are able to pay workers less than their MRP.
- A monopsony is a situation where there is only one buyer of labour in the economy.
- In terms of employment, monopsony exists when there is only one employer of a certain category of employees in an area.

- A traditional monopsony would be a single employer of workers in a town, e.g. steel mill owner or coal mine owner.
- With no other choice of work, workers have to accept the conditions and wages of the monopsony employer even if these wages are very low.
- In a modern economy, these single employers are quite rare but arguably many firms have significant monopsony power and have market power in setting wages.

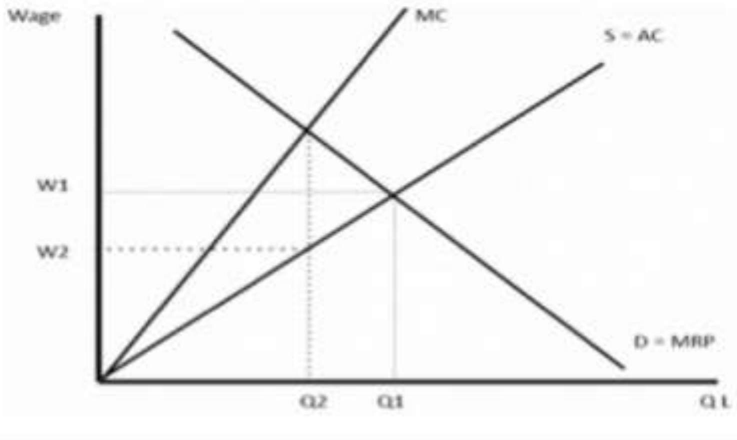


Fig 4.5:

Monopsony power

- In fig 4.5, the wage equilibrium is W1 which is determined by market forces.
- A monopsony will pay wages valued at W2 to maximize its profits.
- However, W2 is below the marginal revenue curve.

Trade unions and their collective bargaining power.

- Unions might exercise their bargaining power to offset the power of an employer.
- A particular occupation might have powerful unions who bargain for high wages.
- As a result, workers who are represented by trade unions usually earn more wages than the workers who do not have trade union representation.

Segregation in the labour market

- The gender pay gap exists in some sectors of the economy due to bias for one sex over the other.
- Although this cause of wage differentiation is not high in Zimbabwe, it exists in other countries.
- Some women are paid less than men although they do the same job in the same organization or industry.

Traditions and stereotypes

- Segregation is frequently linked to traditions and stereotypes.
- While around 60% of new university graduates are women, they are few in fields like mathematics, computing and engineering.
- Fewer women work in scientific and technical jobs.
- This results in women to work in lowly valued and lower paid sectors of the economy.
- Because of these traditions and stereotypes, women are expected to reduce their working hours or to stop working in order to carry out child or elderly care roles at home.

Compensating wage differentials

- Higher pay can often be some reward for risk-taking in certain jobs, working in poor conditions and having to work for very long hours.
- Workers who work in war torn areas are paid more for the risk they take.

- Similarly, workers who work in the mining sector are paid more due to the risks involved when working underground.
- Risky jobs pay more wages because very few are willing to take the risks involved in working such jobs.

A reward for human capital

- In competitive labour market, wages and salaries are high to compensate workers for opportunity costs which they incurred in pursuing further training and personal development.
- There is an opportunity cost in acquiring qualifications. The opportunity cost of staying longer in full or part-time education is the earnings that the individual could have had during that period.
- Certain qualifications are expensive to acquire thus resulting in higher wages.

Geographical differences

- In certain regions of the country, wages are higher than in other regions.
- This is because of a greater demand for their skills, knowledge and high costs of living.
- For example, the cost of living in Harare is greater than the cost of living in Chipinge.
- As a result, workers in Harare are more likely to be paid more than workers in Chipinge.

Profitability of different industries

- Some industries such as financial services have traditionally been able to make higher profits.
- This leads to higher wages especially when pay / bonuses are linked to performance.

Ethnic group discrimination

- Wages may also differ basing on the differences between ethnic groups or races.
- Ethnicity can be in language or culture or the society that people live in.
- In Zimbabwe, there are many different ethnic groups. Ndebele and Shona are the major ethnic groups in Zimbabwe.
- In Zimbabwe, however, there has not been any recorded wage differentials basing on ethnicity.
- Differences between wages may arise due to races. Before independence, whites were normally earning very high wages while blacks received very low wages.
- The problem of differences between wages of whites and blacks was addressed through the laws that were created by the government.

The government policy can influence the level of wage differences in the country.

- The government normally strives to ensure that workers get decent remuneration.
- It sets the minimum wage of its workers.
- Many governments are involved in setting minimum wages or different industries.
- In Zimbabwe, the government, trade unions and the employers negotiate for minimum wages.
- A minimum wage is the lowest wage rate that workers in a sector or industry should earn.
- The government also sets laws against discrimination and unfair labour practices which help to reduce or eliminate unnecessary wage differences.

Occupational prestige

- Occupational prestige refers to the respect and worthiness that people assign to a job.
- This is because some jobs are considered more important than others.
- The society can assign more prestige to some jobs.
- Owners of companies can assign greater importance to some jobs.
- Jobs that are considered more important are better paid than jobs which people think are less important.
- **The prestige of jobs can be influenced by:**
  - The resources that the job holders control,
  - The amount of respect that comes from the subordinates,
  - The knowledge and skills that the job holders have,
  - And the work environment and conditions of service.

THEORY OF DEMAND

1. Explain effective demand
2. Outline the law of demand
3. Illustrate the relationship between price and the quantity demanded.

What is demand?

- Demand is the amount of goods and services a consumer is willing to buy at a given time period and at a given price.
- Demand is also defined as the willingness of consumers to purchase certain amount of goods and services at a given price over a given period of time.
- These goods and services are offered by the suppliers.
- A consumer is a person who purchases goods and services for personal use.
- There are three aspects to be considered in the demand statement. These are:
- Price of goods and services
- Quantity of goods and services to be purchased at a given price
- Time

An example of a demand statement

- Mrs Dube demands five bananas (quantity) at $0.20 each (price) per day (time).

Effective demand

- Effective demand is the ability to purchase particular goods and services at a given price over a given period of time.
- The ability of the consumers to pay for goods and services they demand is what we call effective demand.

Individual demand

- Individual demand is the demand of a single person, household, or firm on a certain product within a given period of time.

Market demand

- Market demand is the total demand of a product in the whole market.
- It is the addition of all individual demands within a particular period of time.

Difference between individual demand and market demand

INDIVIDUAL DEMAND	MARKET DEMAND
It involves the demand of an individual, firm or household.	This involves the demand of all buyers or consumers in the market.

Law of demand

- The law of demand states that an increase in price leads to a decrease in quantity demanded.
- It also states that a decrease in price leads to an increase in quantity demanded.
- Quantity demanded is the amount of goods and services that the consumers are able and willing to buy.

- The law of demand can be illustrated using a table or schedule that shows the relationship between price and quantity demanded.

Demand schedule

- Demand schedule is a table which shows the quantities of a product purchased at different prices within a particular period of time.
- Demand schedule shows price and quantity combination over a specific period of time.
- There are two types of demand schedules:
- Individual demand schedule
- Market demand schedule

Individual demand schedule

- The individual demand schedule is a table which shows the price that an individual is willing and able to pay for a certain quantity of a product within a given period of time.
- It also shows the different quantities of a product bought by a single firm or individual at given prices in a given period of time.
- The reaction of consumers at different prices of a product is shown by an individual demand schedule.
- The diagram below shows an individual demand schedule

Table 5.2: Individual demand schedule

Individual Demand Schedule

Price of beef per kg ($)	Quantity demanded of beef (per kg)
5	10
10	8
15	6
20	4

Individual demand schedule

- The table above shows the price of beef and the quantity demanded by an individual within a period of time.
- Law of demand states that as price increases, quantity demanded decreases. From the diagram:
- If the price of beef is $5 per kg, then a consumer will demand 10 kg of beef.
- However, when the price of beef increases from $5 to $15 the quantity demanded by the consumer decreases from10kg to 6kg.
- If we combine all individual demand schedules, they form a market demand schedule.

Market demand schedule

- A market demand schedule is a summation of the individual demand schedules of a product.
- It represents the total of all individual demand schedules.

Market demand schedule

PRICE OF BEEF $ (KG)	INDIVIDUAL A(QUANTITY DEMANDED)		INDIVIDUAL B (QUANTITY DEMANDED)	MARKET DEMAND (TOTAL QUANTITY DEMANDED) KG
5	5	Add	4	9
10	4	+	3	7
15	3	Add	2	5
20	2	+	1	3
25	1	Add	0	1

Table 5.3: Market demand schedule

- To come up with market demand, we add the quantity demanded by individual A and the quantity demanded by individual B.
- For instance, at $10 per kg of beef, individual A demands 4kgs of beef and individual B demands 3kgs of beef.
- To get market demand, we have to add 4kgs demanded by individual A and 3kgs demanded by individual B, as shown below.

Market demand = quantity demanded of individual A + Quantity
Demanded of individual B.
= 4kg + 3kg
= 7kg

- The table shows how the market reacts to the change in prices of beef.
- As price increases, the market demand for beef decreases.
- If the market price increases from $5 to $10, the market demand for beef decreases from 9kgs to 7kgs

Summary

- Demand is the amount of a product that people are willing to buy at a given price within a specific period of time.
- The demand statement must include the following components: price of product, quantity of the product and the time period.
- Effective demand means the willingness and ability of consumers to purchase a certain product at a given price, within a period of time.
- Individual demand refers to the willingness of an individual, household or firm to purchase a particular product at a given price, within a specific period of time.
- Market demand relates to the total demand of a product in an economy within a given period of time.
- The law of demand shows that there is a negative relationship between the price of a product and the quantity demanded.
- An increase in the price of a product leads to a decrease in quantity demanded.
- A decrease in the price of the product leads to an increase in quantity demanded.

Factors that determine demand

By the end of this sub-topic, learners should be able to:

1. Identify the determinants of demand
2. Explain the following terms; changes in demand and changes in quantity demanded,
3. Illustrate the concepts using diagrams.

- The demand of a product changes over time due to a number of factors.
- Changes in price of a product influence the quantity demanded of that product.
- All other factors other than price affect the demand of the product.

Factors that determine demand

Price of related goods

- The demand of a good or service is highly affected by the price of related goods in the market.
- Related goods are categorised into substitutes and complimentary goods.
- If the prices of related goods change, there is a shift in the demand curve.
  - The demand curve shifts either to the right or left.

Complimentary goods

- These are goods and services which are jointly demanded by consumers.
  - This means that the two goods are used jointly.
- For complimentary goods, a change in the price of one good affects the demand of the other.
  - An example of complimentary goods is a DVD disc and DVD player.

  - A person cannot use a DVD disk without a DVD player.
  - If the price of a DVD player increases, the demand of DVD disks decrease.
- Another example of complimentary goods are cars and fuel.
- For instance, if the price of cars increases, the demand for fuel decreases because few people will be able to buy cars.
- On the other hand if the price of cars decreases, the demand of fuel increases because people buy more cars which result in more fuel consumption.
- This means that complimentary goods have a negative relationship because an increase in the price of one good leads to a decrease in demand of the other good.

Substitute goods

- These are goods which can be used in place of each other. Examples are coffee and tea, butter and jam.

- Consumers cannot consume both goods at the same time if the goods are substitutes.

- For instance, a consumer can buy coffee instead of tea because coffee and tea have the same use.
- If the price of tea increases, consumers will demand more coffee because it is cheaper.
- On the other hand, if the price of coffee increases, demand for coffee decreases thereby increasing the demand for tea.
- Demand for substitute goods is also known as competitive demand.

Individual income and wealth

- Since effective demand is the ability and willingness of the consumers to pay for the goods, demand is affected by the change in income and wealth of the consumers.
- The relationship between income and demand depends on the nature or type of product.
- The two main types of products are normal goods and inferior goods.
    - Normal goods are goods whose demand increases when consumer income increases.
    - Inferior goods are goods whose demand decreases when consumer income increases.
    - For example, if income increases, people tend to travel by aeroplane for longer distances rather than train. Thus, a train becomes an inferior good whereas an aeroplane is a normal good.

Individual tastes and preferences

- If an individual's taste for a product changes positively, the demand for that good increases.
    - For example, if a person likes beef more than before, the demand for beef increases.
    - If the individual's preference for a product decreases, the demand for that product falls.
- A change in individual taste causes a shift in the demand curve.

Changes in population

- A change in population size, age structure, gender, and population density can affect demand of a product in a certain area.
- An increase in population will increase the demand for many goods and services.
- A decrease in population reduces the demand for goods and services.

Government influence

- Government can influence the demand of a product through certain policies such as restrictions on the use of certain products, for example drugs.
    - The government can ban the use of some products.
- The government also affects demand through taxation.
    - Taxation has negative and positive impact on prices of goods and services.
    - If tax decreases, the demand for products increases because the reduction in tax results in increased disposable income of consumers.

Changes in demand

- A change in demand refers to the increase or decrease of the total market demand that leads to a shift of the demand curve.
- It is caused by a change in any of the determinants of demand such as consumer income, consumer spending, changes in population and price of the related goods.
- Despite using the demand schedule, changes in demand can be represented graphically.
- Quantity demanded is shown on the horizontal x-axis whereas the price is indicated on the vertical y-axis.
- Changes in the determinants of demand cause a shift of the demand curve either downward or upward.
  - A downward shift of the demand curve means there is a decrease in demand of the product.
  - An upward shift means that there is an increase in the demand of the product.
- Holding price constant, changes in all other factors affecting demand lead to the shift of the demand curve.

Shift of market demand

- The demand curve shifts upward when there is an increase in demand of a product.
- A downward shift of the demand curve represents a decrease in the demand of a product.

Upward shift of the market demand curve

- An upward shift of the demand curve shows an increase in demand.
- An upward shift in demand curve can also be referred to as a right-ward shift in demand curve.
- An upward shift of a demand curve means there is a positive change in the determinants of demand which causes an increase in demand of a certain product.

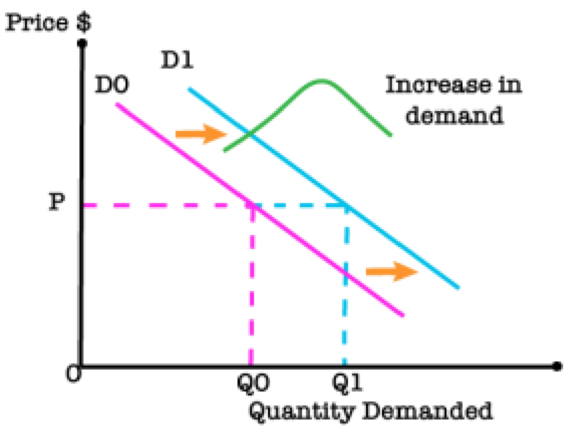


Fig 5.3: Upward shift of demand curve

- From fig 5.3 above, the initial market demand curve was D0 and it shifted to the right to D1, meaning that there has been an increase in the demand of the product.
- At the same price P, the quantity demanded increases from Q0 to Q1 due to an increase in demand.
- The following are the factors that led to the shift of the demand curve to the right:
  - An increase in population.
  - Increased advertising and promotion of the product.
  - An increase in price of substitutes.
  - Decrease in taxation by the government.

- A decrease in price of compliments.
- A rise in consumer income.
- Increase in consumer tastes and preferences.

Downward shift of the market demand curve

- A downward shift of the demand curve results from a decrease in market demand.
- Downward shift of the demand curve means that there has been a negative change in the factors that determine demand.

A shift of the demand curve to the left

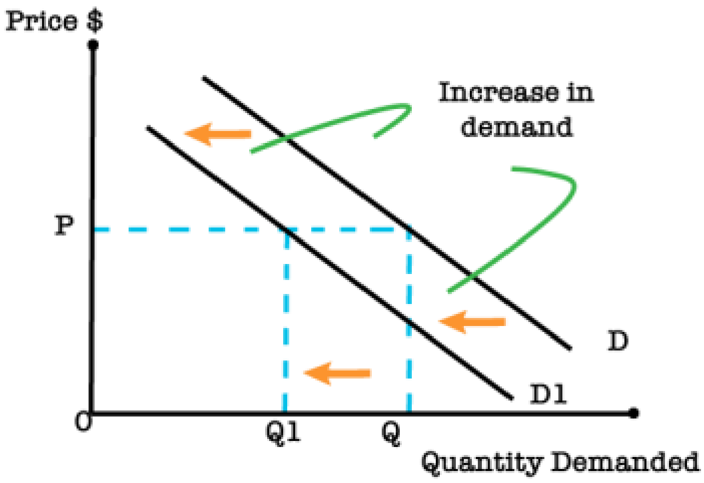


Fig 5.4 Left-ward shift of the demand curve

- From fig 5.4 above, the demand curve has shifted to the left from D to D1 meaning that demand decreased.
- At the same price level, P, the quantity demanded decreases from Q to Q1 due to a decrease in demand.
- A decrease in the market demand is caused by:
    - A rise in government taxation.
    - A decrease in population.
    - An increase in price of compliments.
    - A decrease in consumer income.
    - Decrease in the price of substitutes.

Changes in quantity demanded

- The only factor that can cause changes in quantity demanded is the price of that product.
- Changes in quantity demanded is the movement along the demand curve which is caused by a change in price.
- A change in quantity demanded is a change in the quantity of a product that buyers are able and willing to buy at a given price.
- A change in price causes a change in quantity demanded.
- Change in quantity demanded means the expansion or contraction of quantity demand due to changes in price, holding other factors constant.

Price of a product as a determinant of quantity demanded

- At a higher price, buyers purchase less of the product which decreases the quantity demanded.
- When the prices are low, consumers purchase more of the product which leads to increase in quantity demanded.
- Ceteris paribus, changes in price of the product does not shift the demand curve.

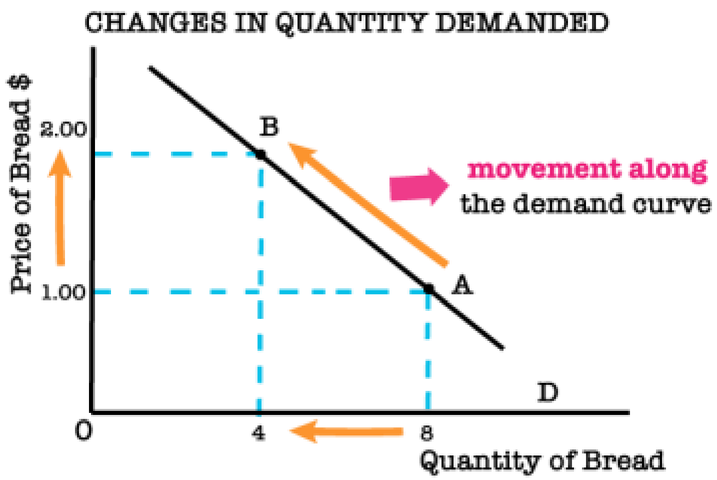


Fig 5.5: Movement along the demand curve

- Fig 5.5, shows how a change in price leads to a change in quantity demanded.
- The diagram shows the relationship of price of bread and quantity demanded at different prices.
- When the price of bread is $1 per loaf, the quantity demanded is 8 loaves.
- Then if the price increases from $1 to $2, the quantity demanded falls from 8 loaves to 4 loaves.
- In fig 5.3 above, the movement along the demand curve is shown by the movement of price and quantity demanded from point A to B.

Summary

- A change in demand refers to the increase or decrease of the total market demand which leads to a shift of the demand curve.
- This change in demand is influenced by the level of consumer income, consumer spending, changes in population and changes in price of the related goods.
- A downward shift of the demand curve means there is a decrease in demand of the product.
- An upward shift of the demand curve means that there is an increase in the demand of the product.
- A change in quantity demanded is a change in the amount of a product that buyers are able and willing to buy at a given price.

The only factor that causes a change in quantity demanded is the price of that product.

Elasticity of demand

1. explain the concepts of elasticity of demand
2. explain the importance of the above elasticities of demand to:
   household
   firm
   government
3. Outline determinants of elasticities of demand

Elasticity of demand

- Elasticity of demand is concerned with the responsiveness of demand to a change in variable factors such as price and income.
- Elasticity of demand is categorised into:
  - Price elasticity of demand
  - Income elasticity of demand
  - Cross elasticity of demand

Price elasticity of demand

- Price elasticity of demand deals with how quantity demanded responds to a change in price.
- It involves comparison of percentage change in the price of a product to the relevant percentage change in the quantity demanded.
- The degree of price elasticity of demand is obtained after calculating the price elasticity of demand.
- Price elasticity of demand (PED) = percentage change in quantity demandedpercentage change in price
- Percentage change in quantity demanded= change in quantityoriginal quantity × 1001
- Percentage change in price= change in priceoriginal price × 1001

Example 5.1: Price elasticity of demand

The demand for product A dropped from 200 to 150 units when its price increased from $10 to $15. Calculate the price elasticity of demand.

- Percentage change in quantity demanded= change in quantityoriginal quantity × 1001
  = 200-150200×1001
  = 50200×1001
  25%
- Percentage change in price= change in priceoriginal price × 1001
  = 15-1010 × 1001
  = 510 × 1001
  = 50 %
- Price elasticity of demand (PED) = percentage change in quantity demandedpercentage change in price
  = 2550
  =0.5

NB: when calculating PED, ignore negative signs.

Measuring the degree of price elasticity of demand

Elastic demand

  - Elastic demand occurs when a percentage change in price brings a greater percentage change in quantity demanded.

- It is said to be elastic if the value is greater than 1.
- Price elasticity of demand is represented by a gentle sloping curve.
- A decrease in price leads to an increase in total revenue.
- A rise in price results in a decrease in total revenue.
- Goods and services which are close substitutes tend to be elastic.

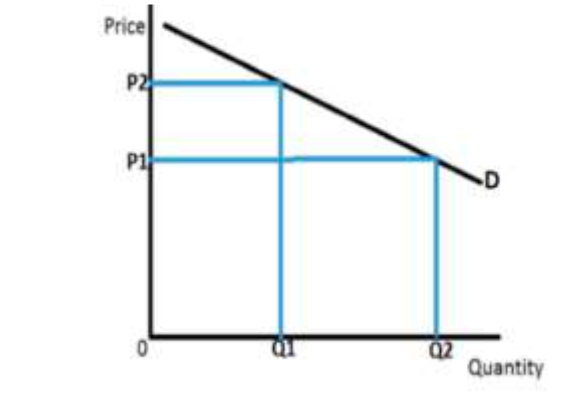


Fig 5.1: Price elastic demand curve

- From fig 5.1, if the price increases from P1 to P2, the quantity demanded decreases with a larger proportion from Q2 to Q1.

Inelastic demand

- Inelastic demand occurs when a percentage change in price brings about a smaller percentage change in quantity demanded.
- The coefficient of price inelasticity of demand is less than one (PED < 1).
- When price decreases, total revenue decreases and also when price increases total revenue increases.

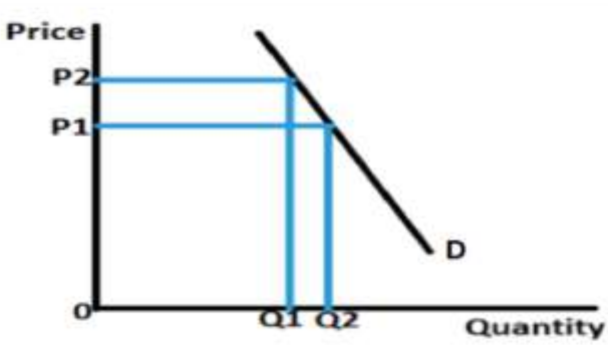


Fig 5.2: Inelastic demand

Example 5.2: Calculation of PED

Item	Old Price	New Price	% Change in Price	Old Quantity	New Quantity	% Change in quantity	Degree	Elasticity category
Beef	1	1.1	10	1 000	950	-5	-0.5	Inelastic
Fish	5	6	20	2 000	1 400	-30	-1.5	Elastic

Example 5.3: Calculation of Price elasticity of demand

Suppose that at a price of $100 monthly sales of beef in a city are 1 000kg. The following month, the price of beef goes up to $110. As a result of a price increase, the quantity of beef demanded per month falls to 950. Calculate PED

Solution

Percentage change in price= 100-110110×100=10

Percentage change in quantity= 1000-950950×100=0,5

Price elasticity of demand = -510×1001000=0,5

This good is inelastic

Income elasticity of demand (YED)

- Income elasticity of demand measures the responsiveness of demand for a good to a change in income of consumers.
- It is the percentage change in quantity demanded due to percentage change in income.
- If income of consumers increases, consumers are likely to buy more of the goods.
- This responsiveness is based on whether the good is a luxury or a necessity.
- Luxury goods have high-income elasticity because people buy more of such goods if their income increases.
  - If YED is greater than one, then it is a luxury good.
- Necessities such as food stuffs have low-income elasticity of demand.
- Income spent on mealie meal does not change much because consumption does not really change when income falls or increases.
- If YED is equal to zero, it is a necessity.
- If YED is greater than zero, it is a normal good because as income increases the quantity demanded increases.
- If YED is less than zero, it is an inferior good because as income increases the quantity demanded decreases.
- Inferior goods are usually outdated goods such as typewriters.
- The value of income elasticity of demand is calculated using the following formula:
  Income Elasticity of Demand=percentage change in quantity demandedpercentage change in income
- Percentage change in quantity demanded is obtained as follows:
  % change in quantity demanded=change in quantity demandedoriginal quantity×1001
- Percentage change in income is obtained as follows:
  % change in income=change in incomeoriginal income×1001

Examples 5.4: calculating income elasticity of demand

- When Tapiwa earns $200 per month, he is able to buy 50 packs of oranges. When his income increases to $300 per month, he can afford 80 packs.
- Calculate the income elasticity of demand of oranges.
- % change in quantity demanded=change in quantity demandedoriginal quantity×1001
  =80-5050×1001
  =60%
- % change in income=change in incomeoriginal income×1001
  =300-200200×1001
  =50%
- Income Elasticity of Demand=percentage change in quantity demandedpercentage chan ge in income
  =6050
  = 1.2

Cross elasticity of demand (XED)

  - Cross elasticity of demand is the degree to which quantity demanded of one good responds to changes in the price of another good.
  - It may be positive or negative.
  - If the products are not related, they have zero cross elasticity of demand.
  - Usually cross elasticity of demand is denoted by XED.
  - The formula for calculating cross elasticity of demand is as follows:
    Cross elasticity of demand= percentage change in quantity demanded of product x percentage change in price of product y

- Related products are categorised into substitute and complimentary goods.
- **XED is positive** if the goods are substitutes.
- Substitute goods are goods that are used for exactly the same purpose.
- An increase in the price of one good leads to an increase in quantity demanded of its substitute as shown in fig 5.3

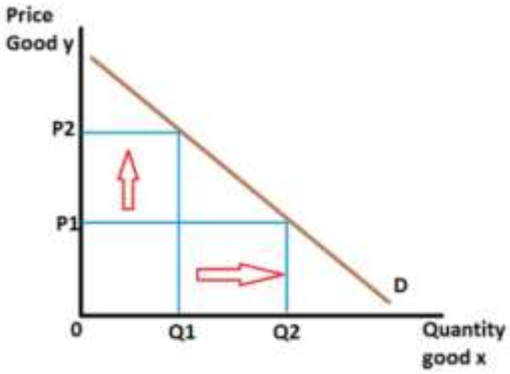


Fig 5.3: Substitute Goods

- **XED is negative** if the goods are compliments.
- Complimentary goods are goods which are jointly used.
- If the price of one good rises, then the quantity demanded of the other good decreases.
- For example, a decrease in the price of cars leads an increase in quantity demanded of petrol.
- On fig 5.4, the y axis represents prices of cars and x- axis represents quantity demanded of petrol.

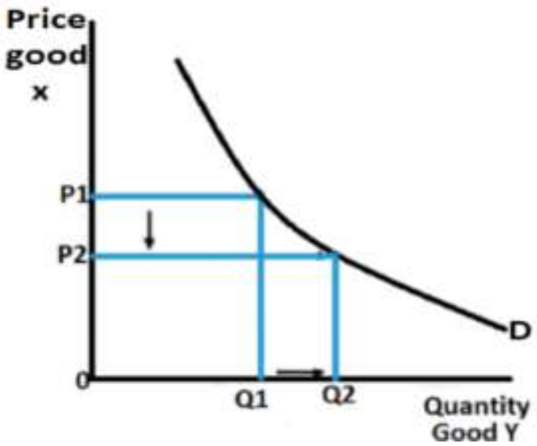


Fig 5.4: Complimentary Goods

Example 5.6: Positive XED

	Old price and quantity		New price and quantity	
Item	$	Kg	$	Kg
Coffee (X)	1.9	4 000	2.1	3 000

Tea (Y)	1.3	6 000	1.4	7 000

Solution

- Cross elasticity of demand= percentage change in quantity demanded of product xperce ntage change in price of product y
  Change in Quantity = 4 000 - 3 000
  1 000
  Change in price = 1.3 - 1.4
  = 0.1
  XED= 10000.1×1.34000
  XED =3.25

Example 5.7: Negative XED

Using the table below calculate XED

	Old price and quantity		New price and quantity	
Item	$	Kg	$	Kg
Cars (x)	50	600 000	90	400 000
Petrol (y)	60	100 000	50	67 000

Solution

Change in quantity=600 000 - 400 000

=200000

Change in price = 50 - 60

=-10

CED=200 00010×60600 000

CED=-2

Determinants of elasticities of demand

Nature of commodity

- Commodities are classified as necessities and luxuries
- A necessity that has no close substitute will have an inelastic demand because its consumptions cannot be postponed.
- Moreover, consumers purchase almost a fixed amount of a necessity per unit whether price changes or not.
- Demand of luxuries is relatively more elastic because consumption of luxuries can be postponed when their prices rise.

Range of substitutes

- A commodity has elastic demand if it has close substitutes.
- A small rise in the price of a commodity which has close substitutes will force the buyers to reduce the consumption of the commodity in favor of substitutes.
- A lower price will attract the buyers of the other substitutes to purchase the commodity.
- If no substitutes are available, demand for goods tends to be inelastic.

Number of uses of a product

- The larger the number of uses a commodity has, the higher is its elasticity of demand.
- The demand in each single use of such commodities may be inelastic, but the demand in all uses taken together is elastic.

Possibility of postponement of purchase

- If the use of a commodity can be postponed to a later date, then the demand of such a commodity will be elastic.

- For example, if furniture becomes more expensive, people will postpone buying new furniture and hence use existing furniture.
- Furniture is therefore price elastic.

Importance in consumers' budget

- The demand for a good is said to be inelastic when a small portion of income is spent on the good, for example salt and toothpaste.
- If the prices of these items rise, the consumer budget is not affected much.
- However, durable goods like houses take away a large portion of the income.
- Hence, the demand for such commodities is elastic.

Income level

- People with high incomes are less affected by price changes than people with low incomes.
- Thus, the distribution of income has an important bearing on the elasticity of demand.

Time

- In the short-run, the demand is inelastic while in the long-run demand is elastic.
- This is because in the long-run, consumers can change their habits and consumption patterns.

Joint demand

- Elasticity of demand for a commodity is also influenced by the elasticity of its jointly demanded commodities.
- If the demand for cars is inelastic, then the demand for petrol will be inelastic.
- Generally, the elasticity of jointly demanded goods is inelastic.

Importance of elasticities of demand

Business

- If the demand for a good is inelastic, then a decrease in price will lead to a fall in revenue of the firm and vice versa.
- A decrease in price will increase revenue of the company if the product's demand is elastic and an increase in price will reduce revenue of the business.

Government

- When the government imposes a sales tax on a product whose price elasticity of demand is elastic, the price will increase hence quantity demanded will in turn decrease.
- This leads to a reduction in government revenue.
- However, when the tax increases on an inelastic good then government revenue increases.
- This is because a rise in price will not lead to a decrease in quantity demanded.
- Therefore, government will always wish to tax inelastic goods for example cigarettes and alcohol because a tax on this type of goods does not reduce quantity demanded.

Households

- The knowledge of elasticity of demand can help households to decide whether to use their existing products if there is an increase in price.
- Also, households can use the knowledge of elasticity of demand to make choices on the alternatives available.

THEORY OF SUPPLY

1. Explain supply.
2. Describe the law of supply.

3. Illustrate the relationship between price and quantity supplied.

What is supply?

- The two economic agents are producers and consumers.
- Producers make and supply products.
- Consumers buy and use the products.
- Supply is the willingness and ability of producers to offer commodities to the market at different price levels.
- Supply is the quantity of goods and services which producers or suppliers are willing and able to provide to the market at different price levels within a particular period of time.
- Hence supply is the total quantity of products that are available for sale in the market at a given price and time.
- Supply statements have three aspects. These are:
- Price of goods and services.
- Quantity of goods and services supplied.
- Time frame of supplying the goods and services.

Quantity supplied

- Quantity supplied is the amount of goods and services offered to the market at a given price over a given period of time.
- Quantity supplied changes with price levels.

An example of a supply statement

- When the price of bananas is 10c, quantity supplied is 300 bananas a week.
- Mr X wishes to supply 300 bananas (quantity) at 10c each (price) per week (time)

Individual supply

- Individual supply is the quantity of goods a supplier offers to the market at different price levels over a given period of time.
- It involves the amount of a certain product a single firm, household or an individual supplies to the market.

Market supply

- The market is where buyers and sellers meet.
- Market supply is the amount of a good or service offered by all the suppliers within the market.

- It shows the sum of all quantities of a product from all sellers at different price levels within a given period of time.
- The market supply is the quantity of a product that all producers offer to the market at a specific price over a given period of time.

Law of supply

- The law of supply states that, if the price of a product increases, the quantity supplied within a given period of time also increases.
- Therefore, the price of a product determines the quantity supplied.
- A decrease in the price of a product leads to a decrease in quantity supplied.
- Price and quantity supplied have a positive relationship.
- A positive relationship means that price and quantity supplied of a product are directly related to each other.
- Firms are prepared to sell more products at a higher price because their aim is to maximise profits.

- The law of supply can be explained using a table called the supply schedule.

Supply schedules

- A supply schedule is a table which shows quantity of a product that is offered to the market at different price levels within a specific period of time.
- There are two types of supply schedules namely:
- Individual supply schedule
- Market supply schedule

Individual supply schedule

- It is a table that shows the quantities of a product that a single supplier is willing to sell at different price levels within a given period of time.
- It shows the contribution of a supplier to the market.

Individual supply schedule

PRICE ($) OF ORANGES PER KG	QUANTITY SUPPLIED-ORANGES (KG)
1	15
2	20
3	25

4	30
5	35

- The table above shows the individual supply schedule.
- It indicates the quantity of oranges the individual is willing to supply to the market at different prices levels.
- The quantity of oranges supplied increases as the price increases.

Example 6.1

- When oranges are at $1 per kg the individual supplies 15kgs. If the price increases from $1 to $3 per kg the quantity supplied increases from 15kgs to 25kgs respectively
- An increase in quantity supplied is caused by an increase in price because an increase in price results in an increase in profits.
- Therefore, an individual supplier is willing to sell more when the price is high.

Market supply schedule

- The market supply schedule is a table which shows the total quantities offered by all the suppliers of a particular product within a period of time.
- It shows the total quantity of a product supplied to the market.
- Market supply schedule is the sum of all individual supply schedules of a particular product within a given period of time.

The market supply schedule

Price($) of oranges per kg	Quantity Supplied (kg) by Individual A	Quantity Supplied (kg) by Individual B	Market supply (kg)
1	4	6	10
2	6	8	14
3	8	10	18
4	10	12	22
5	12	14	26
6	14	16	30

Table 6.1: Market supply schedule

- The table shows the different price levels of oranges and quantity supplied by individual A and individual B to the market.
- To come up with a market supply schedule, we add quantity supplied by individual A and by individual B.
- For instance, at $3 per kg of oranges individual A supplies 8kgs and individual B supplies 10kgs.
- To get the market supply, we add 8kgs supplied by individual A and 10kgs supplied by individual B as shown below:

Market supply = quantity supplied by individual A + quantity supplied by individual B
= 8kgs + 10kgs
= 18kgs

- If the price of oranges increases from $3 to $6, the market supply increases from 18kgs to 30kgs.

Summary

- Supply is the quantity of a commodity or service that sellers are willing to provide to the market at different prices over a specific period of time.
- The supply statement must include the price and quantity of the product supplied as well as the time frame.
- Individual supply is the quantity of a product that a seller is willing to provide to the market at a given price level, within a specific period of time.
- Market supply refers to the amount of a product that is offered by all suppliers to the market at a certain price and within a given time.
- There is a positive relationship between the price of a product and the quantity supplied.
- A decrease in the price of a product leads to a decrease in the quantity supplied.
- An increase in the price of a product leads to an increase in the quantity supplied.

Movement along the supply curve

- The movement along the supply curve from point a to point d shows the effect of price change on the quantity supplied of chairs.
- Price change affects the quantity supplied in the market.
- Price change of a product causes extension or contraction of the supply.
- If the price of a product increases, it causes the extension of supply whereas if the price decreases it causes the contraction in supply.

Contraction in supply

- When supply of a certain product decreases due to decrease in price, it is called contraction of supply.
- Contraction of supply denotes the other part of the law of supply, decrease in price leads to a decrease in quantity supplied.
- This is represented by the downward movement along the supply curve.
- Contraction in supply is illustrated in fig 6.1.2.

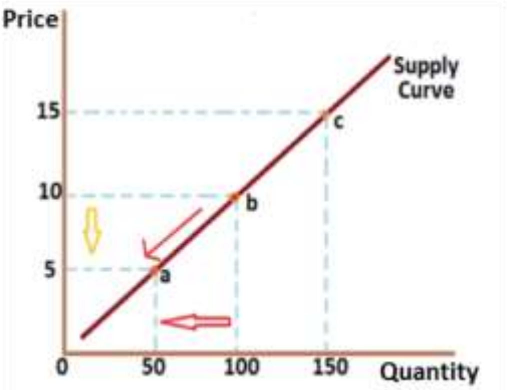


Fig 6.1.2: Contraction in Supply

- If the price of chairs decreases from $10 to $5, quantity supplied decreases from 100 units to 50 units.
- Decrease in price causes a downward movement along the supply curve from point b to point a.

Extension in supply

- When the price of a product increases, that means suppliers are now willing to supply more of their product to the market.
- Firms aim to maximise profits so if the price of a product increases, they tend to increase the quantity supplied so as to increase their revenue.
- Increase in supply is called extension in supply.
- Extension in supply denotes the other aspect of law of supply that as the price of a product increases, quantity supplied also increases.
- The extension in supply shows the positive relationship between price and quantity supplied.
- This is the movement upward on the supply curve.
- Fig 6.1.3 shows the extension in supply of chairs.

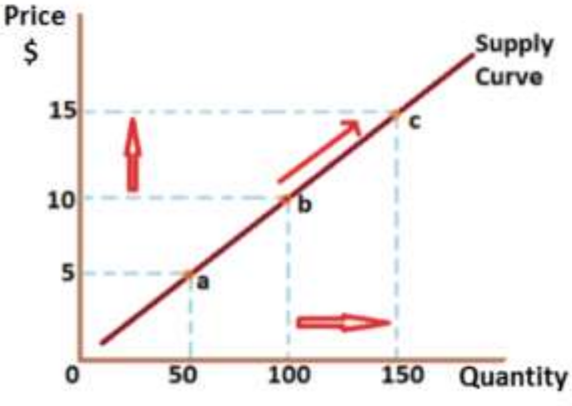


Fig 6.1.3: Extension in Supply

- Fig 6.1.3 shows the extension in supply caused by the increase in price of chairs from $10 to $15.
- Rise in price causes supply of chairs to increase from 100 units to 150 units as suppliers aim to maximise profit.
- The arrow from point b to point c denotes the upward movement along the supply curve.

FACTORS THAT DETERMINE SUPPLY

1. Explain the determinants of supply,
2. Demonstrate how determinants affect the supply curve
3. Describe increase and decrease in supply
4. Illustrate the expansion and contraction of the supply curve.
5. Explain climate change
6. Outline the effects of climate change on production
7. Suggest mitigating measures to climate change.

Supply theory

Factors that determine supply

- The supply of products is influenced by many factors.

Fig 6.1: Determinants of supply

- Fig 6.1 is an overview of the main factors that influence the supply of goods and services.

Number of suppliers/sellers in the market

- The greater the number of suppliers in the industry, the more goods and services offered to market.
- If there are fewer suppliers in the market, there will be fewer products to be offered.
- If the supply of goods and services increases, the price decreases.
- If the supply of goods and services decline, the price rises.

Prices of inputs

- Inputs used in the production process include land, labour and raw materials.
- If the cost of inputs increases, it results in reduction of supply.
- Increase in cost of production reduces the profit of goods and services hence suppliers offer less.
- Also, the reduction in prices of inputs motivates the suppliers to produce more.

Technological advancement

- If there is technological advancement in the economy, there will be improvements in the methods of production, product quality and performance of machinery.
- This allows the suppliers to produce more products at lower cost of production and using fewer inputs.

Producers expectations

- If suppliers expect the price of their products to change in the future, this leads to increase or decrease in production.
    - A producer who expects the price of his or her product to rise may increase production to meet the expected demand.
    - If prices are expected to decrease, producers will reduce the supply of goods and services.

- Suppliers react differently on expected price changes.
    - For example, if a producer of wheat expects the price to increase in future, he or she may stock more wheat in order to meet the expected demand thereby reducing the current supply.

Price of other goods

- The supply of a product can be affected by the change in the price of related products.
- If the products are substitutes, a rise in the price of one product leads to a decrease in the supply of the other product.
- For complimentary products, an increase in the price of a joint product results in the increase in supply of the other product.

Unpredicted factors

- The supply of products can be affected by other factors which are beyond the suppliers' control.
- These factors include natural disasters, wars, economic factors and political factors.
- Unpredicted factors negatively affect the supply of goods in the market which means they reduce the supply of goods.
- If there is economic stability in the country, the supply of goods will also increase.

Changes in quantity supplied

- Quantity supplied means the amount of goods and services that are supplied at a given price within a period of time.
- Change in quantity supplied is a decrease or increase in the quantity of a product that sellers are willing and able to supply at different price levels.
- A change in quantity supplied is caused by a change in the price of the product.
- A change in price of a product causes movement along the supply curve.
- A change in price will cause supply to expand or contract.
    - Expansion of supply refers to how supply varies with a rise in the price of a product, assuming that other factors that determine supply remain constant.
    - Contraction of supply refers to how supply decreases with a fall in the price of a product without a change in other factors that determine supply.
- An increase in supply means that more is supplied at a given price and time.
- A decrease in supply means that less is supplied at a given price and time.
- Suppliers are willing to offer more of a product when its price increases and vice versa.
- A change in quantity supplied is illustrated by the movement along the supply curve.
- The supply curve of a product slopes upwards, meaning that as price rises, quantity supplied increases.
- A change in quantity supplied is a change from one price-quantity combination to a new combination on the same supply curve.

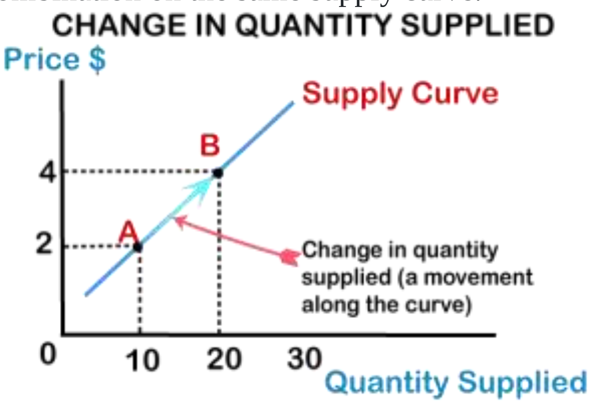


Fig 6.2: Change in quantity supplied

- Fig 6.2 shows a change in quantity supplied.

- From the diagram a change in price does not shift the supply curve but shows a movement along the same supply curve.
- An increase in price from $2 to $4 leads to an increase in supply from 10 units to 20 units because suppliers are willing to supply more when the price of the product is high.
- A movement along the supply curve from A to B shows an increase in quantity supplied.

Changes in supply

- Changes in supply means that the suppliers of a certain product have altered the quantity supplied at the same price level.
- Changes in supply lead to a shift of the market supply curve.
- If supply increases, the supply curve shifts to the right.
    - This is an upward shift of the supply curve.
- If supply decreases, it leads to the shift of the supply curve to the left.
    - This is a downward shift of the supply curve.

Causes of shifts in the supply curve

- All factors, except the price of the product, cause the shift of the market supply curve either inward or outward.

An increase in market supply

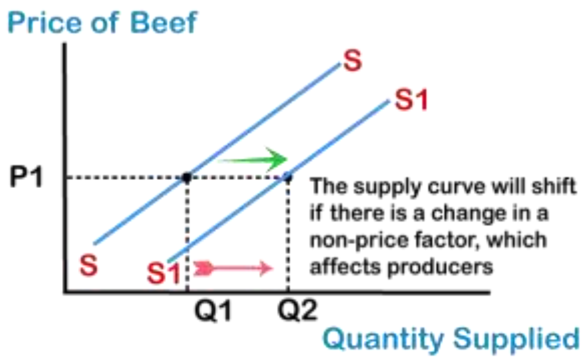


Fig 6.3: Outward shift of market supply curve

- In the diagram above, the original supply curve is S
- There is an outward shift in the supply curve from S to S1.
- An outward shift of the supply curve shows an increase in supply of beef at the constant price P1.
- A shift of the supply curve from S to S1 shows an increase in supply from Q1 to Q2.
- The supply curve shifts from S to S1 due to any of the following factors:
    - Technological improvements in production processes.
    - Expectation of future profits.
    - Discovery of new resources used in production.
    - Decrease in price of substitute goods.
    - Decrease in price of factors of production.

A decrease in market supply of a product

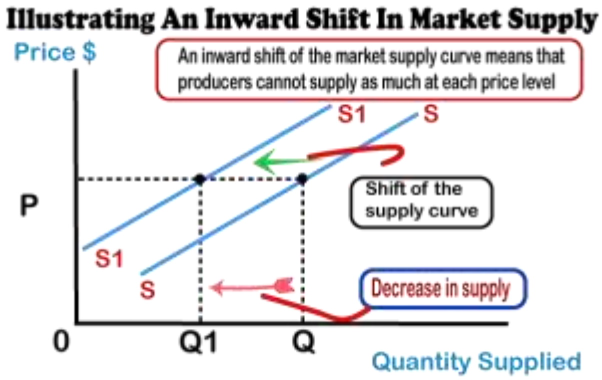


Fig 6.4: Inward shift of market supply curve

- An inward shift of the supply curve shows a decrease in supply.
- From the diagram above, the original supply curve is S.
- A shift of the supply curve from S to S1 shows a decrease in supply of beef.
- The quantity supplied at unchanged price P, decreases from Q to Q1.
- The following are some of the factors that cause an inward shift of the supply curve:
    - Substitute goods become more profitable.
    - A decrease in the availability of resources used in production.
    - Increase in corporate tax by the government.
    - An increase in the cost of factors of production.

CLIMATE CHANGE

Climate change is already affecting production in Zimbabwe.

- Climate change is a significant change in earth's weather patterns such as temperature and rainfall.
- Climate is the state of the atmosphere in a particular area over a long period of time.
- Climate change is caused by global warming as a result of increased concentration of greenhouse gases in the atmosphere.
- It is likely to impact on agriculture and other climate-sensitive industries, infrastructure and people's health.
- The consequences of climate change vary from industry to industry and country to country.

The climatic elements that affect production are:

- Temperature
- Rainfall
- Wind and sunshine

Temperature

- Temperature is how hot or cold a place is on a daily basis.
- Temperature is the amount of heat in the atmosphere at a particular time.
- Changes in temperature affect the industries which in turn affect the level of production in a country.

Effects of temperature in industries

- There will be an increase in demand of air conditioning systems in the industry which in turn increase the costs of production.
    - As cost of production increases, the quantity produced decreases thereby affecting the economy at large.
- Air conditioning increases the costs of electricity within the industry.
- Hot temperatures will bring increased risk of heart stress and subtropical diseases.
    - Subtropical diseases and heart stresses affect the workers which can reduce their productivity.

- Some machines used in most industries react to temperature changes.
  - For instance, there are some machines which require high temperatures for them to work properly. When the temperature decreases, it reduces productivity.
- The temperature can also affect the transport system.
  - Very Low temperatures attract snowfall which makes the roads slippery, thereby making it hard for raw materials to reach industries.
- Temperature can also affect the agricultural sector thereby reducing productivity.
  - Very low temperatures reduce the rate of growth of plants.
  - High temperatures increase the rate of spread of diseases.
  - As a result, agricultural production decreases.
- Hot temperatures promote the consumption of cold products such as soft drinks and ice creams.

Rainfall

- Rainfall determines whether outdoor activities are suitable to be carried out or not.
- Lightning can destroy the electricity system which cuts the power supply to industries.
- Lower rainfall reduces groundwater supplies and causes drought.
- Continuous heavy rainfall, like cyclones, results in workers in the agricultural sectors to fail to carry out farming activities.
- Heavy rainfall affects the movement of consumers to the market.
- Heavy rains also affect the road network. Heavy rains can cause landslides which may block roads
  - Poor road networks affect the transportation of raw materials and finished products.
- The supply of electricity can be affected by heavy rainfall.
  - Most industries in Zimbabwe use electricity when producing their goods.
  - When there is heavy rainfall or storms, electricity maybe cut off.
  - When there is power cut in the industry production stops or is reduced, hence quantity produced for that period decreases.
- Heavy rainfall can also cause factory damages.
  - Heavy rainfall can damage the buildings which are used for production.
  - If buildings are damaged, production is affected negatively.
  - Damage of property causes firms to incur unexpected costs of repairs. Fig 6.7 shows the damage that took place at a work site due to heavy rains
- Shortage of water also affects production.
  - If there is drought, water bodies such as dams dry up, thereby affecting water supplies to most industries.
  - This can affect production because some industries use water during production processes, for example irrigation and purification of minerals.

Wind and sunshine

- Heavy winds destroy buildings, plantations and power system.
- Heavy wind chops plants which reduces the supply of raw materials.
- Solar powered industries are affected if there is limited sunshine, for example when there are long periods of cloudy conditions.

Solutions to climate change

- Financial incentives to encourage energy efficiency.
  - New technologies and techniques in machinery, heating, lighting and ventilation can significantly cut energy use, production costs, greenhouse gas emissions and air pollution.
- Industries should expand rainwater harvesting.
  - Rainwater harvesting includes water storage and conservation techniques.

    - Industries should practice water re-use during production, efficient use of available water and practice irrigation efficiency.
- In agriculture, farmers should adjust planting dates, adopt new crop varieties and practice crop rotation in order to adapt to changes in climate.
    - Farmers should also practice soil erosion control and soil protection through tree planting.
- For road networks, the government should realign roads.
    - It should design standard roads and upgrade rail and other infrastructure to cope with warming and drainage.
- Solution on energy used and electricity
    - There is need for strengthening of overheard transmission and electricity distribution infrastructure.
    - There should be underground utility cables for energy efficiency.
    - Industries should use renewable sources and reduce dependence on a single source of energy.
- Learning to adapt to climate change
    - Climate change is already being felt in towns and cities across the country.
    - To mitigate the problem of climate change in Zimbabwe, the government should engage in some campaign activities to teach people about climate change and how to adapt to it.

Summary

- The factors that influence the supply of a product include the number of suppliers in the economy, prices of inputs, changes in technology, producers' expectations, changes in prices of other goods and unpredicted factors.
- Quantity supplied means the amount of a good or a service that is supplied to the market at a given price within a given period of time.
- Change in quantity supplied is a decrease or increase in the quantity of a product that sellers are willing and able to bring to the market at different price levels.
- A change in quantity supplied is only caused by a change in the price of the product.
- Expansion of supply refers to how supply varies with a rise in the price of a product, assuming that other factors that determine supply remain constant.
- Contraction of supply refers to how supply decreases with a fall in the price of a product without a change in other factors that determine supply.
- An increase in supply means that more is supplied at a given price and time.
- A decrease in supply means that less is supplied at a given price and time.
- Changes in supply means that the suppliers of a certain product have altered the quantity supplied at the same price level.
- Changes in supply leads to a shift of the market supply curve.
- If supply increases, the supply curve shifts to the right.
- If supply decreases, it leads to the shift of the supply curve to the left.
- Climate change is a significant change in the earth's weather patterns such as temperature and rainfall.
- Climate change is caused by global warming as a result of increased concentration of greenhouse gases in the atmosphere.
- Temperature, rainfall, wind and sunshine are the main components that influence climatic conditions.
- The following are ways in which firms and individuals can deal with the effects of climate change:
    - Financial incentives to encourage energy efficiency.
    - Industries should expand rainwater harvesting.

- In agriculture, farmers should adjust planting dates, adopt new crop varieties and practice crop rotation in order to adapt to changes in climate.
- For road networks, the government should realign roads.
- Solution on energy used and electricity
- Learning to adapt to climate Change

ELASTICITY OF SUPPLY

1. explain elasticity of supply
2. calculate price elasticity of supply
3. interpret the value of elasticity of supply
4. describe the determinants of elasticity of supply
5. demonstrate the significance of elasticity of supply to real life situations.

Elasticity of supply

- Elasticity of supply is the responsiveness of quantity supplied to a change in the price of a product.
- Elasticity of supply is also measured as the ratio of proportional change in quantity supplied to the proportionate change in any price.

Price elasticity of supply (PES)

- Price elasticity of supply measures the relationship between the proportionate changes in quantity supplied and proportionate change in price of the product.
- It focuses on finding out the quantity to be supplied over a change in price.
- It is important for firms to know how to respond to changes in market conditions.
- High price elasticity of supply makes the firm more competitive in the market.
- Also high elasticity of supply denotes that supply is sensitive to any changes in price of a product.
- Low elasticity of supply indicates a little sensitivity of supply to changes in price.
- Zero elasticity of supply means that there is no relationship between supply and price.
- Price elasticity of supply is calculated as follows:
  percentage change in quantity suppliedpercentage change in price

- Percentage change in quantity supplied is calculated as:
  change in quantity suppliedoriginal quantity× 1001

- Percentage change in price is calculated as :
  change in priceoriginal price × 1001

Example 6.1: Price elasticity of supply

Mr. T. used to supply 50 crates of tomatoes per week at $5 per crate. After two months the price of tomatoes per crate increased to $7 and then supplies 90 crates per week in the market. Calculate the price elasticity of supply.

- % Change in quantity supplied = change in quantity suppliedoriginal quantity× 1001 =4050× 1001=80%

- % change in price = change in priceoriginal price × 1001 = 25×1001=40%

- PES = percentage change in quantity suppliedpercentage change in price 80%40% =2

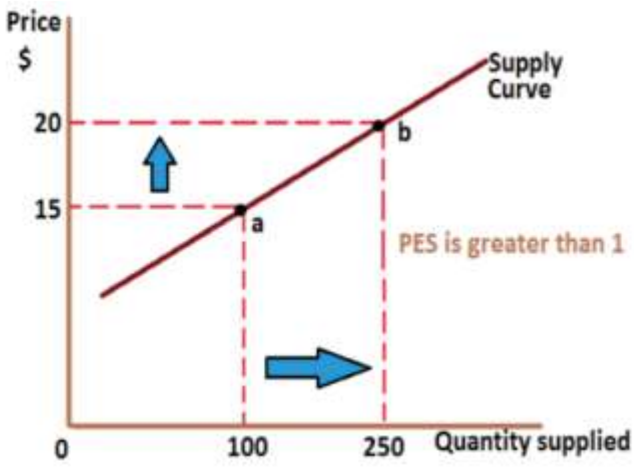
- **Please Note**: When calculating elasticity of supply, you should ignore the negative sign and treat it as a positive number.

Measuring the degree of price elasticity of supply (PES)

- After calculating price elasticity of supply of a product, one can be able to place a degree of change to a product.
- There are five categories of price elasticity of supply, these are:
  - Elastic supply
  - Inelastic supply
  - Unitary supply
  - Perfectly elastic supply
  - Perfectly inelastic supply
- All these categories are obtained after calculating price elasticity of supply for a product.
- Most products fall under the category of elastic and inelastic supply.
- At this level, we only focus on **elastic supply**, **inelastic supply** and **unitary supply**.

Elastic supply

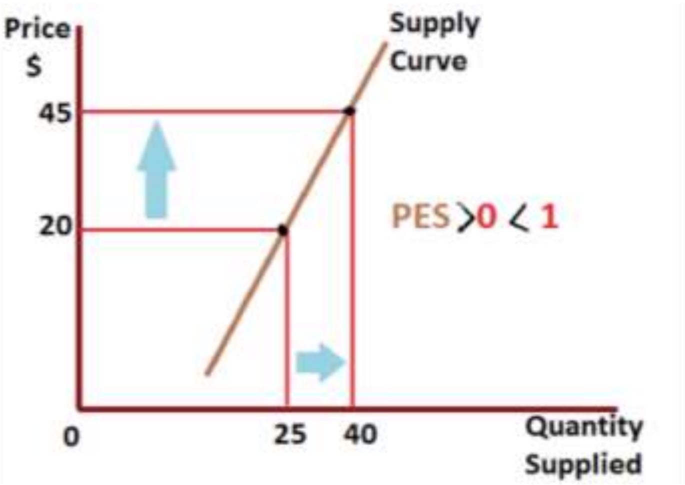
  - Elastic supply occurs when a change in price brings a greater percentage change in quantity supplied.
  - The coefficient of elastic supply is greater than one but less than infinity (PES >1<∞).
  - If the price changes, it highly affects the quantity supplied by firms.
  - An increase in the price of a product will increase the supply of that product or vice versa.
  - Firms are willing to supply more if the price of a product rises.
  - Fig 6.1 shows elastic supply curve.

Fig 6.1:  Elastic Supply Curve

- From **Fig 6.1**, if the price increases from $15 to $20, it brings a greater change on quantity supplied from 100 to 250 units.
- Hence PES = percentage change in quantity suppliedpercentage change in price
- PES= 15033.3
- PES= 4.5
- The result shows that the product has price elastic of supply because 4.5 is greater than 1.
- This can also be applicable even if the price decreases from $20 to $15, percentage change in price will be less than the percentage change in quantity supplied.

Inelastic supply

- Inelastic supply occurs when percentage change in price is more than the percentage change in quantity supplied.
- The coefficient of inelastic supply is between zero and one (PES >0<1).
- Price increase brings a less percentage change in quantity supplied.
- Price inelastic of supply usually deals with necessities.
- An example of necessities include salt.
- Fig 6.2 shows inelastic supply curve.

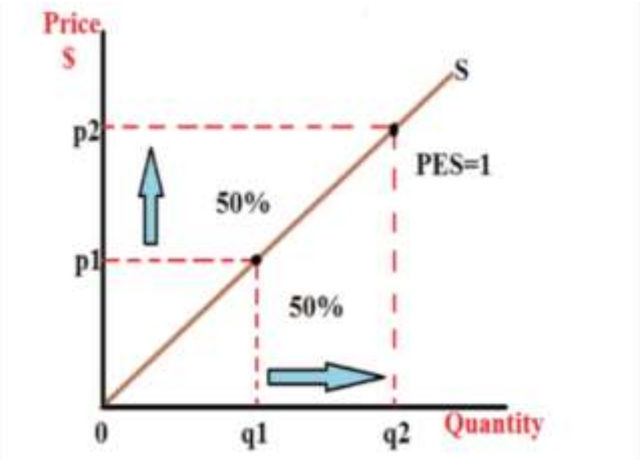
Fig 6.2:  Inelastic Supply Curve

- Fig 6.2 shows a product with price inelasticity of supply.

- If the price increases from \$20 to \$45, quantity supplied increases by a smaller amount from 25 units to 40 units.
- This can be shown by calculating price elasticity of supply of the product.
- PES = percentage change in quantity suppliedpercentage change in price
- PES = 60125
- PES = 0.48

Unitary elasticity of supply

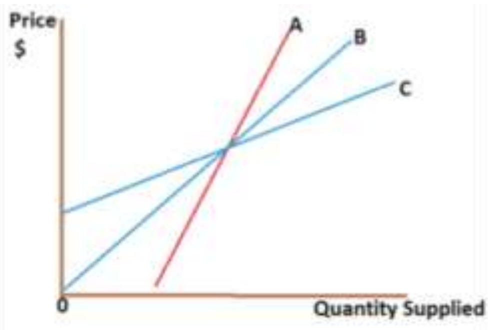
  - Unitary elasticity of supply occurs when percentage change in price is equal to percentage change in quantity supplied.
  - The coefficient is equal to 1 (PES =1).
  - Fig 6.3 shows unitary supply curve.

Fig 6.3: 

Unitary Supply Curve

- From fig 6.3, percentage change in price from **P1** to **P2** brings an equal change in quantity supplied.
- Price increases by 50% and quantity supplied also increases by 50%.

Three different degrees of price elasticity of supply curves

Fig 6.4: 

Types of Elasticity of Supply

Summary on degrees of price elasticity of supply

SUPPLY CURVE	PERCENTAGE CHANGE IN QUANTITY SUPPLIED	PERCENTAGE CHANGE IN PRICE	PRICE ELASTICITY OF SUPPLY AND DESCRIPTION

A	12% decrease	20% decrease	= 0.6 Inelastic
B	20% decrease	20% decrease	=1.0 Unitary
C	40% increase	20% increase	= 2 relatively elastic

Determinants of price elasticity of supply

- The degree of price elasticity of supply can be affected by many factors.
- The following are the factors that affect the degree of price elasticity of supply.

Spare production capacity

- If there is spare capacity for the business to increase its output without a rise in cost of production, then supply will be relatively elastic.
- The price elasticity of supply is relatively elastic during a recession.
- When the economy is in recession, there will be plenty of spare capital resources and labour so firms will be flexible to increase their production.

Time period

- The degree of price elasticity of supply is determined by the time period and the speed of production.
- In the long run when firms can adjust their production levels, supply will be more elastic.
- The shorter the time period, the more difficult for producers to switch from producing one product to another.
- In the short run, price elasticity of supply tends to be relatively price inelastic than in the long run.

Stocks of raw materials and finished products

- If the producing firm has high levels of stock of finished products, it can quickly respond to an increase in demand hence supply will be elastic.
- If the level of stocks of raw materials is high, the firm can increase its production hence price elasticity of supply will be relatively elastic.
- When the levels of stocks of raw materials and finished products are low, price elasticity of supply will be inelastic.

The mobility of factors of production

- This can also be called the availability of substitutes.
- The factors of production that are usually considered to be mobile are labour and capital.
- If the factors of production can be easily switched to produce other products, then supply is said to be relatively elastic.
- Also, if the factors of production are not be easily shifted to produce other goods then the supply is said to be inelastic.

Number of sellers in the market

- If there are many sellers in the market, supply tends to be relatively more elastic.
- On the other hand, if there are few sellers in the market, supply tends to be relatively inelastic.

Importance of price elasticity of supply

- Price elasticity of supply is important because:
- It facilitates trade.
- It helps the exporting industries to respond to the exchange rate if export demand grows.
- It is also influences the government when determining the level of taxation.
- If the firm has price elastic of supply, the government tends to charge low taxation to encourage more production.
- The knowledge of price elasticity of supply also helps producers.
- When supply is inelastic, suppliers increase supply without an increase in cost or time delay.
- It helps producers to do their production forecasts.
- It also helps producers when determining the prices of their products.
- It is also used to determine housing supply.
- It helps firms when responding to changes in market conditions.

Interaction of demand and supply

1. Illustrate the interaction of demand and supply curves
2. Explain equilibrium price and quantity
3. Identify equilibrium point

- Demand and supply represent the willingness of consumers and producers to engage in buying and selling.
- An exchange of a product takes place when buyers and sellers agree upon a price.
- The supply and demand curves determine the price and quantity at which goods and services are bought and sold.
- The demand curve shows the quantities that consumers are willing to buy at a given price.
- The supply curve shows the quantities that suppliers are willing to produce and sell at a given price.
- In the absence of government intervention, the market forces that is demand and supply determine prices.
- Demand and supply interaction can be shown by use of a demand schedule or a demand and supply curve.
- Table 7.1.1 shows the demand and supply schedules.

Price ($) of tomatoes	Supply of tomatoes (units)	Demand of tomatoes (units)
0	0	0
2	10	50

4	20	40
6	30	30
8	40	20
10	50	10

- From the schedules of demand and supply, the equilibrium price is $6 where quantity supplied is equal to quantity demanded at 30 units.
- At any other prices, there is price disequilibrium because quantity demanded is not equal to quantity supplied.
- The price in the market is determined by the interaction of demand and supply curves.
- Market price can be expressed diagrammatically using the demand and supply curves.
- Fig 7.1.1 shows the interaction of demand and supply curves.

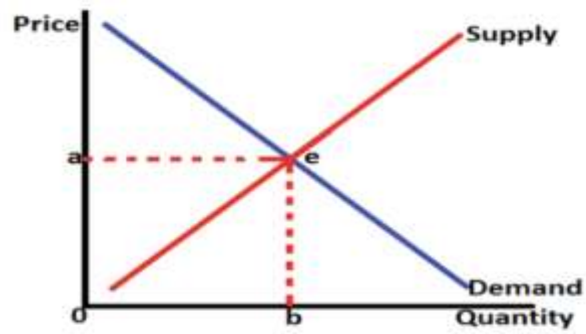


Fig 7.1.1: Interaction of Demand and Supply Curves

- Point b shows quantity demanded by consumers and which suppliers are willing to offer at price a.
- Demand and supply curves interact at point e which is termed the equilibrium point.

Equilibrium Point

- Equilibrium point is the point where quantity supplied equals to quantity demanded.
- This is the point where the demand curve cuts the supply curve.
- A change in demand and supply will bring about a change in the equilibrium point
- The equilibrium point is shown at point E on Fig 7.1.2.

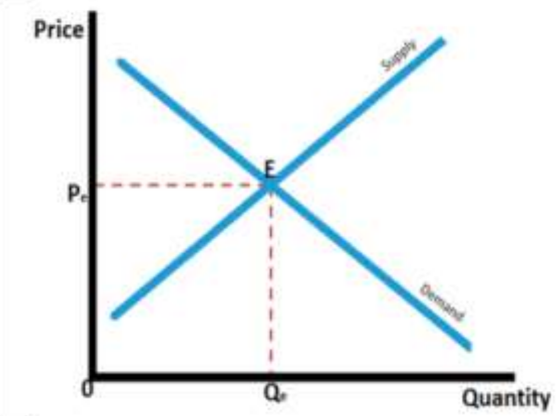


Fig 7.1.2: Equilibrium Point

Equilibrium Price

- Equilibrium price is obtained at the point where demand and supply curves meet.
- This is also called the market clearing price.

- At this point, there are no other factors influencing price, ceteris paribus.
- A change in demand and supply will bring about a new equilibrium price.
- Fig 7.1.3 shows equilibrium price.
- Equilibrium price is at Pe.

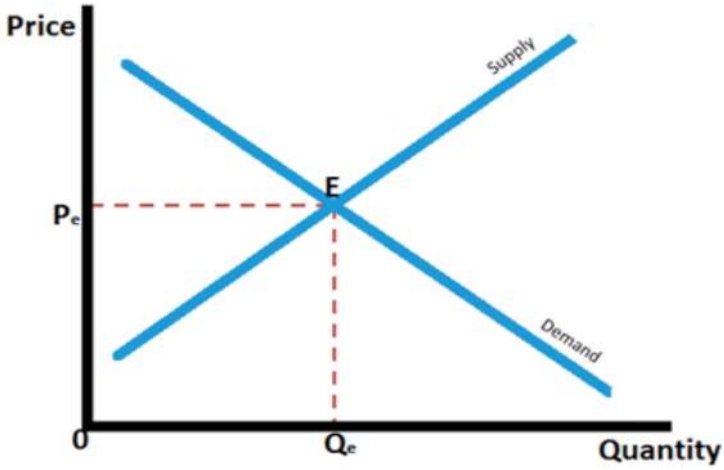


Fig 7.1.3 Equilibrium Price

Equilibrium Quantity

- Equilibrium quantity is the quantity of a product that consumers are willing to buy at the equilibrium price.
- The equilibrium quantity is the quantity produced and bought where the supply and demand curves intersect.
- A change in the demand or supply of a product results in a change in the equilibrium quantity.
- An increase in either demand or supply, increases the equilibrium quantity.
- Conversely, a decrease in demand or supply will cause a decrease in the equilibrium quantity.
- Fig 7.1.4 shows the equilibrium quantity.

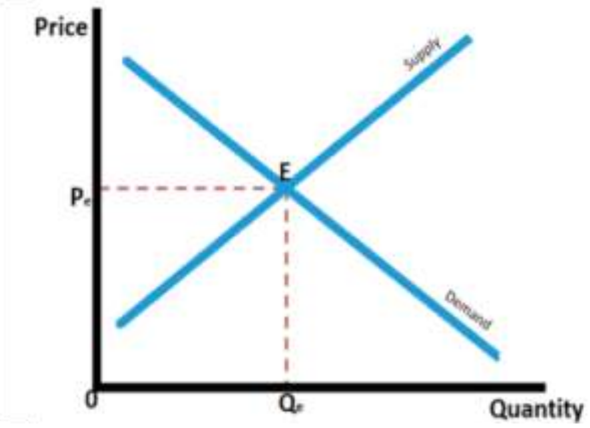


Fig 7.1.4 Equilibrium Quantity

- Point Qe on the diagram is the equilibrium quantity.

1. Demonstrate the shift on the demand curve
2. Illustrate the shift of the supply curve
3. Show how a new equilibrium is established
4. Outline causes of the shift of the demand curve.

Market equilibrium

- In a market, consumers are willing to buy cheap products while suppliers are willing to sell their products at the highest possible price.
- So, market equilibrium occurs where the demand and supply meet.
- The consumers' will to demand a particular quantity of a product at a particular price is represented by the demand curve.
- The suppliers' will to supply a particular quantity of a product at a particular price is represented by the supply curve.
- In other words, market equilibrium is a point where the demand curve and the supply curve intersect.
- The market equilibrium point can be shown by fig 7.1

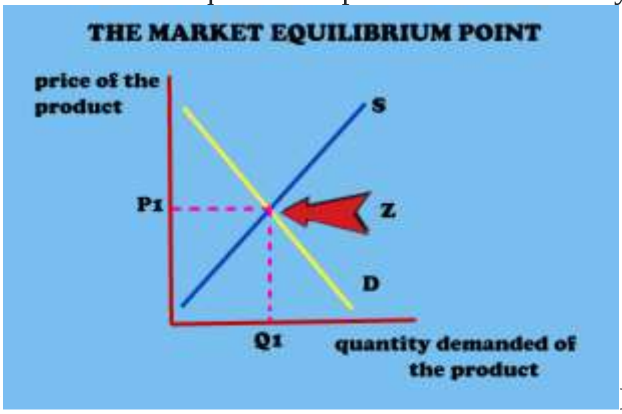


Fig 7.1: Market equilibrium

- From fig 7.1, the market equilibrium is at point Z where the demand and supply curves meet.
- At point Z, there is neither surplus nor shortage.
- Surplus (excess supply) is a situation where the quantity supplied is more than the quantity demanded.
- Shortage (excess demand) is a situation where the quantity supplied is less than the quantity demanded by consumers.

Shift of the Demand Curve.

- A demand curve shows quantities demanded of a product at any given price at a given period of time.
- The demand curve shifts either outwards or inwards.

Increase in Demand

- The outward shift of the demand curve shows an increase in the demand of a product.
- Fig 7.2 shows an outward shift of the demand curve.

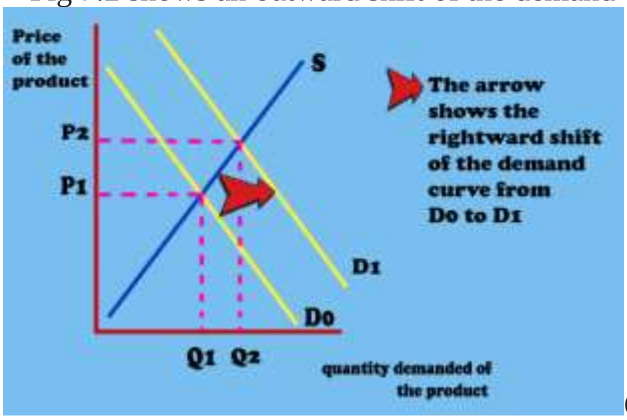


Fig 7.2: Outward shift of demand curve

- The graph shows an increase in demand of a product.
- The increase in demand is shown by the rightward shift of the demand curve from D0 to D1.

- An increase in demand results in an increase in price from P1 to P2 and an increase in quantity demanded from Q1 to Q2.

Decrease in Demand

- An inward shift of the demand curve to the left shows a decrease in demand of a product.
- A decrease in demand leads to excess supply.
- Fig 7.3 below, shows an inward shift of the demand curve.

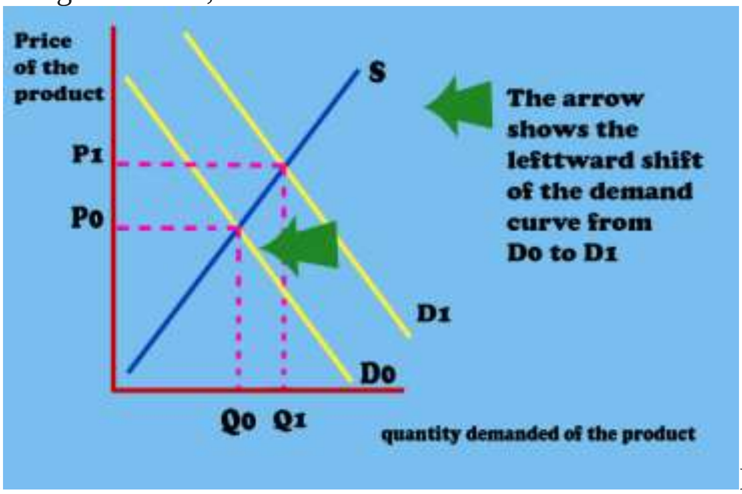


Fig 7.3: Inward shift of demand curve

- The graph shows a decrease in demand of a product.
- A decrease in demand is shown by the leftward shift of the demand curve from D0 to D1.
- A decrease in demand results in a decrease in price from P1 to P0 and a decrease in quantity demanded from Q1 to Q0.

The causes of a shift in the demand curve are:

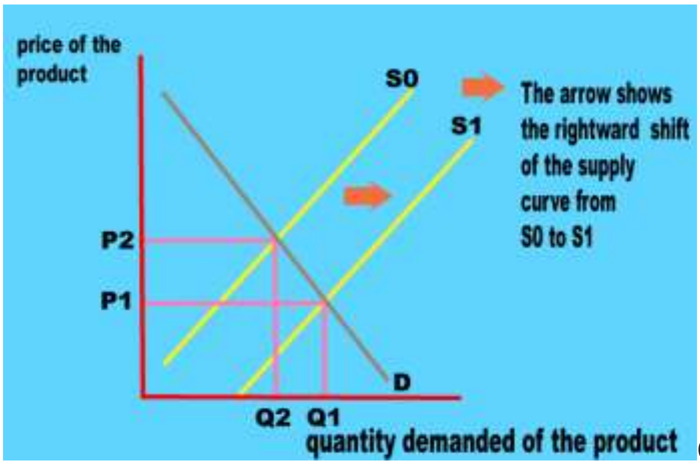
- Changes in consumer incomes.
- Changes in price of substitutes
- Changes in consumer tastes and preferences
- Changes in weather
- Changes in the population structure
- Changes in the population size
- Increasing advertising of products.

Shift of the Supply Curve

- A supply curve shows the quantity of a product supplied by producers at a given price within a given period of time.
- The supply curve can shift either to the left or right.

Increase in supply

- An outward shift of the supply curve shows an increase in supply of a product.
- An increase in supply leads to a decrease in the price level due to excess supply which exists in the market.
- Fig 7.4 below shows an outward shift of the supply curve.

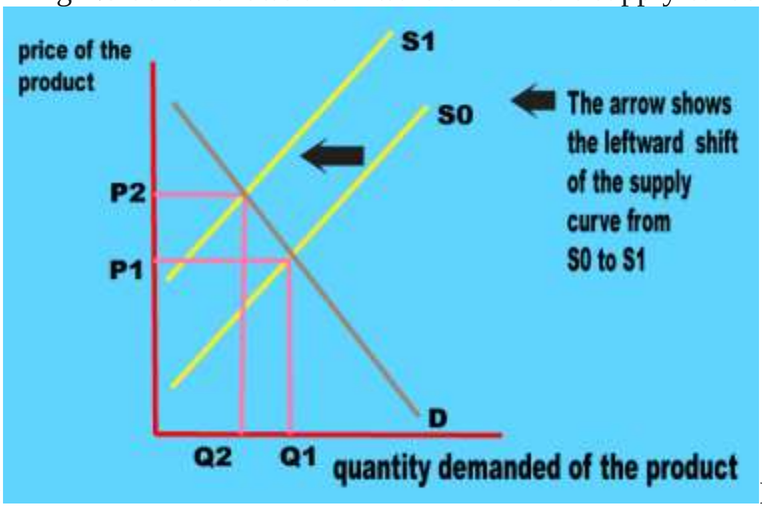
Fig 7.4: 

Outward shift supply

- The graph shows an increase in supply of a product.
- An increase in supply is shown by the rightward shift of the supply curve from S0 to S1.
- The increase in supply results in a reduced price level for the product from P2 to P1 and an increase in quantity supplied from Q2 to Q1.

Decrease in Supply

- An inward shift of the supply curve to the left side shows a decrease in supply of a product.
- A decrease in supply increases the price levels due to shortages which exist in the market.
- Fig 7.5 below shows the inward shift of the supply curve to the left.

Fig 7.5: 

Inward shift of supply curve

- The graph above shows a decrease in supply of a product.
- A decrease in supply is shown by the leftward shift of the supply curve from S0 to S1.
- A decrease in supply causes an increase in the price level from P1 to P2 and a decrease in the quantity demanded from Q1 to Q2.

The causes of a shift in the supply curve are:

- Changes in weather,
- Technological progress,
- Changes in the prices of factors of production,
- Changes in the prices of other commodities,
- Taxation and subsidies,
- Changes in the number of producers,
- The occurrence of unexpected events, for example, war and drought.

The establishment of a new equilibrium.

- The change in the market equilibrium comes as a result of a shift in demand and supply curves.

Increase in Demand.

- Fig 7.6 shows the new equilibrium as a result of an outward shift of the demand curve.

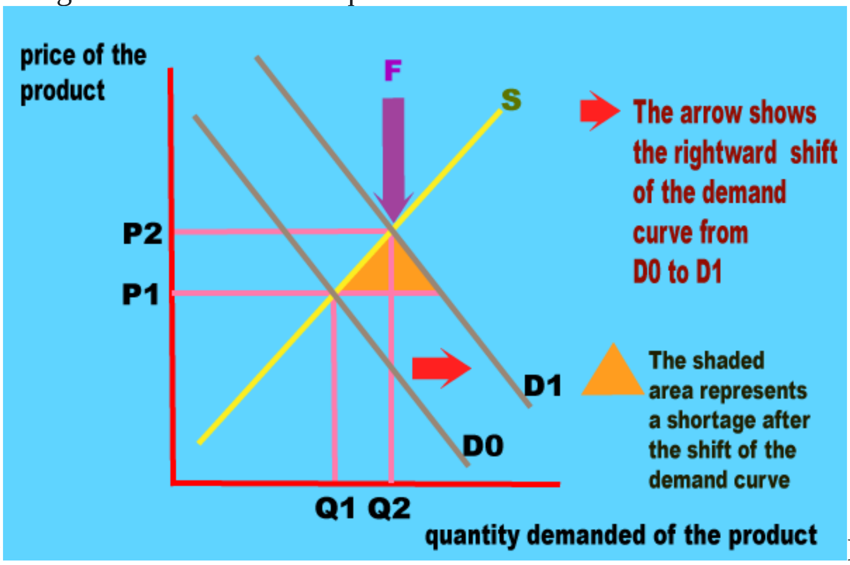


Fig 7.6: Market equilibrium

- The increase in demand results in a shortage in the market due to excess demand for the product.
- The shortage is shown by the shaded area on the graph if the price remains at P1 after the rightward shift of the demand curve to D1.
- The shortage in the market will cause a rise in the price of the product from P1 to P2.
  - As quantity demanded increases from Q1 to Q2, it pushes the price of the product up from P1 to P2 which makes our new equilibrium point to F.
- The new equilibrium is established on point F where the new demand curve D1 intersects with the supply curve, S

Decrease in Demand

- Fig 7.7 shows the establishment of a new equilibrium point when there is a decrease in demand for the product.

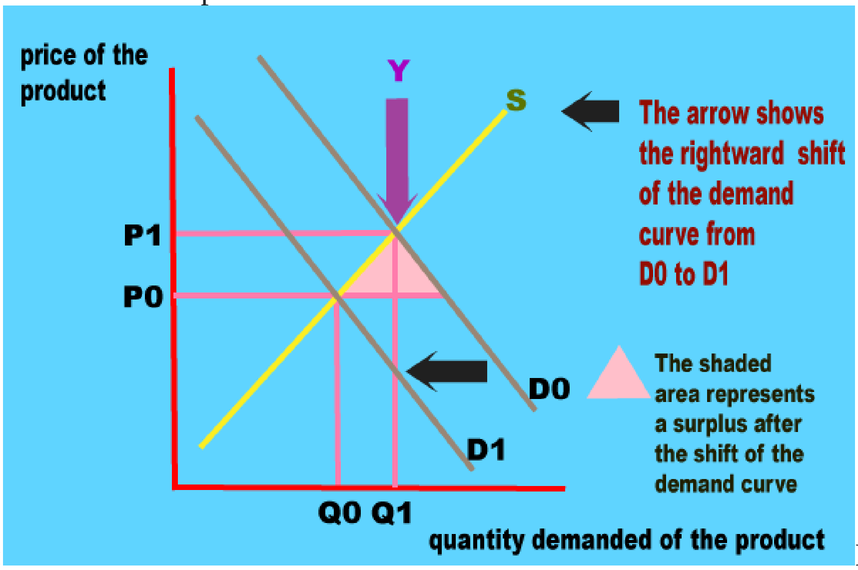


Fig 7.7: Equilibrium point

- A decrease in demand results in a surplus in the market due to excess supply of the product.

- The excess supply is shown by the shaded area on the graph if the price decreases from P1 to P0 as a result of the leftward shift of the demand curve to D1.
- The excess supply exists due to decrease in demand of the product leading to a fall in the price from P1 to P0.
- The suppliers reduce the price as a way of persuading the consumers to buy the excess supply in the market.
- Due to a decrease in demand for the product, the new equilibrium is established at point Y where the new demand curve D1 intersects with the supply curve S.

Increase in Supply

- Fig 7.8 shows the establishment of the new equilibrium after an increase in supply.

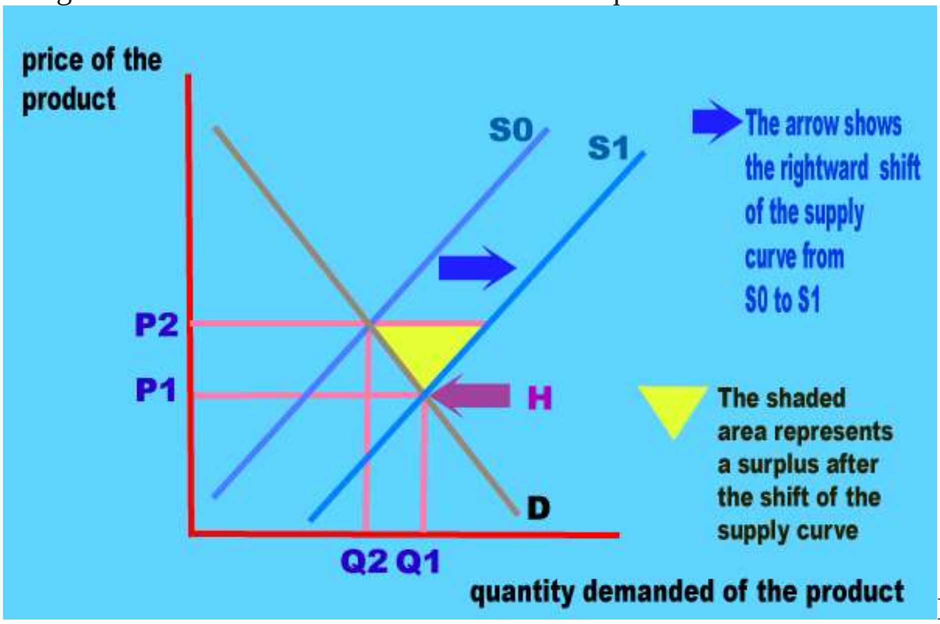
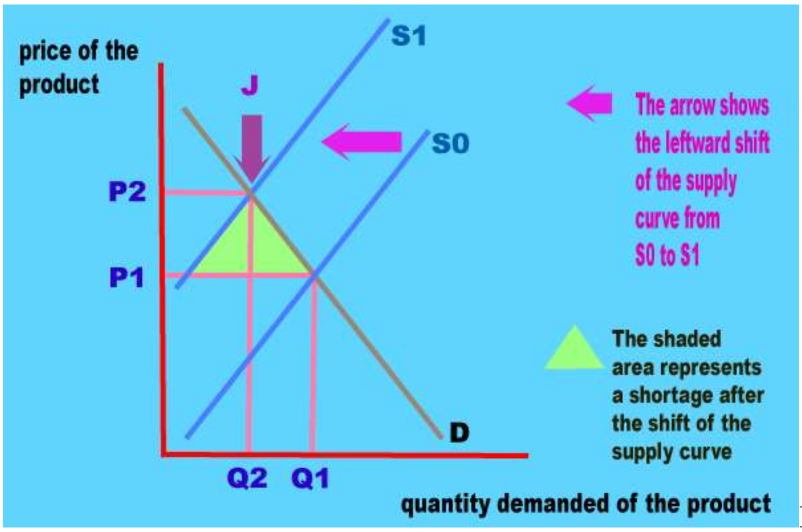


Fig 7.8: New equilibrium point

- An increase in supply results in a surplus in the market.
- The excess supply is shown by the shaded area on the graph if the price remains at P2 after the rightward shift of the supply curve to S1
- The price falls as the suppliers persuade consumers to buy the excess supply in the market.
- At the price P1, the quantity demanded by consumers increases from Q2 to Q1 due to the fall in price.
- Due to an increase in supply of the product, the new equilibrium is established at point H where the new supply curve S1 intersects with the demand curve D.

Decrease in Supply.

- Fig 7.9 shows the establishment of a new equilibrium after a decrease in supply.

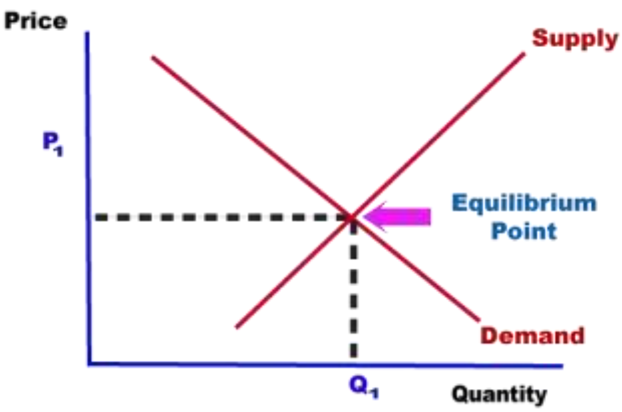
Fig 7.9: 

New equilibrium point

- The decrease in supply results in a shortage in the market due to excess demand.
- The shortage is shown by the shaded area on the graph if the price remains at P1 after the rightward shift of the demand curve to S1.
- The shortage in the market will cause a rise in the price of the product from P1 to P2.
- At price P2, the quantity demanded decreases from Q1 to Q2 due to an increase in the price level of the product.
- Due to a decrease in supply of the product, the new equilibrium is established at point J, where the new supply curve S1 intersects with the demand curve D.

Summary

- A market is where consumers and suppliers meet and exchange goods and services.
- Market equilibrium is a point where the demand curve and the supply curve intersect.
- The intersection is the equilibrium point.

Fig 7.10: 

Equilibrium price

- The demand curve or supply curve can shift either to the left or to the right.
- The shift in each one of these curves leads to a change in the equilibrium point.
- The outward shift of the demand curve shows an increase in the demand of a product.
- An inward shift of the demand curve shows a decrease in demand of a product.
- The causes of a shift in demand curve include changes in:
  - Consumer income
  - price of substitutes
  - consumer tastes and preferences
  - weather
  - population structure
  - population size

- An outward shift of the supply curve shows an increase in supply of a product.
- An inward shift of the supply curve shows a decrease in supply of a product
- Shifts in supply curve can be caused by any of the following:
  - Changes in weather.
  - Technological progress,
  - Changes in the prices of factors of production,
  - Changes in the prices of other commodities,
  - Taxation and subsidies,
  - Changes in the number of producers,
  - The occurrence of unexpected events.

Government intervention on the market

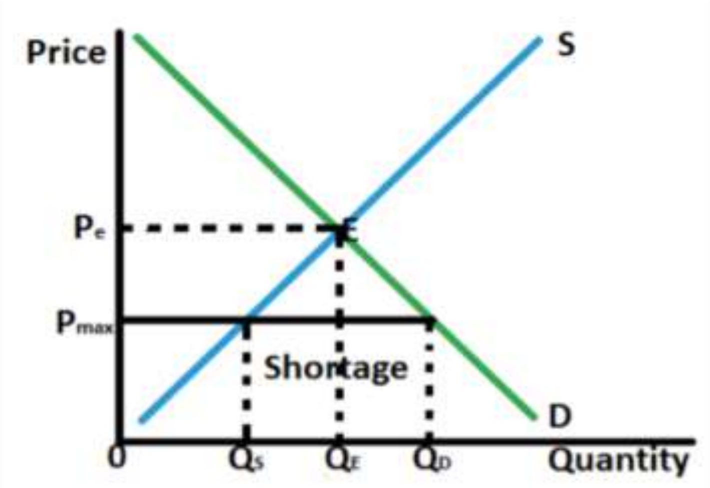
1. describe how the government intervenes in the market
2. explain price ceiling
3. explain price floor
4. illustrate the effects of price controls on the market

Government intervention on the market

- Government intervention is made by the government that regulates prices of products in the market.
- This can be done directly through regulations or indirectly through subsidies and taxes.
- This is done to promote economic fairness and improve social welfare.
- Price controls are most commonly used on foodstuffs and other essential items such as water and electricity.
- The government can set prices too high or too low because:
  - Government wants to set prices at levels where it is affordable for almost all consumers.
  - The government would want to maximize incomes and profits for producers in the market.
  - To reduce price variation in the market where there may be many prices for the same product.
- The government may find it wise to prevent price increase above the market equilibrium or to prevent a fall in price below the market equilibrium.
- Market intervention is usually done in inflationary periods.
- Hence, there will be price ceilings and price floors.

Price ceiling

- Price ceiling is a maximum price set by the government for particular goods and services that they believe are being sold at exorbitant prices.
- These are usually set on interest rates, rentals and on basic commodities.
- A maximum price means firms are not allowed to set prices above a certain level.
- The aim is to reduce prices below the market equilibrium price.
- The advantage of price ceiling is that it may lead to lower prices for consumers.
- This may be important if the supplier has monopoly power to exploit consumers.
- For example, a landlord who owns all the property in an area can charge excessive prices.

Fig 7.1:  Price Ceiling

- Price will fail to fulfill its rationing power function when there is price ceiling.
- The distance between Qs and Qd reflects the market shortage which is caused by excess demand.
- There will be excess demand because the price is set below the equilibrium price.
- An effective price ceiling will lower the price of a good, which decreases the producer surplus.
- If the demand curve is relatively elastic, then the net effect to consumer surplus will be positive.
- Price ceilings may lead to black markets, artificial shortages and consumer exploitation.
- Sellers can also adopt a first come first served basis or rationing so as to contain demand if the ceiling is imposed for long periods.
- Price ceilings disrupt the market and its forces.

Effects of price ceiling

- Setting price ceiling can lead to excess demand or shortage of commodities.
- Excess demand or shortage occurs when consumers demand more of a good than what is being supplied.
- Setting maximum price can lead to hoarding of products resulting in shortages in the market.
- As a result, the market price will rise because of this shortage.
- When there are shortages in the market, there will be:
    - Emergency of black market,
    - Inflation,
    - Long queues
- These economic problems will lead to market disparities.
- If the prices are too low, most producers will be forced to reduce production hence redundancy of machinery.

Price floor

- Price floor is the minimum price set by the government for some goods and services that it believes are being sold unfairly in a market.
- This is the minimum price set by the government on certain products.
- The government sets the price above the equilibrium level so that they can be effective.
- Price floors are set to keep prices from dropping down.
- The main aim is to protect the producers from obtaining abnormal losses.
- For example, prices of minerals are set so that the miners can offset costs and are not exploited by buyers.

- Price floor encourages the producers to keep producing as they obtain high profits because prices are kept above the equilibrium price.
- Fig 7.2 illustrates price floor.

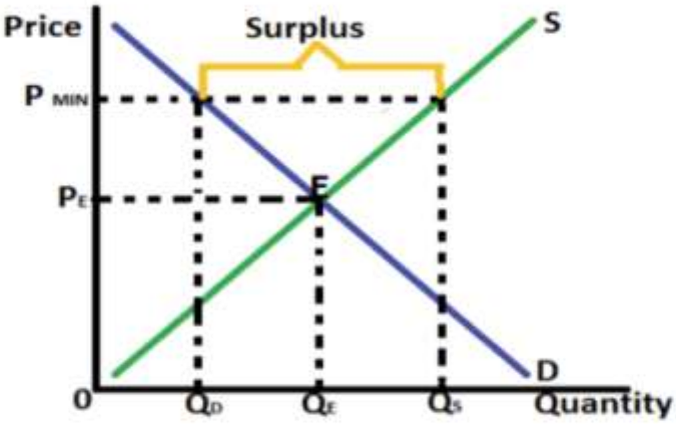


Fig 7.2: Price Floor

- From Fig7.2, if the government sets prices above the equilibrium price that means there will be surplus in the economy as supply is more than the quantity demanded.
- The distance between the equilibrium quantity supplied and quantity demanded is the surplus.
- The difference between price floor **(P)** and equilibrium price **(PE)** shows a surplus in the economy or excess supply of goods and services.
- Usually the government puts prices above the equilibrium in order to reduce the consumption of certain goods and service that may harm consumers.
- For example, the government can set minimum price on alcohol so that the consumers can reduce the consumption of alcohol.

Effects of price floor

- Price floor results in excess supply of products in the market.
- Excess supply is when total supply exceeds total demand.
- This could be due to a rise in price which will lead to a decrease in quantity demanded.
- If the market price is above the equilibrium price, quantity supplied is greater than quantity demanded, resulting in a fall in market price.
- Producers will sell their excess products in responding to price increase.
- It is a disadvantage to consumers who cannot afford the maximum price hence a reduction in demand resulting in excess supply.
- Price floor may lead to producers to incur losses due to a fall in demand.
- A fall in demand results in loss of employment.

Costs

1. Distinguish between long run and short run
2. Illustrate average costs using diagrams.

- Costs are all the expenses incurred by firms in producing goods and services.

- When dealing with costs and output, we consider whether it is in the short-run or long-run period.

Short-run

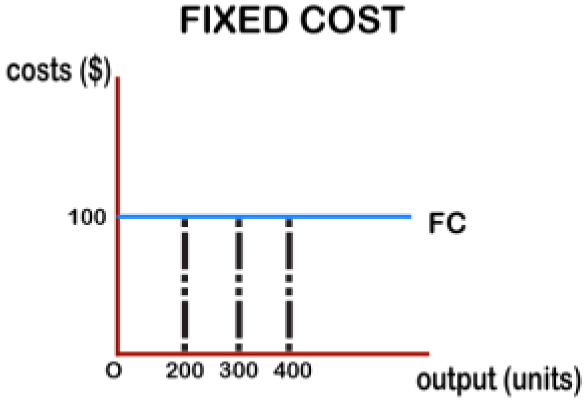
- In the short-run, it is only possible to change the variable factors of production.
- For example, the firm can increase labour and the raw materials.
- In the short-run, there is only one fixed factor of production.
- For example, the firm cannot expand its factory because there is no sufficient time to organize and construct a larger factory.

Short run Costs.

- The following are the costs incurred by firms in short run-period.

Fixed costs

- These are costs which do not vary with the level of output.
- Fixed costs are associated with the fixed factor of production.
- Some examples of fixed costs include interest on loan, rent and insurance
- Even if the output is zero units, fixed costs remain the same.



- Fixed Costs
- When the firm is producing zero units, the fixed costs will be at $100.
- Also, when the firm is producing 200 units, 300 units or 400 units, the fixed costs incurred in the short run remain at $100.

Variable costs

- Variable costs are costs which change in relation to output
- As production increases, variable costs increase.

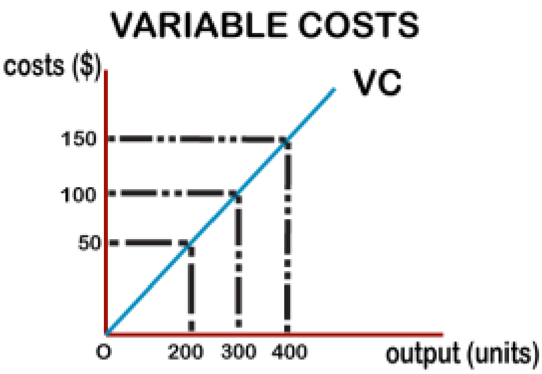


Fig 8.2: Variable Costs

- Fig 8.2 shows that the variable costs increase as output increase.

Total costs

- Total costs are all the total expenses incurred by the firm in the production of goods and services.
- Short run total costs is the sum of the total fixed and total variable costs.
- The formula for calculating the short run total costs is shown below

- When output is zero, the total costs are equal to total fixed costs.

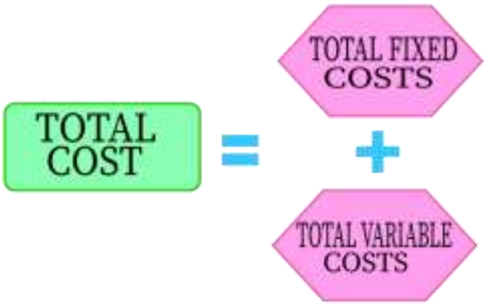


Fig 8.3: Total Costs

- From fig 8.3, if production is zero, the total cost is $100 because total costs will be equal to total fixed costs.
- When the output increases from 200 units to 400 units, the total costs increase from $100 to $200 because as variable costs increase the total cost also rises.

Average Fixed Cost

- Average fixed cost is the total fixed cost divided by the total output.
- The formula for calculating the average fixed cost is shown below.
- When the output is small, the average fixed cost is high because the fixed costs are spread over small units of output.
- An increase in output results in a fall in the average fixed costs because as output increases, the fixed costs are spread over a large number of units.
- Table 8.1 shows the total output, total fixed cost, total variable cost, total costs and average fixed cost for 3 months.

Month	Total output	Total Fixed costs	Total variable costs	Total Costs	Average Fixed cost
1	200units	$100	$50	$150	$0.5
2	300units	$100	$100	$200	$0.33
3	400units	$100	$150	$250	$0.25

Table 8.1: Average Fixed costs

- From Table 8.1, the average fixed cost is obtained by dividing the total fixed costs by output.
- From this information, we can draw up an average fixed cost curve

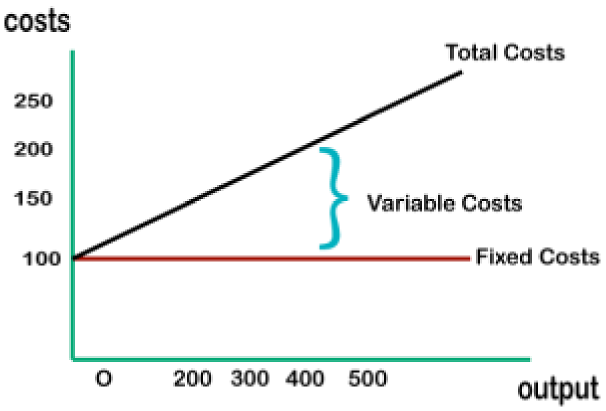


Fig 8.4: Average Fixed Costs

- From the graph, as the units produced increase from 200 units to 400 units, the average fixed cost decreases from $0.5 to $0.25 because the fixed costs are being spread over many units.
- From the graph, as output increases, the average fixed cost continuously falls.

Average variable cost.

- Average variable cost is the total variable costs divided by output.
- The formula for calculating average variable costs is shown below
- Average variable cost is U shaped.
- Table 8.2 shows the total output, total variable cost, and average variable cost for 3 months.

Month	Total output (units)	Total variable costs $	Average variable cost
1	200	100	0.5
2	300	140	0.46
3	400	170	0.43
4	500	200	0.40
5	600	250	0.43
6	700	350	0.50
7			

Table 8.2: Average variable costs

- From the table, the average variable cost is obtained after dividing the total variable cost by the total output.
- The information on the table can be used to draw up an average variable cost curve as shown in fig 8.5.

Fig 8.5: Average variable costs

- From the graph, average variable cost falls for a bit due to discounts experienced when a firm buys more raw materials.
- It is because as output produced increases, the purchasing of more raw materials causes the firm to experience discounts reducing the costs of production.
- As output increases, the firm may experience more wastages resulting in the purchasing of more raw materials which increases the costs of production.

- Also, the more labour which is hired results in an increase in costs through wages.
- As production increases from 500 units to 600 units, average variable cost increases from $0.4 to $0.42. This is due to increase in labour hired to increase production which requires to be paid through wages.

Average costs

- Average costs is the cost of producing per unit output.
- To find the average cost, we divide the total costs by total output.
- The formula for calculating the average costs is shown below:
- Also, the average cost can be calculated using the following formula.
- In the short run, the average costs fall due to benefits of large scale production.
- As output continuously increases, the average cost starts to rise.
- Table 8.3 shows the total output, total costs and average cost for 3 months

Month	Total output	Total Costs	Average cost
1	200units	$150	0.75
2	300units	$200	0.67
3	400units	$250	0.63

Table 8.3: Average cost

- From the table, the average cost is obtained after dividing the total cost by the total output or by adding the average fixed cost and the average variable cost.
- From the information on the table, we can draw up an average cost curve as shown in fig 8.6.

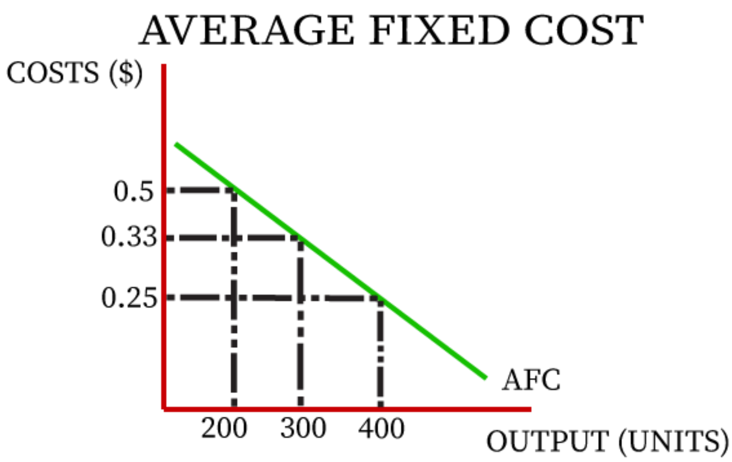


Fig 8.6: Average cost

- From the graph, the average cost falls as the firm produces more output because it will be enjoying economies of scale.
- As output increases beyond a certain level, the average cost starts to rise due to increased cost of production.

Long run

- The long run is a period of time when all the factors of production can be changed.
- It is a time period where all the factors of production are variable.
- In the long run, if a firm is operating at a larger scale it will:
  - increase the land used for production,
  - employ more capital in the business,
  - And hire more labour.

- The firm needs more income to cater for the costs.

Long run costs

Average cost

- The long run average cost curve is U-shaped.
- When a firm becomes large, it enjoys the benefits of large scale production such as:
  - Buying more quantities of raw materials at discounts,
  - Borrowing large amounts of money to finance the business because they have collateral security.
  - Acquiring advanced machinery and technology.
- The benefits of large scale production leads to decrease in average costs
- However, as production increases beyond a certain level, the average cost starts to rise as the firm encounters some production difficulties such as:
  - Increased cost of labour,
  - Managerial difficulties and
  - Financial problems.

Long run average cost curve

Fig 8.7: Long run average cost curve

- The average cost curve firstly slopes down due to the benefits of large scale production.
- As the firm increases its production from Q1 to Q2, the average costs decreases from P2 to P1.
- As output increases from Q2 to Q3, the average cost remains constant.
- As production rises from Q3 to Q4, the average cost increases due to disadvantages of operating at a large scale.

The relationship between short run and long run costs

- The relationship between the short run and long run costs can be best illustrated in fig 8.8.

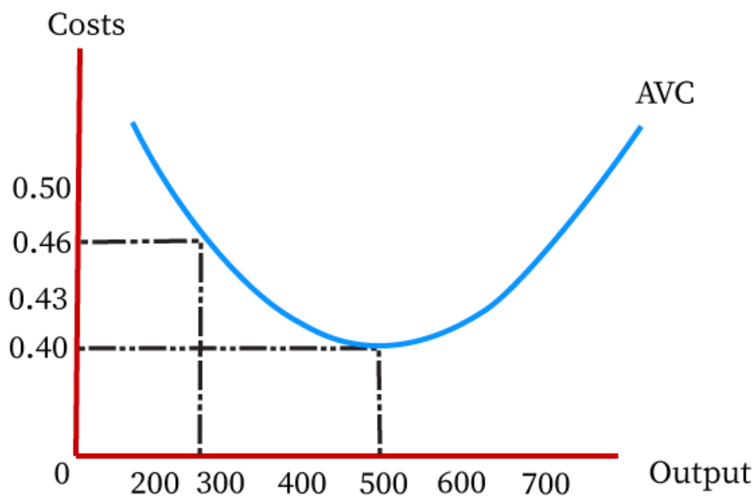


Fig 8.8: Relationship between short run and long run costs

- From the graph, we can see that as a firm starts its operation, it will be producing at short run average cost 1 (SRAC1).
- As the demand increases, the firm increases its production from Q1 to Q2 thereby the costs decrease to SRAC 2.
- The continuous increase in demand will result in the firm's short run average cost shifting to SRAC3 and SRAC 4
- This shows that the benefits of large scale production apply within a particular period of time.
- Beyond that period, average costs start to increase due to disadvantages of large scale production.
- Therefore, the long run average cost curve is made up of the short run average cost curves which will be shifting depending on market situation and growth of the firm.

Summary

- Costs are all the expenses incurred by firms in producing goods and services.
- The short term is the period in which at least one of the costs of factors of production is fixed.
- The long term refers to a time period when all the costs of factors of production change in response to the changes in the level of output.
- The costs that are incurred in the short run include:
    - Variable costs
    - Fixed costs
    - Total cost
    - Average fixed costs
    - Average variable costs
    - Average cost is the cost of producing per unit output.
- Formula for average costs is:

AVERAGE COST = AVERAGE FIXED COST + AVERAGE VARIABLE COST

- Formula for total costs is:

TOTAL COST = TOTAL FIXED COSTS + TOTAL VARIABLE COSTS

- Formula for average fixed costs is:

AVERAGE FIXED COSTS = TOTAL FIXED COSTS ÷ TOTAL OUTPUT

- Formula for average variable cost is:

- Fig 8.9 shows the relationship between short run and long run costs.

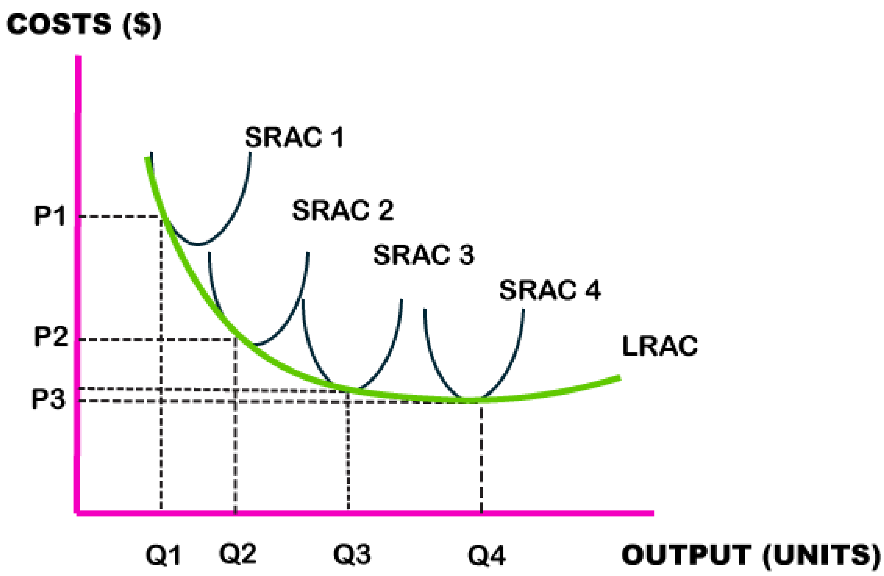


Fig 8.9: Relationship between short run and long run cost

Marginal costs (MC)

1. explain the terms : marginal costs (MC) , marginal revenue (MR) and average revenue (AR)
2. identify the profit maximising rule
3. explain the concept of economic efficiency
4. describe normal profit and abnormal profit

- In Economics, most decisions are concerned with the changes in the existing situation of the firm in terms of costs and revenue.
- Marginal cost is the extra cost caused by an increase in the production of one more unit to the existing production costs.
- Marginal cost is usually influenced by variable costs.

- When a firm increases its output, marginal cost usually fall at first as firm's variable resources are used more efficiently.
- Later due to fixed capacity, output then increases at a slower pace than the variable resources then the marginal cost starts to rise again.
- This makes the marginal cost curve to be a U-shaped.

Example 8.1 Marginal Cost

- Marginal cost can be obtained as total cost of new production level minus total cost of original production level.
- If the cost of producing 10 items is $150 and $155 to produce11 items, then the marginal cost is $5.
- Total cost of new production is $155.
- Total cost of original production level is $150.
- Then marginal cost is $5.

Formula for calculating marginal cost.

- Marginal cost=Change in Total CostChange in output level
- This formula can be denoted as follows:
- MC=ΔTCΔQ
- Taking the above example, one can calculate marginal cost as follows:
  MC=ΔTCΔQ
  MC= 155-1501
  MC=5
- The following table shows how to get marginal cost at different output levels as well as total costs of production.
- This table can also be used to draw the marginal cost curve.

OUTPUT	TOTAL COSTS	MARGINAL COST
1	200	200
2	300	100
3	350	50
4	500	150
5	800	300
6	1200	400

Table 8.1: Marginal Costs

  - Fig 8.1 shows a marginal cost curve.

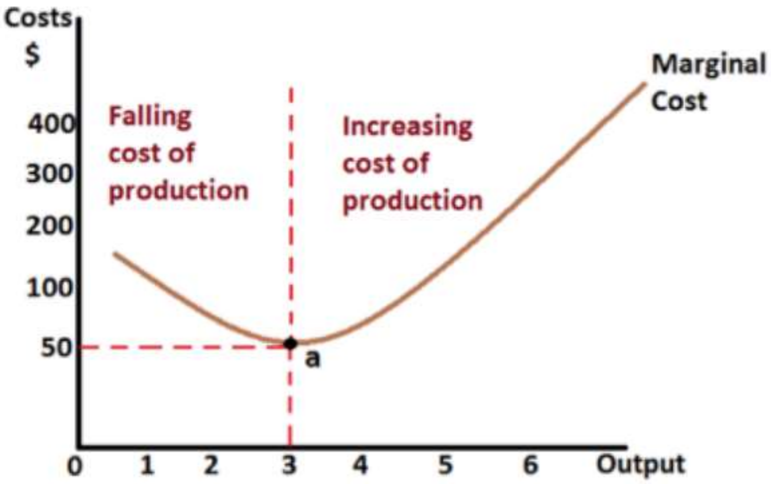


Fig 8.1: Marginal Cost Curve

- At first, marginal cost falls as output increases up to point **a**.
- From point **a**, marginal cost starts to rise as output increases.
- Thus, marginal cost has the same behaviour as economies and diseconomies of scale.

Revenue

- Revenue is the amount that the firm receives after selling its products.
- Revenue can either be total revenue, average revenue or marginal revenue.

Total revenue (TR)

- Total revenue is the amount of money earned by the firm after selling its products.
- Total revenue = quantity sold price per unit.
- Hence TR=Q ×P

Average revenue (AV)

- Average revenue is the amount earned after selling one unit of a product.
- It is revenue earned per unit sold.
- Average revenue can also be called the price of the product, if all the products are sold at the same price.
- Average Revenue= Total RevenueOutput Sold

Marginal revenue (MR)

- Marginal revenue is the additional revenue gained or received by the firm after selling an extra unit.
- It is the change in total revenue when one additional unit is sold.
- In a perfectly competitive market, marginal revenue is equal to the price of the product.
- Marginal revenue is useful in the economic theory because it is used by the firm to determine their profit level.
- The formula for calculating marginal revenue is as follows:
- Marginal Revenue= Change in total Revenuechange in units sold
- MR=ΔTRΔQ

Example 8.2: Marginal Revenue

- A firm obtained $2 000 after selling 4 000 lunch tins. Then, they obtained $2 100 after selling 4 050 lunch tins. Calculate the marginal revenue.
- MR=ΔTRΔQ
  MR=2100-20004050-4000
  MR=10050
  MR=2

Profit maximisation

- Profit maximisation is also called the marginal revenue and marginal cost rule.
- This means that marginal revenue and marginal cost can be used to obtain profit maximisation point at a given output level.
- Marginal revenue minus marginal cost gives the extra profit made from producing one extra unit of output.
- If the firm makes an extra profit from producing the extra unit, it will continue to carry on expanding the production process.
- However, the firm will cease production if the production of extra unit brings a loss.
- Thus, the economic theory states that firms maximise profits when marginal revenue is equal to marginal cost.
- The points where marginal cost is equal to marginal revenue can be shown using cost and revenue curves.
- Cost and revenue curves are drawn on the assumption that the firm sells its products at the same price.
- Fig 8.2 shows how a firm maximises profit.

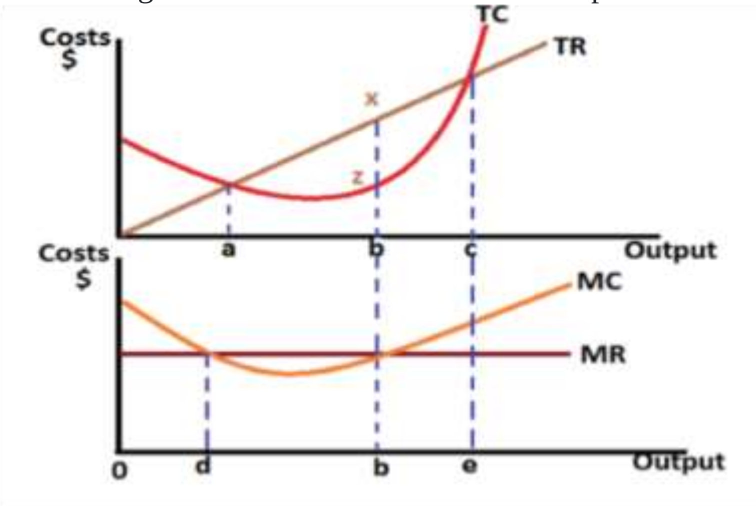


Fig 8.2: Profit Maximisation Point

- The marginal revenue curve is horizontal which shows that all units of output are sold at the same price.
- On the total cost and total revenue curves, distance from **0** to **a** shows that the firm is making a loss because the total cost curve is higher than the total revenue curve.
- Between point **a** and **c**, the firm is making a profit since total revenue is more than total cost.
- However, the profit is maximised at point **b** where there is the greatest distance between total revenue and total cost.
- If the firm produces more than **c** output, it will start making loss again.
- Points **a** and **c** show the break-even point where the firm is making neither loss nor profit.
- If the firm produces an extra unit which is more than **b**, the firm will make a loss because marginal cost of producing extra unit will be more than revenue received after selling it.
- When the firm produces below output **b**, it is making profit from the sale of extra unit.

Economic efficiency

- Efficiency deals with how the resources are used well to resolve the economic questions of how, what and for whom the production should take place.
- There are two main types of efficiency used in economics namely productive and allocative efficiency.

- Economic efficiency implies that all resources of the firm are allocated on the best possible way to minimize waste and inefficiency.
- It is also concerned with the optimal production and distribution of scarce resources by firm or within an industry.

Productive efficiency

- Productive efficiency can be achieved by the firm if production takes place at the least average cost.
- A firm is also said to be productive efficient if it produces within the boundaries of the average cost curve.
- This is the point where marginal cost and average cost curves are at their minimum.
- This is shown in fig 8.3

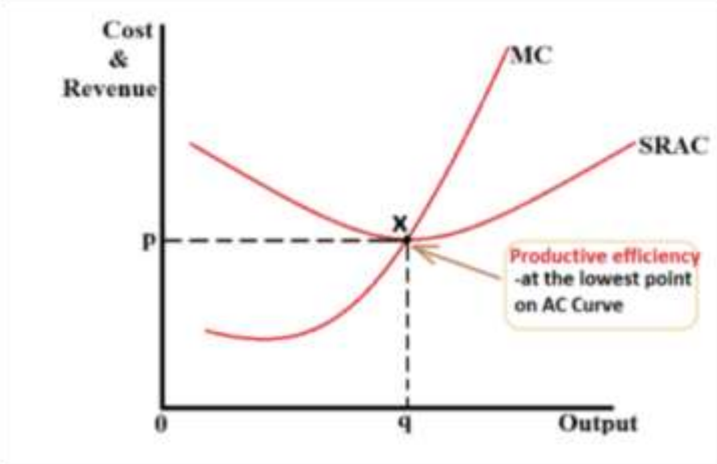


Fig 8.3: Productive efficiency

- From Fig 8.3, a firm is productive efficient when producing at point **x** where average costs are at minimum.
- The price of the product **(P)** is able to cover the average costs so that the firm will remain in business.
- In the economy as a whole, there is productive efficiency when production is taking place at any point along its production possibility curve (PPC).
- It is impossible to produce more of one good without reducing the quantity of another.
- This can be explained using the production possibility frontier curve.

Allocative efficiency

- Allocative efficiency is concerned with whether the resources are allocated to those products demanded by consumers.
- It is when the economy best allocates the available resources to maximise the economic welfare of the citizens.
- This occurs when there is optimal distribution of goods and services, taking into consideration the preference of consumers.
- Allocative efficiency is achieved when a firm produces goods and services which are needed by the consumers.
- Allocative efficiency of the firm can be measured using output produced by the firm.
- It is obtained at output level where the price of the product is equal to marginal cost of production (P=MC).
- This means that the price of the product that the consumers are willing to pay is equal to the satisfaction derived by the consumers after consuming the product (marginal utility).
- Therefore allocative efficiency is achieved when marginal utility of the product is equal to the marginal cost (MU=MC).

Profit

- Profit is the reward to the entrepreneur for taking risks.
- Profit is the difference between revenue earned by the firm and total cost incurred during the production process.
- Firms maximise profits when there is the greatest difference between firm's revenue and firm's total cost.
- At the low level of production, the firm will make a loss because revenue earned will be less than total cost incurred.
- The situation whereby a firm makes neither loss nor profit is called the break even because revenue will be equal to total cost.
- There are two types of profit, these are normal profit and abnormal profit.

Normal profit

- Normal profit is the minimum amount of profit which is necessary to keep the firm in the industry.
- This is the minimum reward necessary to keep the entrepreneur in business.
- It is earned when average revenue is equal to average cost (AR=AC).
- Hence, normal profit is made when price is equal to average costs.
- Normal profit is the opportunity cost of capital as it only keeps the firm in business without extra incentive obtained.
- The profit which could be earned elsewhere with the same capital is the opportunity cost of capital.
- The amount of normal profit varies from industry to industry depending on the risks involved in the type of business.

Abnormal profit

- This can also be called supernormal profit.
- Abnormal profits are profits which are above normal profits.
- Abnormal profits are earned when average revenue is greater than average cost.
- Abnormal profit attracts new firms into the market because there is incentive for other producers to enter.

TYPES OF MARKETS

1. Describe the features of each type of market structure
2. Explain the advantages and disadvantages of each market structure.

TYPES OF MARKETS

What is a market?

- A market is where buyers and sellers meet or interact for the purpose of trading goods and services.
- A market is made up of buyers and sellers.
- In markets, prices are determined, information is shared and exchange of goods and services takes place.

Market structures

- A market structure describes how each firm or industry operates.
- The features of market structures include:
  - Supply side of the market
  - Number of firms in the market

    - Product offered in the market
    - Entry and exit of firms
    - Competition among firms
    - Prices of products
    - Output produced

Types of market structures include:

- Perfect competition
- Monopoly
- Monopolistic competition

PERFECT COMPETITION

- Perfect competition occurs in a market where there are many small firms and many buyers.
- Suppliers compete to supply homogeneous products.
- Buyers choose the products they want from any of the sellers.
- Prices are set through the interaction of demand and supply.

Characteristics

- There are many small firms and many buyers in the market.
    - Buyers influence the market demand and sellers influence market supply.
- Firms in perfect competition supply homogeneous products.
- There is perfect flow of information to buyers and sellers.
    - Buyers are assumed to have knowledge of every change in the market.
    - Also sellers are aware of the behaviour of the buyers in the market.
    - Buyers can move freely from one seller to another since the products offered are identical.
- There are no barriers to entry and exit of firms in the market.
    - Sellers are free to join the market or to leave the market without any barriers such as policies.
- Products offered are not advertised in the market.
- Firms in perfect competition earn abnormal profits in the short run and normal profits in the long run.
- The demand curve of a perfectly competitive market is perfectly elastic, meaning it is horizontal to the right.
    - Firms compete on non-pricing aspects like after sales service and product designs.
- Firms are price takers
    - In perfect competition, the firms or buyers have no power to influence the market price.
    - Market price is determined by the interaction of demand and supply curves.
    - Buyers can demand infinite goods at the given prices.
    - In order for the firm to increase profits, they must increase output.
    - Firms stick to the given price because if they decide to increase the price, there will be no sales.
    - If the other firms decide to lower their prices, they will incur losses.

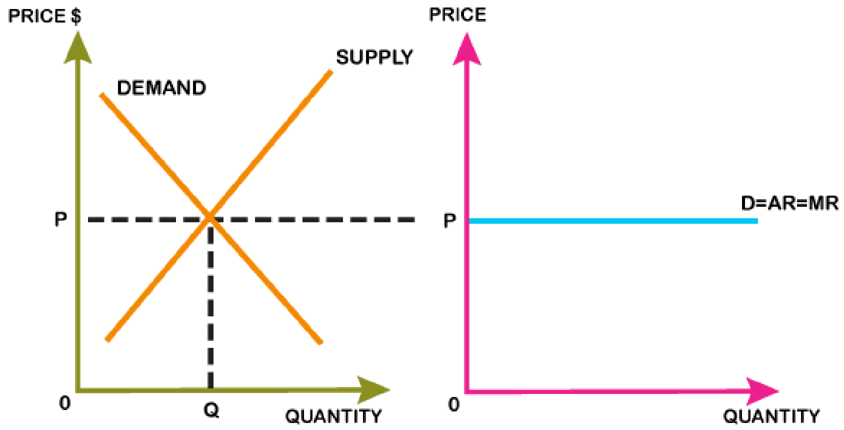


Fig 9.1: Firms are price takers

- In fig 9.1, the equilibrium price is P.
- Firms that charge price above will not have sales.
- Firms that charge price lower than P will incur losses.

Advantages of a perfectly competitive market

- There is effective allocation of resources
  - Firms produce at a point where marginal cost is equal to price (MC=P) which means that the price of the product can cover the extra costs of producing that product.
  - Economic resources are used to produce goods and services of the highest value which leads to maximisation of social welfare.
- Firms enjoy efficiency in production
  - Efficiency is the ability of firms to produce goods and services at a minimum point of the average cost.
- Non price competition costs are reduced.
  - Firms do not need to allocate resources to advertising and sales promotions.
- Freedom to choose on goods and services
  - Individuals are free to choose the goods and services they want from different sellers.
  - Firms are free to choose the type and quality of goods and services to produce.
- There is free flow of information in the market.
  - All information about the market is spread out evenly to both the customers and firms.
- Consumers enjoy low prices since there are many sellers in the market.

Disadvantages

- Firms do not have enough resources and incentives to conduct research about the product they offer.
- There is limited consumer choice
  - Firms do not offer variety to consumers due to provision of homogenous products.
- There is existence of social costs arising from the activities of firms.
  - Firms can cause environmental pollution to the society.
- Freedom of entry and exit of firms if the market conditions change causes wastage of resources.
- Firms cannot enjoy the benefits of large scale production.

- Inability of firms to produce large volumes of output restrict them from having lower cost production.

MONOPOLY MARKET

- Monopoly exists when there is a single supplier and many buyers of a product in the market.
- Monopoly occurs when there is one firm that dominates the market.
- The firm makes the industry.
- The firm produces one range of product.

Characteristics

- There is a single seller of a product in the market.
- There are barriers to entry and exit
    - It is difficult for other firms to enter the market because of the conditions in the market.
    - The main barriers to enter the market are capital to start, competition with the existing firms and government policies.
- There is price discrimination.
    - A monopoly firm charges different prices for the same product to different consumers.
    - If the market is elastic, the monopoly charges low price for it to sell more products, thereby increasing revenue.
    - A monopoly also charges high prices to the market with inelastic demand.
- The firm is the price maker.
    - The firm decides on the price to be charged for the product being sold.
    - It sets the price which enables it to maximise revenue.
- A monopoly aims at maximising profits.
    - A monopoly firm normally sets price above the equilibrium price.
    - Due to lack of competition, a monopoly firm earns abnormal profits both in the long run and short run.
- There is lack of substitutes
    - The firm produces goods and services which have no close substitutes.
    - A monopoly offers unique products.
- In a monopoly, there is no competition.

Advantages of monopoly

- A monopoly market increases government revenue through taxation.
- A monopoly market enjoys the benefits of large production
    - This benefit is passed to the consumers by the firm through lower prices.
- Price discrimination used by monopolies caters for individual differences.
- There is efficiency in production due to use of advanced technology.
- There is stability of prices since there is no competition in the market.
- Monopoly firms carry research and development on their products because they have sufficient funds to do so.

Disadvantages of monopoly

- There is no consumer sovereignty.
    - Consumers are exploited in terms of quantity and pricing of goods and services.
- Low quality goods and services are produced due to lack of competition.
- There is no variety of products since there is only one seller in the market.
- There is poor customer service by the monopolies.

MONOPOLISTIC COMPETITION

- Monopolistic competition is a market structure where there is a large number of small firms selling similar products in the market.

- It contains elements of monopoly and perfect competition.
- It is also known as the competitive market.

Characteristics

- There is a large number of small firms and many buyers in the market.
- There are no barriers to entry or exit.
  - Firms are free to enter the market if they have the requirements.
  - Also, the existing firms are free to leave the market if the conditions of the market are not good for them.
- Products are differentiated in monopolistic competition so that consumers are able to distinguish the products. For example, surf, OMO and sunlight washing powder are differentiated products.
  - Products are differentiated by shape, size, and colour.
  - They can also be differentiated through packaging and promotional techniques.
  - Firms are price makers.
  - The firms are price makers and they have a downward sloping demand curve.
  - Firms charge different prices in relation to the change in demand.
  - A firm can charge lower or higher prices as compared to its competitors.
- There is imperfect flow of information in the market.
  - Sellers and buyers have no full knowledge about the conditions of the market.
- Firms under monopolistic competition aim at maximising profit.
- Firms advertise their products in order to fight competition from their rivals.
  - As firms offer similar or slightly different products, they may need to advertise their products to let customers know the difference between the products.

Advantages of monopolistic competition.

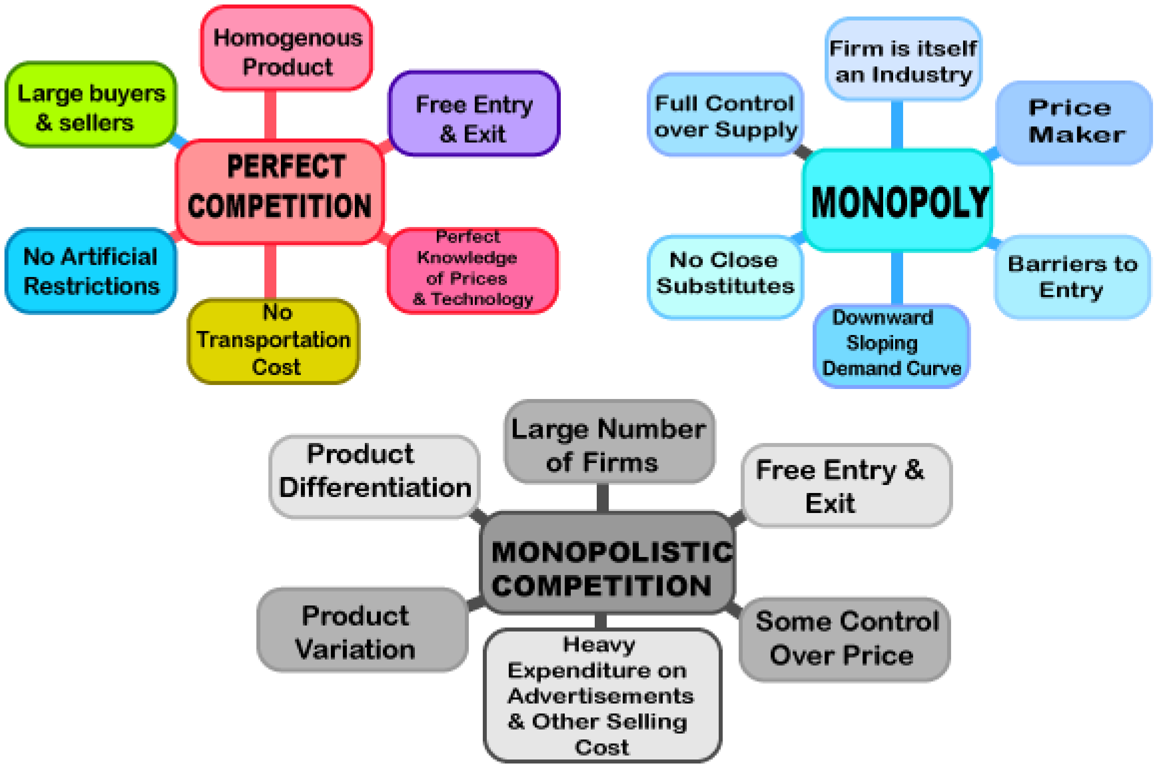
- A wide variety of goods and services is offered.
  - Differentiation of products creates diversity, choice and increase utility to consumers.
- Markets are relatively contestable because there are no significant barriers to entry and exit.
- Firms advertise their products through various channels of communication which can increase their sales.
  - They make customers more aware of the features and different types of products in the market.
  - They also enable customers to make informed decisions by comparing the features of different products.
- There is high competition which can lead to high quality of goods and services to be produced.

Disadvantages of monopolistic competition.

- Due to differentiated products, firms can charge more than fair prices to the customers for just an extra feature of the product.
- Firms only concentrate on irrelevant features of the product for them to differentiate it from other products while not focusing on the quality of the product.
- Firms incur additional costs on promoting and advertising their products.
  - The burden is then passed on to the consumers by charging high prices.
- Firms can charge high prices on certain products.
  - Firms with market power add huge mark-up on the marginal cost.

Key points on market structures

Fig



9.2:
Market Structures

Summary

- The main market structure are perfect competition, monopolistic competition and monopoly.
- A market structures describes how each firm or industry operates.
- In analysing a market structure, we look at the following:
    - Supply side of the market
    - Number of firms in the market
    - Product offered in the market
    - Entry and exit of firms
    - Competition among firms
    - Prices of products
    - Output produced
- Perfect competition occurs in a market where there are many small firms and many buyers trading in homogenous products.
- Monopoly exists when there is a single supplier and many buyers of a product in the market.
- The main characteristics of a monopoly are:
    - There is a single seller of a product in the market.
    - There are barriers to entry and exit.
    - There is price discrimination.
    - The firm is the price maker.
    - A monopoly aims at maximizing profits.
    - There is lack of substitutes
    - In a monopoly there is no competition.
- Monopolistic competition is a market structure where there is a large number of small firms selling similar products in the market.

- The major characteristics of monopolistic competition include:
    - There is a large number of small firms,
    - There are many buyers in the market,
    - There are no barriers to entry or exit,
    - Products are differentiated,
    - Firms are price makers,
    - Information asymmetry exists,
    - Firms aim at maximising profit,
    - Firms advertise their products.

Short run and long run period

1. describe short run equilibrium and long run equilibrium for each market structure
2. identify the profits maximising output
3. compare features of different market structures

- Short run is a period of time within which firms can only alter level of output by increasing or decreasing the amount of variable factors like raw materials and labour while fixed factors of production remain unchanged such as machinery and capital equipment.
- It is a period where at least one factor of production is fixed.
- In the short run, neither existing firms can leave the industry nor can new firms enter the industry.
- All firms aim to maximise profits in the short run.

Long run period

- This is a period where all the factors used in production are variable.
- It means that the firm can easily alter its production by increasing or decreasing the output produced.
- Firms are able to adjust all costs in the long run period.
- In the long run period, there are no fixed costs of production.
- All firms earn normal profits in the long run because it is long enough for new firms to enter the market and erode the supernormal profits.

Firm’s equilibrium condition

- A firm is said to be in equilibrium when it is able to satisfy consumer needs with the existing level of output.
- Also, a firm is in equilibrium when it has no advantage if it increases or decreases its output.
- All firms in the market are willing to produce the highest level of output which brings the greatest profit or smallest level of loss.
- Hence, a firm is in equilibrium when producing output which brings the maximum net return.

Conditions of the equilibrium of a firm

- All firms are said to be in equilibrium if they are able to satisfy the following conditions:
    - When the profit is at its maximum.
    - When marginal cost (MC) is equal to marginal revenue (MR).
    - The marginal cost curve must cut marginal revenue curve from below.

Short run equilibrium of a perfectly competitive market

- The assumption is that all firms face similar cost conditions.
- These costs include average and marginal costs, and their curves are of the similar shape and level.
- This would be so if all firms have equal efficiency and use homogeneous factors of production.
- These factors of production should be available to all the firms in the industry and at the same price.
- Firms in perfectly competitive market are price takers, they accept the prevailing price as determined by demand and supply.
- As a result, the demand curve of a perfectly competitive market is a horizontal straight line at the level of given price.
- Firms in perfectly competitive market increase their revenue by selling additional output at the same price.
- Hence, the marginal revenue curve is the same as average revenue curve which is the price of the product.
- In order to determine the equilibrium point, the firm will compare marginal cost with marginal revenue.
- A firm will be in equilibrium at the level of output where marginal cost is equals to marginal revenue.
- And also marginal cost curve cuts the marginal revenue from below.
- At this level, the firm will be maximising its profit.
- Under perfect competition, the firm will equalise marginal cost with price to attain the equilibrium output.
- Fig 9.1 shows the equilibrium output of a perfectly competitive firm under short run conditions.

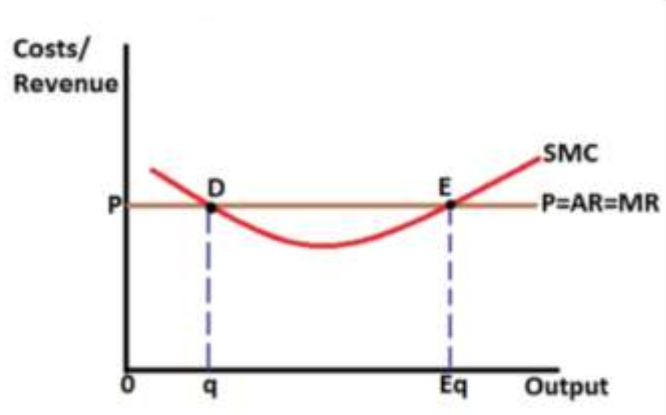


Fig 9.1: Equilibrium condition under perfect competition

- On Fig 9.1, **P** is the prevailing price in the market.
- The line **P=AR=MR** is the demand curve.

- The marginal cost curve cuts average and marginal revenue curves at point **D** and point **E**.
- The firm will be in equilibrium at point **E** at output **Eq** since marginal cost is equal to marginal revenue.
- Hence, a firm's equilibrium under perfect competition is when **MC=MR= Price**.
- The above condition does not show whether a firm is making profit or loss until the average cost curve is introduced on the diagram.
- In the short run, firms under perfect competition earn abnormal profits or losses.

Abnormal profits under perfect competition in the short run

- Profit per unit is the difference between average revenue and average cost.
- Abnormal profit is profit which is above normal profit.
- Fig 9.2 shows abnormal profit.

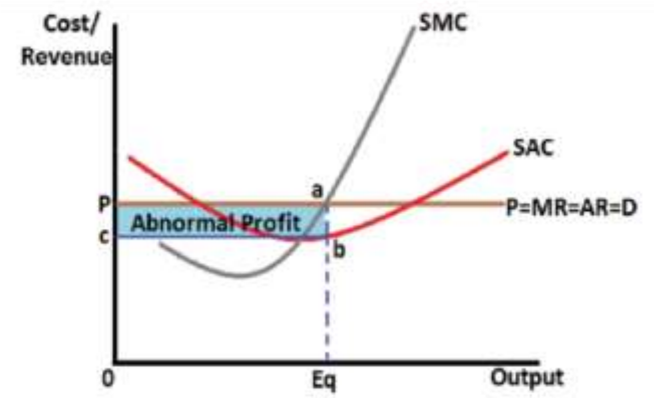


Fig 9.2: Abnormal Profit

- At the equilibrium output **Eq**, average revenue is equal to **Eqa** and average cost is equal to **Eqb**.
- Hence, the profit per unit of output is ab which is the difference between **Eqa** and **Eqb**.
- The total profit will be equal to **abcp** which indicates abnormal profit.
- Abnormal profit is obtained when average revenue is greater than average cost.

Entrance of new firms into the market

- All the firms in the industry earn abnormal profits under short run conditions.
- The industry will not be in equilibrium because there will be a tendency for new firms to enter the industry.
- These firms will be attracted by abnormal profits.
- These new firms drive away the supernormal profits because competition increases and prices will decrease because supply will be more than demand.
- The entrance of new firms can cause the existing firms to earn losses.
- Fig 9.3 shows losses incurred by the firms in the short-run period.

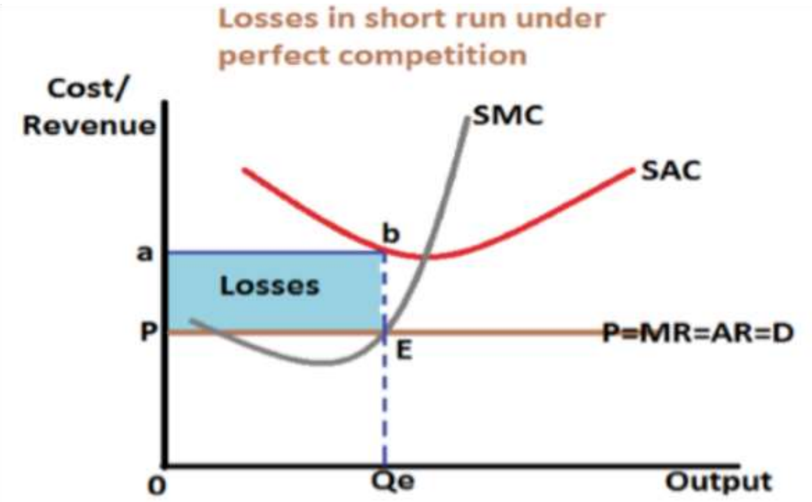


Fig 9.3: Loss under perfect competition

- Now the price of a product is less than the short run average costs throughout, thus the firm cannot be able to cover the average costs of production.
- Price line lies below the average cost curve at all output levels.
- The firm will be at equilibrium at point **E** at which marginal cost is equal to marginal revenue.
- The firm would produce at **Qe** but at a loss since **AR** is less than AC.
- Total loss would be a shaded area **abPE** which is the minimum loss that a firm can make at a given price **P**.
- All firms will be making losses since they are operating under the same conditions.
- As a result, the loss making firms have the tendency to leave the industry in order for them to make normal profits somewhere.
- Then, the remaining firms in the industry will start to make normal profits.
- This can only happen in the long run period.

Long run equilibrium for a firm under perfect competition

- All firms in a perfectly competitive market earn only normal profit.
- Exit of firms from the industry eliminates economic losses.

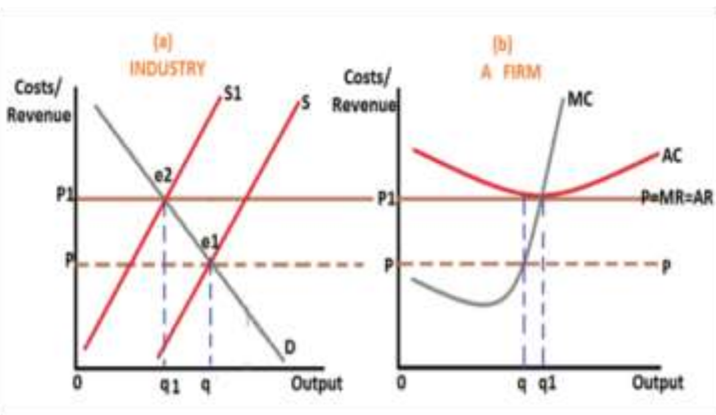


Fig 9.4: Normal Profit

- Exit of firms will cause the supply curve to shift to the left because firms will offer less into the market.

- As the supply curve continues to shift to the left, the price rises and covers the distance between AC and AR.
- This causes the firms to earn normal profits in the market.

Equilibrium of a firm under monopoly market

  - The equilibrium condition of a firm under monopoly market is the same both in the **long run** and **short run**.
  - A monopoly market always earns abnormal profits both in short run and long run because there are barriers to entry in the market.
  - A monopoly firm sets price which is greater than marginal costs of production.
  - Profit maximisation occurs when marginal revenue is equal to marginal cost.
  - Fig 9.5 shows how a monopoly firm is able to make abnormal profits.

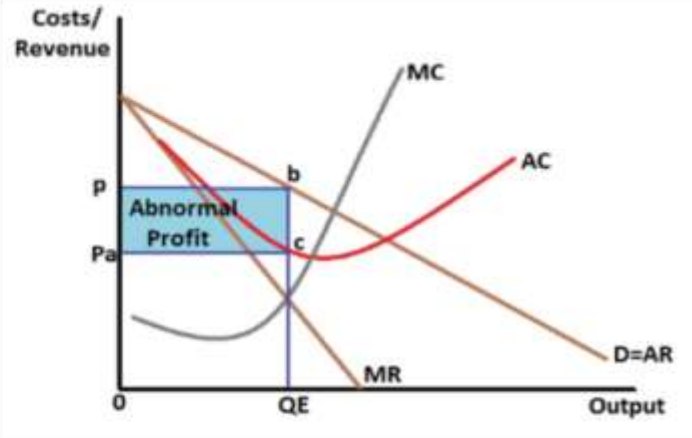


Fig 9.5: Abnormal Profits

- Abnormal profit is obtained because the average revenue of a firm is greater than average costs of production.
- This is illustrated by the distance between point **b** and point **c (AR-AC)**.
- Therefore, the equilibrium price is **p** and the equilibrium quantity is **QE**.
- The equilibrium of this monopoly firm is at point b.
- Fig 9.5 shows how a monopoly firm is able to make abnormal profits because the price of the product **(AR)** is greater than **AC**.
- Abnormal profits is denoted by the shaded area PaPbc.
- Usually abnormal profits attract new firms to enter the market but there are some barriers to entry such as start-up costs.
- Barriers to entry enable the monopoly firm to keep abnormal profits both in the long run and short run.
- This shows that the firm is allocative inefficient because the price is greater than marginal cost **(MC)**.
- Also, a monopoly firm producing at **QE** is productive inefficient because it is not producing at the lowest of average cost curve.

Equilibrium of a monopolistic competition

- Firms in the monopolistic competition sell differentiated products from one another hence they are faced with a downward sloping demand curve.

- In this case, the firms are price makers so they have the power to increase or decrease price without losing their customers.
- A monopolistic competitive firm will maximise profits when marginal revenue is equal to marginal cost.

Short run equilibrium of a monopolistic competition

- The firms in monopolistic competition are price makers and will behave like monopolies in the short run.
- The profit maximising price will be determined basing on where the profit maximising quantity amount falls on the average revenue curve.
- Monopolistic competition firms earn abnormal profits and losses in the short run.
- Fig 9.6 shows a firm under monopolistic competition which earns abnormal profits in the short run.

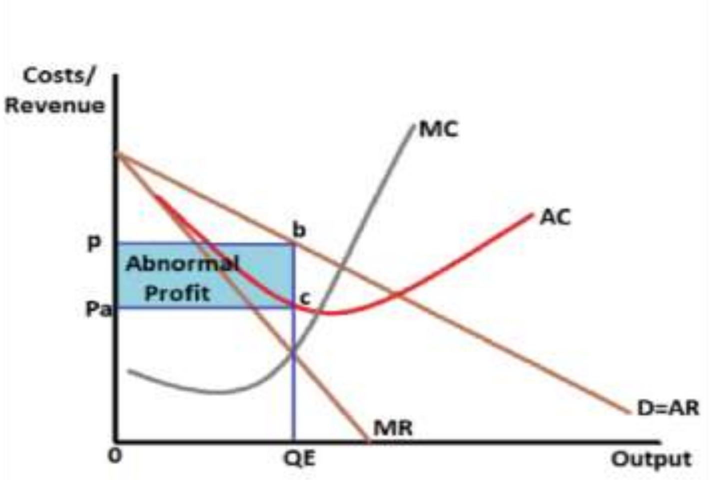


Fig 9.6: Abnormal Profits

- In the short run, the diagram of a monopolistic competition firm is the same as that of a monopoly.
- The firm maximises profit where **MR=MC**.
- At the profit maximisation point, the equilibrium output is **QE** and the equilibrium price is p leading to supernormal profit.
- Given that price **(AR)** is above **AC** the difference between point b and point c shows super normal profits.
- On fig 9.6, the abnormal profit is represented by the shaded area **PbcPa**.
- Supernormal profits earned by the firms in monopolistic competition attract new firms into the market.
- As new firms enter the market, demand for the existing firms' products is reduced and becomes more elastic.
- Also, the demand curve will shift to the left.
- As the demand curve shifts to the left, prices go down and eventually all the abnormal profits are eroded away.
- This causes firms to incur losses.
- Losses are incurred when average cost is greater than the market price.
- Fig 9.7 shows conditions of a monopolistic competition firm which earns losses in the short run.

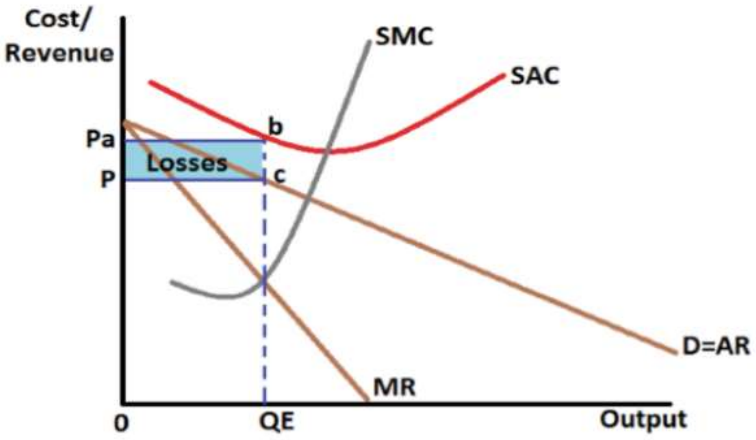


Fig 9.7: Losses

- From the diagram, short run average cost curve **(SAC)** is above the average revenue curve hence a firm will make a loss.
- The shaded area **Papcb** on the diagram represents a loss incurred by the firm.

Long run equilibrium of the firm under monopolistic competition

- All firms in a monopolistic competition will earn normal profits in the long run.
- These normal profits are caused by the new firms which enter the market because they were attracted by supernormal profits.
- New firms will share the abnormal profits with existing firms which results in losses and normal profits.
- If the existing firms incur losses in the long run, some firms will leave the industry.
- If other firms leave the industry, the market share of remaining firms will increase
- A firm in a monopolistic competition is in equilibrium position when it produces a quantity lower than its full capacity level in the long run.
- Fig 9.8 shows how normal profits are earned in the long run under monopolistic competition.

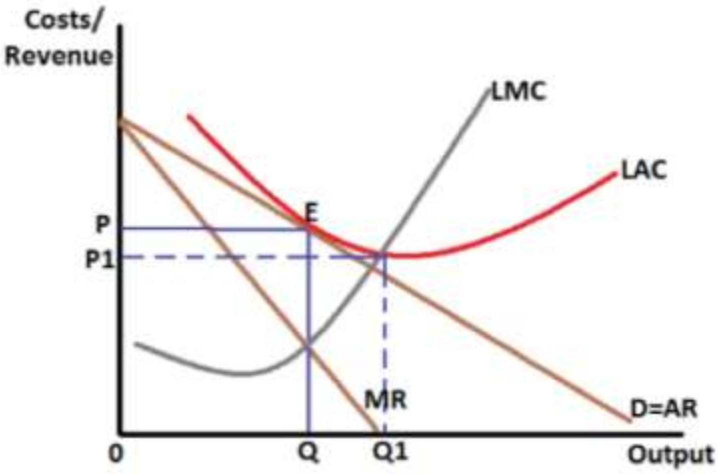


Fig 9.8: Abnormal Profits

- On fig 9.8, AR curve touches the LAC curve at point **E**.

- Corresponding to this point, the equilibrium quantity is **Q** and the price is **P**.
- Equilibrium position is when MR=LMC as a result all the firms earn normal profits only.
- In the long run, a firm can expand its output from **Q** to **Q1** and this move can reduce the average cost of production.
- The firm cannot do so because it would reduce the average cost more than average revenue.

Other price and output determinants

Costs

- Costs incurred by the firm influence the output and price of the product.
- The firm can set price less than that of competitors even if the costs of production are high.
- By selling at a lower price, it increases sales thereby increasing the output to suit the demand of the product.
- This strategy of pricing is only effective in the short run.
- For a product to be profitable, it must attain a break-even point.

Competition

- The firm should match its price with that of its competitors.
- Also, the firm assesses how its competitors respond to price changes and suggest whether to increase its output or to decrease.

Government regulation

- The government can influence on the price and output of firms.

Business organisations

1. Describe sole trader
2. Outline advantages of sole trader
3. Describe a partnership
4. State the features of partnership
5. Outline advantages and disadvantages of a partnership.

Business organisation

- An organisation is a group of people who come together for a particular purpose.
- Business organisations aim to satisfy the needs of people by providing goods and services.
- In a profit making organisation, people come together in order to earn an income or revenue.
- The main objective of profit making organisations is to maximize profits.
- However, there are some non-profit making organisations that are formed to promote public welfare.
- Non-profit making organisations ensure that members bring in enough capital to cover the costs they will incur and to pay their employees.
- Non-profit making organisations plough back into the business the money that is left after all their expenses.
- Business organisations are classified under private and public sectors.
- The public sector is made up of all firms run and controlled by the government.
- The private sector is composed of firms owned and run by individuals and groups to earn profit.

- Businesses in the private sector are further classified basing on legal formalities and ownership.
- A business can either be incorporated or unincorporated.

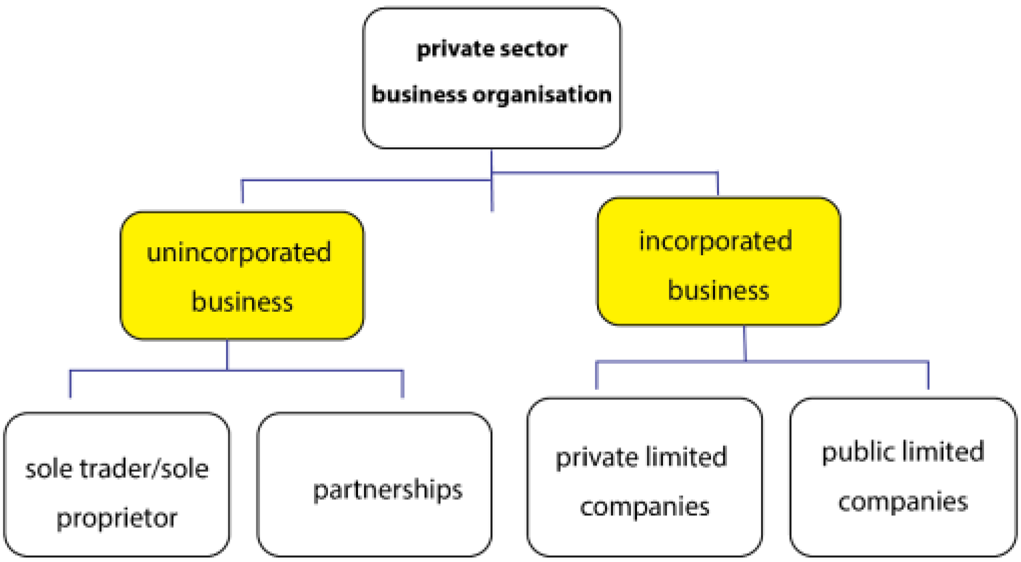
Unincorporated businesses

- These are businesses having no separate legal entities.
- Separate legal entity means the business and its owners are separated in representation.
- In unincorporated businesses, owners may be sued for breaking the law in their business activities.
- The firms are usually small and owned by one person or few individuals.
- Unincorporated businesses include partnerships and sole traders.

Incorporated businesses

- These are businesses having separate legal entities.
- In incorporated businesses, if the company breaks the law, it represents itself without the involvement of its owners.
- The diagram below summarises the private sector.

Fig



8.1 Privat
e sector organizations.

Sole trader

- This is a business owned and controlled by one person.
- The sole trader is also called a sole proprietor.
- The sole trader can hire other workers.
- Sole traders are found in different types of production sectors.
- In the primary production sector, we have farmers and in the secondary production sector we have builders.
- Owners of restaurants and hairdressers are examples of sole traders found in the tertiary sector.

Advantages

- Sole proprietor business is usually cheap to start up because there are no legal formalities required.

- The sole trader's business requires little capital to set up.
- The sole trader keeps all the profit after paying tax.
- The sole trader has total control over the business hence decision making is quick.
- The sole trader's business is easy to form and dissolve.
- There are few regulations that affect the sole trader business and its operations.
- The owner is free to choose his/her own working hours.
- Sole traders can be able to offer personal services to customers thereby creating customer loyalty.
- The sole trader enjoys secrecy because the financial accounts of his/her business are not published.

Disadvantages

- The sole trader faces unlimited liability.
- Unlimited liability means that if a business fails to pay its debts, the owner uses his/her own belongings to set off those debts.
- There is no separate legal entity.
- They do not have the benefits that are enjoyed by large companies such as bulky buying, loans and trade discounts
- The business lacks continuity if the owner dies or retires.
- For some businesses, like hairdressing, if the owner is sick business activity will not take place hence income is lost.
- The owner has full responsibility of managing the business hence he/she is likely to work for very long hours.
- The sole trader may not be able to employ specialised personnel like accountants, lawyers or economists since they require high wages.
- The sole trader will then be forced to do all the work alone thus compromising on quality.
- A sole trader is likely to make poor decisions because of lack of consultation.

Partnership

- A partnership is a business owned by two to twenty individuals who pull in their resources together, sharing profits and liabilities.
- A partnership agreement clarifies the relationship between the partners and their duties.
- The share of profits and losses is usually determined by partner's percentage of share ownership or terms of the partnership.
- Partner's ownership percentage is not related to partner's liability.
- When forming a partnership, individuals may draw up a partnership deed which states how the partnership operates.
- The partnership deed states the rights of each partner.
- If there is no partnership deed, they will use the partnership Act.
- The partnership Act states that if there is no partnership deed, the profits and liabilities of the business are to be shared equally among the partners when it dissolves.

Partnership Deed

This is a legal document that covers:

- How much capital each partner is supposed to contribute,
- How the partners are going to share profits and losses,
- How the business will be dissolved,
- How much control each partner has in the partnership,
- The rules of taking new partners.

Advantages

- Partners help each other in raising start-up capital.

- It is flexible – A partnership is easier to form and manage.
- The responsibility of running the business is shared among the partners.
- Partners are involved in decision making – partners consult each other.
- The absence of one partner due to social problems or holiday does not affect business operations.
- Loss is shared among partners.

Disadvantages of Partnership

- Slow decision making due to consultations.
- General partners have unlimited liability for the debts of the firm.
- Death, disagreements and mental illness of one partner can lead to dissolution of partnership.
- Sharing of profits with lazy partners may discourage some who are honest, resourceful and hardworking.
- Less freedom with regards to the management of the business.
- The capital raised may not be adequate to expand business activities.

Types of partnerships

General Partnership

- A general partnership is an arrangement where the partners have an unlimited liability.
- This is a partnership in which there are only general partners.
- General partners are those who take part in the day-to-day running of the business.
- All the partners are responsible for all liabilities or financial debts.
- They are all responsible for the management of the business.
- In a general partnership, any partner can make decisions without the permission or knowledge of other partners.

Advantages

- Partners share management responsibilities and this provides time for business development.
- There is fast decision making because there is no need for wide consultations between or among partners.

Disadvantages

- Partners are jointly liable for the business' legal obligation hence an error by one partner costs everyone.
- There may be poor resource utilization. The partners may use the resources in a wasteful way.
- Poor decisions may be made since all partners have the right to make decision without consulting each other.
- There is unlimited liability.

Limited partnership

- A limited partnership has at least one general partner and one or more limited partners.
- A limited partner has a share of ownership but does not take part in the day-to-day running of a partnership.
- Limited partners are also called sleeping partners.
- The general partner is responsible for the daily operations of the business.
- The liabilities or debts that are incurred in a limited partnership are liable to the general partner.
- The limited partners do not take part in the management or decision making process of the partnership.

Advantages

- A limited partner has limited liability hence a debt that is incurred is only limited to the partner’s contribution and business assets but not to personal property.
- A limited partner cannot be sued.
- Limited partners can be replaced without dissolving the partnership.
- Decision making is fast because only general partners are responsible for the daily operations, without consulting limited partners.
- The partnership requires less paper work during its formation.
- Limited partners may benefit from the profits of the partnership without getting involved in the operations.

Disadvantages

- General partners have a risk of carrying the partnership’s debts and obligations.
- If one general partner makes a wrong decision, all the other partners are held responsible.
- General partners have a right to make decisions without informing other general partners hence if one general partner makes a wrong decision that results in a debt, other general partners will be held liable.
- Poor decision making by general partners that affect profits will affect the profits of limited partners.

Summary

- Businesses can either be Incorporated or Unincorporated.
- An incorporated business is a business that is formally registered with the government and exists separately from its owner.
- An unincorporated business is a business that has not filed its articles of association with the government
- A sole trader is a business that is owned by a single person.
- A partnership is a business that is owned by two to twenty people with the aim of making a profit.
- A partnership is either general or limited.
- A general partnership is a type of partnership in which the owners have unlimited liability.
- A limited partnership is a partnership in which the owners have limited liability.

Small to Medium Enterprises (SMEs)

1. outline the features of small to medium enterprises (SMEs)
2. describe the methods of survival for SMEs

Small to Medium Enterprises (SMEs)

- These are businesses which are owned by individuals.
- They are characterised by the following features:
    - Low level of output
    - Few number of employees
    - Low level of profits
    - Have a small market share
    - Use of technology is low
    - Low capital base
    - Centralised decision making leading to quick decision making

Importance of SMEs

SMEs are important as they:

- Create employment.
- Encourage self-employment as people will engage in business activities other than seeking for jobs.
- They contribute to national output.
- Lead to full utilisation of resources in a country.
- Increase competition in a market hence high quality and cheap products are produced as firms compete.
- Increase revenue for the government through tax.

Challenges faced by SMEs

- Small firms may face problems as they operate in any economy.
- The challenges may include:
- Competition from bigger firms
  - They may not be able to compete with bigger firms because of high costs involved in advertising and marketing.
- Poor managerial skills as they are not able to hire more skilled employees.
- Lack of diversification
  - SMEs are not able to produce a wide variety of goods which makes them vulnerable to changes in consumer demand.
- They lack financial support
  - Banks and other financial institutions may be reluctant to lend money to new and small businesses because they have no track record or suitable security to offer.
- They are not able to afford professional support
  - SMEs have to rely heavily on their own knowledge and skills as they cannot afford to pay for consultancy services.
- Inability to survive recession.
  - SMEs have no strong financial base hence they are easily affected during recession periods.
- Affected by government legislation
  - SMEs face great difficulties with the extra overheads as a result of government regulations for example VAT, NASA regulation and many others.
  - Monetary and fiscal policy of government can affect the business.
- Difficulty in finding suitable premises.
  - Good location tend to be expensive to rent or buy therefore SMEs cannot afford to compete with larger organisations.

How small firms survive

- Despite the advantages of large firms, many SMEs find ways to survive.
- The following are the reasons and methods of SMEs survival:
- SMEs offer personal service
  - They offer after sales services, for example installations of satellites or free transport.
- They have personal contact with the customers.
  - Many people prefer to do business with the owners of the company directly and are prepared to pay higher prices for the privilege.
- Flexibility and efficiency.
  - Small firms are often more flexible and innovative.
  - They may be able to react more quickly to changes in the market without following lengthy procedures.

- Lower costs.
  - SMEs may have lower operational costs than larger producers, for example large firms often pay their employees government agreed wage rate and small firms do not.
- They break bulk and sell in smaller units as compared to bigger firms which makes some of their products to be cheaper.
- They open for longer hours which increases their profit margins as some clients prefer to do business after hours.
- They can form joint ventures and enjoy the benefits as members.
- They locate near customers which gives them upper hand on lowering their costs of advertising.
- There are less legal formalities to set-up an SMEs as compared to setting-up a large firm.
- The government may assist them by :
  - Lowering their tax.
  - Giving them tax holidays, allowing small firms not to pay tax for a certain period of time.
  - Providing information and management support about markets through agencies like Zimbabwe international trade fair (ZITF) and Agricultural shows.
  - Providing loans at lower interest rates.
  - Providing buildings where they can operate.

Business plan

1. draw a business plan

Business plan

- A business plan is a written document which describes the nature of the business.
- It comprises of the sales and marketing strategy, the nature of financial background and contains expected profit and loss statement.
- It provides the directions of the company's future plans.

Importance of a Business Plan

Clarifies the business direction

- The primary purpose of the business plan is to define what the business is about or what it intends to be overtime.

Details the vision of the organisation

- Business plan can be an effective way to plan for future changes in marketing, growing and innovations.

Attracts financing

- A business plan shows whether or not a business has the potential to make profit.
- By putting the statistics, facts and detailed plan in writing, the new business has a better chance of attracting investors.

Attracts team members

- Business plan can be designed as a sale tool to attract partners, secure suppliers and attract executive level employees into the new venture.

Shows the organisational structure of a company

- A business plan conveys the organisation structure of a business, including directors and their individual duties.

Creates a marketing road map

- A business plan will have marketing strategies.
- It describes how the new firm's products and services are going to reach the targeted clients.
- Components of a business plan are as follows:

Fig 10.3.1:

Components of a business plan

Components of a business plan

Executive summary

- It states all the important information about your business.
- It summarizes the other section of your plan.

Business Description

- It describes your company and what it does.
- It states when the business was formed and its mission statement.
- It also states the version of the business.
- The business description answers the following questions:
    - What is the business model?
    - What is the location of the business?
    - What is the legal structure?
    - What are some of the marketing opportunities?
    - What is the projected growth?

Market Analysis

- Market analysis describes business' competitors and the state of the market as a whole.
- This section gives the scope of the market and how the business fits in.
- The analysis should look at the trends of the market.

Organisation and Management

- This part of a business plan shows the management structure and other team members.

- This section, highlights the expertise and qualifications of each member of the team.

Sales Strategy

- It explains the firm's marketing strategy.
- It gives the details of the promotional and advertising strategies.

Financial projections

- In this section, the capital requirements of the business are included.
- Sources and uses of finance are also included in this section.

BUSINESS PLAN FOR PIZZA SMASH Ltd	
Name of Business	Pizza Smash Ltd
Type of organisation	Private Limited Company
Business aim	To provide a high-class takeaway pizza service including delivery
Product	High quality cooked pizza
Price	Average price of $8 including delivery charges
Market aimed for	Young people and families
Market research undertaken and the outcome	Research was conducted using questionnaires, also research was undertaken using the national trends of takeaway sales and local competitors.
Human Resources plan	Four staff (including 2 co-owners) to be the only staff employed initially
Details of Business Owners	Lawry Kays- Administrator for 5years Tapiwa Tangles- chef of 12years experience
Production details and business costs	Main suppliers – L & K wholesales Fixed costs of business -$48 972 per year Variable costs- approximately $1 per unit sold
Location of business	Site will be in Harare Central Business area (Speke Ave) Leasehold sight (6years)
Main Equipment required	Second-hand kitchen equipment- $4200 Second-hand motorbike - $1 150
Forecast profits	Summary- in the first quarter of 2018, the total costs are forecast to be $12 243 with revenue of $16 081 Predicted Profit=$2 285 Level of output to break-even – 1749 units per quarter
Cash flow	See cash flow on diagram 2
Finance	$8 000 invested by each of the owners Bank loan of $10 000

Business Plan

Cash Flow Projection

- A cash flow projection shows the expected amounts of money that will come into a business along with its expected expenses.
- The cash flow projection is a forecast of a business organisation's cash income and expenditure on a weekly, monthly or yearly basis.

Importance of cash flow projections

- It helps the business to understand its cash and expenditure requirements for a period of time.
- The projections guide the management to achieve its set goals.
- Cash flow projections help you to estimate the rate at which the business will grow.
- An example of a cash flow projection shown in table 10.3.2

Year 2018	Jan	Feb	Mar		YTD 2018
Pizza Sales	9,600	17,400	15,200		42,200
GROSS SALES	9,600	17,400	15,200		42,200

					-
Cost of Sales					
Pizza	3,168	5,742	5,016		13,926
TOTAL COST OF SALES	3,168	5,742	5,016		13,926
					-
GROSS PROFIT	6,432	11,658	10,184		28,274
					-
General and Administrative					
Employee Salaries	1,000	1,000	1,000		3,000
Management Salaries	1,000	1,000	1,000		3,000
Employer Taxes/Benefits	240	240	240		720
Advertising	350	350	350		1,050
Bookkeeping	150	150	150		450
Credit Card Charges (1%)	36	36	36		108
Insurance	120	120	120		360
Legal and Professional Fees	100	100	100		300
Misc. Other	100	100	100		300
Office Supplies	125	125	125		375
Rent	500	500	500		1,500

Repair and Maintenance	150	150	150		450
Telephone	60	60	60		180
Utilities	150	150	150		450
Total Gen. and Admin. (Fixed)	4,081	4,081	4,081		12,243
					-
NET PROFIT OR LOSS	2,351	7,577	6,103		16,031
Bank Loan (Repayment)	3,582	3,582	3,582		10,746
Cash Flow After Financing	(1,231)	3,995	2,521		5,285
Draw	1,000	1,000	1,000		12,000
Net Cash Flow	(2,231)	2,995	1,521		2,285
Accumulated Cash Flow		764	2,285		
Average Daily Sales / 30 days	320	580	507		

Table 10.3.2: Cash Flow Projection

National income

1. Identify methods of measuring national income
2. Explain the methods used in measuring national income

Introduction

- National income gives the statistics of a country's economic performance and the statistics are used to analyse the economy.

- There is an important relationship between income, expenditure and output in an economy and all these three give the figure of a country's national income.

National output

- Output is the amount of goods and services that are produced by residents of a country within a certain period of time.
- The output can be consumed or used for production of other products.
- National output is the total output of goods and services produced in an economy.
- Factors of production are used in the production process.

National income

- National income is the amount of income that businesses or individuals in a country receive in exchange for production of goods and services or investments and capital.
- The total amount of income that is earned by the factors of production is the national income.

National expenditure

- Expenditure is the current value of finished goods and services in an economy.
- Value of a nation's output can be determined by the amount that organisations and individuals pay for goods and services.
- The value that organisations and individuals pay for goods and services is the national expenditure in an economy.

National output=national income=national expenditure

National income

- National income is determined by gross domestic product, gross national product or net national product.
- Gross Domestic Product (GDP) is the aggregate value (in monetary terms) of goods and services that are produced in a country within a given period of time.
- There are three ways of measuring GDP and these are :
    - The output method
    - The income method
    - The expenditure method

Output method

- The money value of final goods and services produced within a year can be calculated using the output approach.
- Using this method, GDP is measured basing on the flow of goods and services.
- Final goods are those goods that are consumed directly and not used for further production.
- If goods are used for further production, they are called intermediate goods.
- When using the output method, only the value of final goods is recorded.

- The values of intermediate goods are not recorded when the output method is used because the value of intermediate goods will be included in the value of final goods.
- Recording intermediate goods leads to double counting and to avoid double counting the method of value addition is used.
- Method of value addition is when the added value at each stage of production is summed up to calculate GDP.

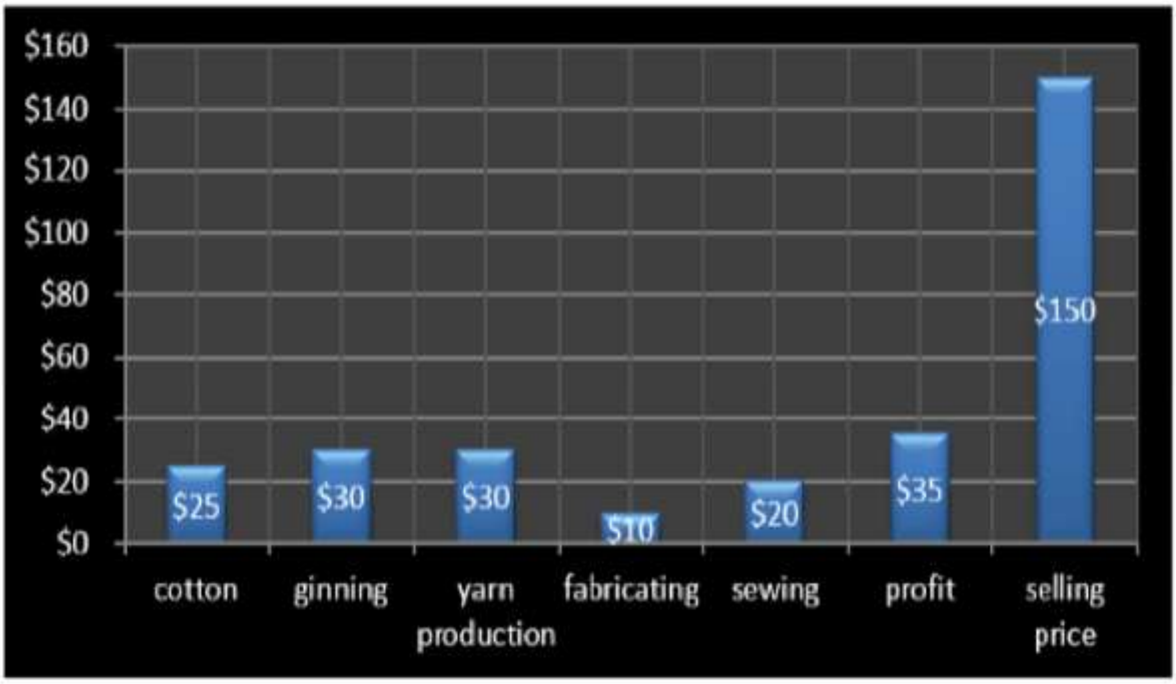
An example of the output method

Example 10.1.1

- Take for instance, after the production of a man’s suit the retail price is $200. That price includes all the costs of production and profit earned. The costs of production are classified as follows:
- Cotton $25
- Ginning $30
- Yarn production $30
- Fabricating and dyeing $10
- Sewing $20
- The profit earned is $35

- Fig 10.1.1 shows the information of example 10.1.1.

Fig
10.1.1:



Value of Final Goods

- From Fig 10.1.1, using the output approach, the value that is recorded is the selling price which is $150.
- Adding the production costs and profit will lead to double counting since costs of production and profit sum up to the selling price.

Income method

- GDP is the sum of incomes from the production of goods and services.
- With this method, all the income received from the use of factors of production are added up.
- The four factors of production and their rewards are as follows:

Factor of production	Reward
Labour	wages and salaries
Capital	interest
Land	rent
Enterprise	profit

- This method adds income earned by individuals, whether they are formally employed or self-employed, to profits earned by private sector businesses as well as rent earned from ownership of land.
- Interest earned from capital invested is also added up.
- This method excludes the following:
- Transfer payments such as pension funds, jobseekers allowances, income for disadvantaged families and welfare assistance.
- Private transfer of money from one person to another.
- The above aspects are excluded because they are unearned incomes. In other words, there is no productive activity done by individuals receiving such income.

Expenditure method

- GDP is the total sum of the amount of income that is spent on final goods and services that are produced in a country.
- The expenditures of individuals, firms and government are all added up.
- Expenditure method also accounts for expenditure on exports by foreign customers but expenditure on imports is deducted.
- Therefore, expenditure method sums up private consumption expenditure, government's consumption expenditure, gross capital formation and net exports.
- Net exports are the difference between exports and imports.
- Therefore, the formula of calculating GDP using expenditure method is:

Consumption (C) – this relates to income spent on personal consumption of durable and non-durable goods. It also involves money spent on personal consumption of services.
Investment (I) – This relates to the value of private investments.

Government (G) – government's spending on various projects such as dam or road construction.
Exports (X) – exports
Imports (M) – imports
(X - M) – Net exports or the difference between exports and imports.

Real versus nominal GDP

- The main difference between real and nominal GDP is that real GDP is adjusted for inflation and nominal GDP is not adjusted for inflation.
- When GDP is not adjusted for inflation, it means that the values of expenditure, output and income are measured at current price.
- When GDP is adjusted for inflation, it means that the values of expenditure, output and income are measured at base price or past year price.
- Therefore, real GDP shows the economic worth of goods and services adjusted for changes in price.
- Nominal GDP shows the monetary value of goods and services that is not adjusted for changes in price.
- Real GDP shows the actual picture of the economy yet nominal GDP does not give an actual picture of an economy.
- A rise in GDP indicates an increase in living standards, but when using the nominal value the conclusion may be misleading.
- This is because GDP may be showing an upward trend due to an increase in price but people will not be better off.
- Since nominal GDP may mislead, real GDP is likely to be used because it takes into account the changes in total output, assuming that prices are constant over time.

COMPONENTS OF NATIONAL INCOME

1. Identify the components of national income
2. Explain the components of national income.

NATIONAL INCOME

- National income is the amount of revenue that businesses and individuals in a country receive in exchange for the production of goods, services, investments and capital.
- The total amount of income that is earned by the factors of production is the national income.
- National income is also equal to national output or national expenditure.

National income = national output = national expenditure

- Output is the amount of goods and services that are produced by residents of a country within a certain period of time.
- The output is consumed or used for production of other products.
- National output is the total output of goods and services produced in an economy.
- Expenditure is the current or present value of finished goods and services in an economy.
- The value of a nation's output can be determined by the amount that organisations and individuals pay for goods and services.
- The value that organisations and individuals pay for goods and services is the national expenditure in an economy.

Components of national income

- The formula for calculating national income is as follows:
    - ***GDP = C + I + G + (X - M)***

C	Consumption
I	Investment
G	Government expenditure
X	Exports
M	Imports
(X - M)	Net exports

Consumption (C)

- Consumption relates to income spent on buying of durable and non-durable goods for household use.
- It also involves money spent on personal consumption of goods and services.
- Consumption depends on disposable income and wealth of households.
    - Disposable income refers to the income that is available for spending after tax and charges.
    - Wealth is defined as the assets that people own which are valued in monetary terms. For example, houses, shares in companies and cars.
- As income increases, the total amount of money spent is likely to increase holding all other things constant.
- The minimum level of consumption that takes place even for consumers with no disposable income is called autonomous consumption.
    - Usually, the consumers will be spending on basic necessities.

Influences on consumption

Income

- The amount of income of households determines how much they spend.
- Consumption can be influenced by current disposable income, previous income and future income.
- If they are earning more income and if more income is expected in the future, consumers are likely to increase their consumption.

Wealth

- As the assets of people increase in value, there is likely to be an increase in consumption.

Distribution of income

- Uneven distribution of income can lead to less spending.
    - If households have more income, they spend more on consumption.
    - If the households' income decreases, there is less consumption of goods and services.
- Therefore households with more income buy more products than households with less income.

Age structure

- Middle aged people usually spend a lower percentage of their incomes due to savings.
- Therefore, if the majority of the citizens comprises of the middle aged class there is likely to be low consumption.

Expected changes in inflation

- People's expectations on inflation rates can influence consumption.
- If consumers expect a high inflation rate, they are likely to increase their consumption in the current period.
- However, when consumers anticipate inflation rate to be favourable in the future, they may decrease their consumption in the current period.

Quality of goods and services

- If the goods and services being produced in the economy are of higher quality, there is likely to be an increase in consumption.
- However, if goods and services are of low quality, consumption is likely to decrease.

Investment

- Investment involves goods that are purchased and used to produce other goods and services.
- Investment in the national income function relates to the value of private investments.
- Investment can be influenced by a number of factors.

What influences investment?

Rate of interest

- Firms invest when expected yield of return exceed expected costs.

Changes in technology

- If there is advanced technology, investments are likely to increase.

Changes in cost of capital

- When capital is cheaper, firms tend to purchase more capital.
- An increase in capital can lead to an increase in investment.
- However, when capital is expensive, investments are likely to decline due to a decrease in purchase of capital.

Future expectations

- When entrepreneurs are optimistic about the future, they are likely to increase their investments.
- Take for instance, if stable inflation is expected, they are likely to increase investments so as to benefit from the advantages of a stable economy.
- If they expect that demand for their products is likely to increase in the future, they are likely to increase their investments to cater for the future projections.

Profit levels

- When profits are high, people are likely to invest more.
- However, if they are incurring losses or lower profits, there is less probability of an increase in investment.

Corporation tax

- Corporation tax is a fee that is charged on profits.
- If the tax is lower, post-tax returns will increase thus stimulating investments.

Government investments

- Increase in government grants and tax holidays will increase investments.

Net exports

- The amount of net exports is the difference between exports and imports.
- Exports are goods and services that are sold outside the country.
- Imports are goods and services bought from other countries for example, raw materials bought from South Africa.
- The amount that is spent on exports and imports is influenced by various factors.

Factors that influence the amount of net exports

- Prices of domestic goods and services compared to foreign goods and services.
    - If domestic prices are lower than prices of imports, people tend to demand cheaper domestic products.
- The quality of products can also determine the level of imports and exports.
    - If domestic products are of higher quality than imported ones, people will demand more of domestic products and less of foreign products.
- The exchange rate can also influence the net exports of a country.

- Exchange rate is the value of a country's currency in terms of another country's currency.
    - If the exchange rate is favourable, it is cheaper for foreign countries to purchase domestic products.
- Local and foreign income levels can also determine net exports.
    - When the local income levels are low, people will have less money to demand foreign products thus imports will decline.
- The effectiveness of marketing the products can also influence net exports.
    - If there is effective marketing of domestic products compared to foreign products, imports are likely to decrease and exports may increase as well.

Government spending

- Government spending is the government's consumption of final goods and services.
- The government can spend money on both capital and consumer products.
- Government's spending on goods and services is an injection into the economy.
- Government expenditure adds to the output of an economy.
- Government spending can be classified into different categories.

Categories of government spending

- Current expenditure - involves government spending on day-to-day activities, for example, salaries of civil servants, purchase of medicines and purchases of textbooks.
- Capital expenditure involves funds spending on developing social infrastructure like building hospitals, schools and roads.
    - Current and capital expenditure involves the direct use of resources by the government.
    - They can be referred to as exhaustive expenditure.
- Transfer payments are payments designed to provide income to vulnerable groups. For example, payments to pensioners, the unemployed and subsidies to producers.
- Debt interest is interest paid to holders of government debts.
    - Transfer payments and debt interest are non-exhaustive.
    - They involve the transferring of economic purchasing power from taxpayers to recipients of welfare payments, producers and holders of national debts.
    - Those who receive the transferred income will decide on what goods to produce.

Functions of government expenditure

The government spends its funds to:

Provide public and merit goods.

- Public goods are to be paid by government.
- The government subsidises merit goods in order to increase their consumption.
- Provision of public and merit goods redistribute income from the rich to the poor through the tax system.

Provide social security.

- Social security covers a wide range of benefits that are in the form of grants.
- Transfers involve pension funds, child benefits and medical benefits.
- The government can assist the disabled and the elderly.
- This ensures that everyone has some level of output thus reducing poverty.

Regulate economic activities.

- The government intervenes in the activities of the private sector so that the firms may act in the best interest of the public.
- Money is spend by the government in enforcing regulations.

Improves efficiency in allocation of resources.

- The government can provide grants and subsidies in a bid to influence the location, performance and structure of firms.

Summary

- The total amount of income that is earned by the factors of production is called national income.

National income = national output = national expenditure

- Expenditure is the current or present value of finished goods and services in an economy.
- Components of national income can be summarised by this formula:

$$GDP=C+I+G+(X-M)$$

C	Consumption
I	Investment
G	Government expenditure
X	Exports
M	Imports
(X - M)	Net exports

- Consumption refers to income spent on buying goods and services in any economy within a year.
- Investment involves goods that are purchased and used to produce other goods and services.
- Net exports is the difference between the value of exports and the value of imports.
- Government spending is the government's consumption of final goods and services.
- The following are factors that influence the level of investment:
    - Rate of interest
    - Changes in technology
    - Changes in cost of capital
    - Future expectations
    - Profit levels
    - Corporation tax
    - Government investments
- The level of consumption in the economy is determined by the level of consumer income and wealth.
- Government expenditure can be classified into:
    - Current expenditure
    - Capital expenditure
    - Transfer payments
    - Debt interest

National income accounting

1. Explain the meaning of the term Gross Domestic Product (GDP)
2. Explain the meaning of the term Gross National Product (GNP)

National income accounting

- National Income is the amount of revenue that businesses and individuals in a country generate from the exchange of goods and services produced within a country.

- It is the value of goods and services that are produced in a country within a period of time.
- National income accounting is a bookkeeping system used by a government to measure the level of the country's economic activities during a given time period.
- Usually, the national income accounting is done yearly.
- The records encompass total revenue earned by local corporations, wages paid to domestic and foreign workers, amount spend by individuals and corporations in a country.
- This account provides an insight on how the economy is functioning and indicating the state of the economy.
- The account is also used to compare economic welfare or standards of living between countries.
- A country's economic growth is also indicated by the values of national income.
- National income can be calculated using the following methods:
- Gross Domestic Product (GDP)
- Gross National Product (GNP)
- Gross National Income (GNI)

Gross Domestic Product (GDP)

- GDP is the total market value of goods and services produced by a country within a certain period of time.
- It is the total value of everything that is produced by individuals and companies in a country during a certain period.
- The gross domestic product is calculated yearly or quarterly.
- Everything produced by non-citizens and foreign owned companies located within a country is included in the GDP.
- Take for instance, if a South African company is producing in Zimbabwe, it means, the production of that company is recorded in Zimbabwe's GDP account.
- A country's GDP can be expressed in different ways.
- GDP can either be nominal GDP or real GDP.

Nominal GDP

- Nominal GDP is also referred to as money GDP.
- It is the total monetary value of goods and services, valued at current market prices, produced by a country within a certain period of time.
- Current market prices mean the prices for a particular year, like 2014.
- In other words, GDP at current price refers to the value of gross domestic product valued at the prices existing in that year, for example in 2014.
- Nominal GDP includes all the changes in market prices that occurred during the current year due to inflation.
- Nominal GDP is measured using the following approaches:
- Expenditure/spending approach
- Production approach
- Income approach
- The expenditure approach sums the market value of all domestic purchases of final goods and services within a given time period.
- The production approach gives the total production measured by subtracting intermediate goods from the total output.
- Intermediate goods are goods used for further production.
- The income approach adds the income earned by households and firms within a given time period.

Real GDP

- It is the total monetary value of goods and services produced by a country within a certain period of time.
- Real GDP takes account of the effects of inflation.
- The value of GDP is expressed in terms of the base year prices.
- Real GDP is the monetary value of GDP at constant prices.
- Constant prices means prices of the same base year are used, for example if 2013 is the base year then 2014 GDP at constant price is measured using 2013 prices.

Components of GDP

- The components of GDP are:
- Personal consumption expenditure (C)
- Business investment (I)
- Government spending (G)
- Net export [export – imports] (X-M)
- Consumption (C) is the expenditure by consumers on durable and non-durable goods and services.
- Investment (I) refers to assets purchased and used to create wealth such as inventories, machinery, residential and non-residential buildings.
- Government expenditure (G) is the total amount of money the government spends on final goods and services within a particular period of time.
- Exports (X) are goods and services produced by individuals and firms in a country and sold to other countries.
- Imports (M) are goods and services bought from other countries.
- Net exports is obtained by subtracting total imports from total exports.
- Therefore, GDP = C+ I + G + (X – M)

Gross National Product (GNP)

- GNP is the total value of final goods and services produced by a country's citizens, regardless of production location, in a given period of time.
- The account includes personal consumption expenditures, government expenditure, private domestic investments and income earned by the country's citizens living in other countries.
- Income earned within the domestic country by foreign individuals or corporations is subtracted.

Components of GNP

- Personal consumption investments
- Private domestic investments
- Government expenditure
- Net exports
- GNP equals to private domestic investments plus income earned by citizens living in other countries minus income earned by foreign individuals and corporations working in the country.
- Therefore:

Where: C -- Personal consumption
I -- Private domestic investments
G -- Government expenditure
(X-M) -- Net exports
Z -- private domestic investments plus income earned by citizens living in other countries minus income earned by foreign individuals and corporations working in the country.

- GNP is a more accurate measure of a country's income than production.

- The value of GNP is higher than the value of GDP if the income earned by domestic corporations outside the country is more than the income earned by foreign citizens in the country.
- In other words, if the income earned by Zimbabwean individuals and corporations outside the country is more than the income earned by foreign individuals and corporations in Zimbabwe, then Zimbabwe's GNP is higher than its GDP.
- A greater difference between GNP and GDP means the country is more into international trade, international production and international financial operations.
- GNP can be expressed as real GNP, when prices are adjusted for inflation.
- It can also be expressed in nominal value when current market prices are used.

Summary

- National Income is the amount of revenue that businesses and individuals in a country generate from the exchange of goods and services produced within a country.
- GDP is the total market value of goods and services produced by a country within a certain period of time.
- Nominal GDP is the total monetary value of goods and services, valued at current market prices, produced by a country within a certain period of time.
- Real GDP is the total monetary value of goods and services, adjusted for inflation, produced by a country within a certain period of time
- The components of GDP are:
- Personal consumption expenditure (C)
- Business investment (I)
- Government spending (G)
- Net export [export – imports] (X-M)
- GNP is the total value of final goods and services produced by a country's citizens, regardless of production location, in a given period of time.
- The components of GNP are:
    - C -- Personal consumption
    - I -- Private domestic investments
    - G -- Government expenditure
    - (X-M) --Net exports
    - Z -- private domestic investments plus income earned by citizens living in other countries minus income earned by foreign individuals and corporations working in the country.
- Therefore:GNP=C+I+G+(X-M)+Z

Importance of national income statistics

1. discuss uses of national income statistics by different agents
2. identify the limitations of national income statistics
3. explain the limitations of national income data

Importance of national income statistics

- Gross Domestic Product (GDP) acts as a barometer to the climate of business in an economy.

- It helps policy makers to come up with new policies that are favourable to the economy.

  - Policy makers may also be assisted by GDP values when implementing, adjusting and analyzing current policies in an economy.

- National income statistics are used to formulate economic policies in a country since they indicate the aggregate yield of the whole economy.
- The statistics can also be used for planning purposes. Future forecasts can be made using the current or previous trends of statistics thus making it easier to plan.
- Statistics of the national income enable people and the government to identify and know the structure of the economy.
- National income statistics enable the government to assess how various sectors are contributing to the national income.
  - Hence, informed decisions can be made on how to boost sectors not performing well in the economy.
- Inflationary and deflationary gaps are also indicated by national income statistics.
  - When the expected expenditure in a given period exceeds the available output, it shows that there is an inflationary gap.
  - This can help the government to make policies that will curb the inflationary pressure.
  - Those who give loans like banks will adjust their loans for inflation.
  - Also, investors will make their investment decisions wisely.
- National income statistics also help to analyse the standards of living between different countries.
  - Living standards for people living in the same country but at different periods are also compared using these statistics.
  - Therefore, increase or decrease in welfare can be measured or compared using these statistics.
- The government is able to formulate policies for employment since the data indicates the structure of industrial output, savings and investments.
- These statistics may be used by different scholars for their researches or for academic purposes.
- The data can be used to compare different periods in a country so as to assess whether the economy is declining, growing or is stagnant.
  - If national income increases, it means that there is growth in the economy.
  - If the national income decreases, it means that the economy is deteriorating.
  - If there is no change or no significant change of the data, it means that the economy is just stagnant.
  - Basing on these patterns, the government can easily make its future plans.
- National income statistics may be used by the government when seeking international aid to boost the economy.
- The level of business activities in the future can also be estimated using national income statistics.
- The data can be used to measure whether the government policies are correctly planned and implemented.
- National income data provide patterns for consumption and investments in the economy.
- The data can help to facilitate inter-sector performance comparisons.

Limitations of national income statistics

- A number of problems are encountered when compiling and using national statistics.
- The following are some of the problems encountered.
- There is use of barter trade in villages and these figures are not included in the national income statistics.
- There is a problem of double counting of goods.
    - Some goods may be final goods at one point and intermediate goods at another point.
    - Take for instance, bananas are finished goods but they can also be used in the production of banana-yoghurt.
- Some of the economic activities are not counted in the national income statistics but they play a pivotal role in sustaining the economy.
    - Take for instance, black market activities like trading of illegal things such as drugs.
    - These activities are not accounted for but they have a major role in the sustainability of the economy.
- There is also unpaid work which is not recorded in the statistics. Take for instance, when one builds his/her own house.
    - This activity is not recorded in the national income statistics because that person will not receive a wage for performing that task.
    - However, building a house is an activity that improves the living standards of people.
    - Therefore, national income only records paid work and ignores unpaid work which is of great importance as well.
- National income data do not account for the quality of life that people have thus it does not record whether people are happy or not. This may mean that it ignores the actual welfare of the people.
- National income statistics do not account for economic activities with positive or negative externalities that cannot be measured in monetary terms.
    - Take for instance, a firm producing chemicals can dump its chemicals in the river and that may affect the residence of the area as well as the aquatic life.
    - National income data only records the money made by the firm but does not take into account the effects of its operations.
- National income statistics are used to compare standards of living between countries but different countries have different currencies, disparities in the distribution of income and different tastes and needs of people.
- National income measures economic growth but does not include social costs or the distribution of government expenditure.
    - A rise in income may be due to a rise in spending on defense.
- The government can conclude or assume that the trends of national income will continue as they are.
- This may mislead investors or interested parties when the situations change.
- A rise in inflation may complicate national income figures.
- When computing national income statistics, number of hours worked in generating income is not taken into account.
    - Some countries may have long working hours with less time for leisure.
- Some firms may fix their accounts so as to avoid tax hence data collected for national income may not be correct or may be misleading due to hidden transactions.
- In order to compare national income between countries, the figures are supposed to be converted into a common currency like the USD.

- This may give misleading figures especially for countries with relatively small scale of international trade.
- However, in a bid to solve this problem national income statistics may be converted to purchasing power parity.

- National income figures are not accurate due to the complexity of data gathering hence they may be misleading.
- The statistics do not indicate how income is distributed in the economy hence one may conclude that there is a rise in living standards yet there is unequal income distribution.
- Unavailability of records may also lead to omission of important data and this is usually common in developing countries where there are high informal sectors.
- Inadequate information may be produced because values of income generated by the informal sector may be difficult to collect and to estimate.
- Transfer payments may be included in the national income statistic thus giving a false figure.
- The national income value does not account for the quality of products.
- National disasters, like wars, may raise a country's national income yet a country will be rebuilding hence the value can mislead investors.
- Value of national income does not take into account the bad effects of economic activities such as pollution, yet the value includes money that is spent in trying to alleviate the effects.
- National income statistics take no account of the negative impact of growth in national income on natural resources or the environment.

MONEY

1. Explain barter trade
2. Describe advantages and disadvantages of barter trade
3. Outline the types of money

Barter trade

- Trade is the buying and selling of goods and services.
- Trade includes the exchange of goods or services using either money or goods for goods system.
- Barter trade is the exchange of goods and services between individuals without the involvement of money.
- It is the exchange of goods and services for goods and services.
- Barter trade only takes place when there is an agreement between the parties involved in trade.
- An example of barter trade is shown on the picture below where there is an exchange of tomatoes and wheat between two people after agreeing on the quantities. Barter trade was the common form of trade long ago before the introduction of money as a medium of exchange.

- Barter trade is still being practiced nowadays but at a low scale.

Advantages

- It increases sales since people will be exchanging goods or services they have.

- Social relations between parties involved can be improved due to the interactions during the trading process.
- It enables parties involved to receive the actual products they need.
- Barter trade is simple to carry out when both parties reach an agreement.
- It opens new markets when there are many parties involved.
- It reduces wastages because the exchange occurs when the parties involved have uses for the products they are acquiring.
- It improves the standard of living due to access to different types of goods and services from various parties.
- It enables idle materials to be traded if there are parties that need them.
- It is flexible because the individuals involved can easily adjust the quantities and sizes depending on the quality of products to be exchanged.

Disadvantages.

- It is difficult to measure the value of commodities for the exchange to occur.
- It takes time to find individuals to engage into barter trade.
- It is difficult to store value in commodities since some are perishables and others lose value over time.
- Barter trade can only happen if there is a double coincidence of wants between parties involved.
- It is difficult for barter trade to occur when products involved cannot be divided into smaller portions. For example, if an individual has a cow and is in need of two pairs of trousers.
- Barter trade offers limited goods when done at a local scale.

Money

- Money is anything which is accepted in the payment of goods, services and debts in a specific country.
- Therefore, money is a legal tender.
- A legal tender is a country's currency accepted as a medium of exchange by law.

Types of money

- Money is divided into M1, M2 and M3

M1

- M1 includes the physical money which are notes and coins.
- It also involves demand deposits and negotiable order of withdrawal accounts.
- M1 includes assets that are easily converted to cash.
- It views money as more of a medium of exchange.

Notes

- Notes refer to paper money which is approved by the government to be used as legal tender.

Coins

- Coins are metals standardized in weight and stamped by the government to be used as legal tender.

Demand deposits

- Demand deposits are funds in a bank account which can be withdrawn by the account holder anytime without giving a notice.

- The money can be withdrawn through Automated Teller Machine (ATM), Point of Sale and online banking.
- With ATM, the account holder may access funds without the assistance or help of a bank teller.
- Online banking is also known as internet banking. People can make deposits, payments or send money using the internet or phone applications without visiting the bank.

Negotiable order of withdrawal

- Negotiable order of withdrawal is a bank account which earns interest over time and the account holder is allowed to write drafts against the money held in the account.
- The depositor gives at least a seven days' notice to the bank before the withdrawal of money.
- This service is usually offered by commercial banks.

M2

- It includes M1 plus short-term deposits and money market funds.
- Therefore;
- Short-term deposits refer to the money put into the bank for a time not longer than one year.
- Money market funds is money that is invested as short-term loans in order to earn interest yet maintaining its original value.
- M2 cannot be used as a medium of exchange since it includes highly liquid assets which are not cash.
- However, highly liquid assets can easily be converted into cash.
- A liquid assert is an asset that can be changed into cash in a in a very short time such as precious metals.

M3

- It includes M2 plus long-term deposits and other large liquid assets.
- Long-term deposits refer to money placed into the bank for more than one year.
- M3 includes assets that cannot be easily turned into cash.
- It leans more on assets associated with larger financial institutions and corporations than small business units and individuals.
- M3 is viewed as a store of value rather than a medium of exchange.

Summary

- Money is anything that is generally accepted as a means of paying for goods and services.
- Barter trade refers to the exchange of goods and services for goods and services.
- The three types of money are M1, M2 and M3
- M1 refers to notes and coins that are circulating in the economy plus demand deposits that are held by banks.
- M2 consists of M1 plus short-dated saving deposits and fixed deposits that are held by banks.
- M3 includes M2 plus long-term large deposits.

FUNCTIONS OF MONEY

1. Outline and explain the characteristics of money
2. Explain the functions of money

- Money is anything that is generally acceptable in the settlement of debt and for payment of goods and services in a particular country.
- Money can also be defined as anything that can be used to put a value on goods and services.
- Money can either be bank notes or coins and these notes and coins are printed by the government through the central bank.
- People accept money as payment of debt because they can spend it at a later date and others will also accept settlement of payments using money.
- Without money, the exchange of goods and services will be difficult.

Functions of money

- To overcome the problem of barter trade, money performs the following functions:
    - Medium of exchange
    - Measure of value
    - Store of value
    - Means of deferred payment
    - Unit of account

Medium of exchange

- Money acts as a medium of exchange in the sense that it eliminates the use of barter trade.
- Money as a medium of exchange means that money will be used in trade for the purpose of buying and selling of goods and services.
- Barter trade has a major disadvantage of the need for double coincidence of wants but the introduction of money solved that disadvantage since one will be able to simply pay for the products wanted.
- Money facilitates the transactions between people to be more convenient.
- Therefore, modern trade involves the process of exchanging of goods and services using money as a medium of exchange

Measure of value

- Money can be used as a measure of value of goods and services.
- Money can help buyers and sellers to engage in trade without exchanging goods for goods but the value of goods and services will be expressed in monetary terms.
- Money can also be used to compare and measure the value of different commodities by comparing the prices.

Store of value

- Money as a store of value means that money can facilitate future payments and purchases.
- The wealth of individuals can be measured in terms of money hence people may be called millionaires or billionaires, depending on the monetary value of their wealth.
- For money to be a store of value, a stable value should be maintained.
- Store of value for money is mainly affected by a rise in inflation which reduces the value of money.
- Money loses value when there is a rapid rise in general prices in the economy.

Means of deferred payments

- Money is used as a means of deferred payments within a specified period of time.
- Therefore, money can be used to pay for the goods which the customer has already used.
- Money enables customers to buy on credit and on hire purchase from the sellers.
- This function of money can be highly affected by some economic factors such as changes in inflation level and interest rates.

- The function of money as a means of deferred payment mostly works when the interest is charged on the balance of money left to be paid to creditors or if compound interest is charged.
- Money makes it easier to lend and borrow goods and services because it is an easier way of measuring debt.

Money as a unit of value

- This means that money can be used to measure the worthiness or value of goods or services.
- This is the function of money that allows people to establish a price of a good or a service.

Characteristics of money

- For money to serve its functions, it must possess certain features or characteristics.
- The following are properties of good money:
  - Durability
  - Scarcity
  - Portability
  - Divisibility
  - Acceptability
  - Stability
  - Uniformity

Durability

- Good money should be durable meaning that it can last long without getting torn because people will not accept anything that deteriorates fast.
- Notes and coins should be durable and strong so that they can act as a store of value.
- Durability of money can cause it to perform the functions of store of value and medium of exchange.

Portability

- Good money should be easy to carry around.
- There is need for money to be in various denominations in order to increase convenience of carrying it around.

Acceptability

- Anything which can be used as money should be generally acceptable for buying and selling goods and services.
- People should have confidence that sellers will accept the money for trade.
- If people lose confidence in money, they tend to disregard it as a medium of exchange.

Divisibility

- Money should be expressed in various denominations as shown in Fig 11.1.1.

Fig 11.1.1: Notes and Coins

- It should be easy to change money from large denominations into smaller denominations so that customers can purchase even small units of goods and services that are very cheap such as freezits and maputi.
- Good money must be converted from one denomination to the other without any change in value.
- Good money should have notes and coins with different face values for payments and to give change.
- This characteristic of divisibility overcomes the problem of barter where goods are difficult to divide in order to suit the transactions made.

Scarcity

- Good money should be limited in supply for it to maintain its value.
- Abundant or excess supply of money in the economy may result in the deterioration of the value of money.
- Limited supply of money can avoid demand pull inflation which is caused by excess supply of money in an economy.
- People may also lose confidence in money if it is in excess supply.

Stability

- Good money should be stable in value. Stability means that money does not lose its value over a short period of time.
- Since money performs the function of measuring the value of products, it must be stable enough in order for it to measure the value of goods properly.
- The value of goods must be maintained over a long period of time.
- Fluctuations in the value of money can result in people or investors losing confidence in it.

Uniformity

- Good money should be uniform and identical.
- Same denominations should be identical so that they can be easily recognized.
- They are supposed to have similar features.

Financial institutions

1. describe the roles of financial institutions in an economy,
2. Explain the functions of a central bank in the economy.

Financial institutions

- A financial institution is an organisation established to carry out monetary transactions such as investments, loans and customer deposits.
- The services given by financial institutions differ from one organisation to another.
- The types of financial institutions include commercial banks, merchant banks and building societies.

Commercial Banks

- Commercial banks are organizations that provide financial services. For example, accepting deposits and issuing loans.
- They also offer their clients investment products. For example, savings accounts, checking accounts and certificates of deposit.
- The clients who deposit money into commercial banks get interest on their deposits.
- Commercial banks gain money by using the money deposited by clients
- Examples of commercial banks in Zimbabwe are ZB bank, Agribank, Steward bank, Barclays bank of Zimbabwe and BancABC bank.
- Fig 12.1 below shows examples of commercial banks.

Roles of Commercial Banks

- Commercial banks form the capital base in an economy.
    - Commercial banks provide schemes and projects which attract their clients to save their money.
    - Commercial banks organize the savings of clients.
    - The money mobilized by commercial banks is made available for productive purposes.
- Commercial banks provide finance to the government.
    - They provide long-term credit through investing in government securities.
    - Commercial banks also provide short-term money to the government by buying treasury bills.
- Commercial banks help in the execution of the monetary policy.
    - They help in the development of an economy through implementing the monetary policies created by the central bank.
    - The Central Bank relies on commercial banks for the success of its monetary policy.
- Commercial banks help in financing consumers' activities.
    - They offer short-term loans and overdrafts to consumers.
- Commercial banks help in providing finances for internal and external trade.
    - In internal trade, they offer short-term and medium term loans to wholesalers and retailers.
    - In external trade, commercial banks also offer loans to exporters to cater for the costs they incur in production and exporting.
- Commercial banks provide long-term finance for the improvement of agriculture.
    - They provide finance for farmers to buy inputs and to cover other costs involved in farming.
    - The farmers pay back the money to these commercial banks after selling their farm produces.
- Commercial banks help in channeling the funds to productive investments.
    - The finances organized by commercial banks is distributed to all sectors of the economy which increases productivity within an economy.

Merchant Banks

- Merchant banks are financial organisations which deal with international finance, loans for companies, high net worth individuals and underwriting new issues.
- Merchant banks have more experience in dealing with foreign trade hence they are experts in dealing with multinational companies.
- Merchant banks do not provide regular banking services for the general public.
- An example of a merchant bank in Zimbabwe is MBCA bank.

Roles of Merchant Banks

- Merchant banks help their clients in raising finance.
    - The money raised by merchant banks for their clients can be used to start-up businesses.
    - Merchant banks raise finance by issuing debentures, shares and bank loans.
- Merchant banks offer promotional activities.
    - They help entrepreneurs in project identification, getting government approvals and incentives.
- Merchant banks are brokers in stock exchange.
    - Merchant banks buy and sell shares on the stock exchange on their clients' behalf.
    - Also, merchant banks research on equity shares.
    - They advise their clients on which shares to buy, how many and the time for selling them.
- Merchant banks help in project management.
    - These banks provide advice to their clients on the location, preparation and planning of projects.
    - Also, they find information pertaining incentives and concession from the government.
- Merchant banks help their clients in processing registration of their industrial projects.
    - Merchant banks carry out some formalities on behalf of their clients such as getting government's permission to expand, modernize or starting new businesses.
- Merchant banks give special assistance to entrepreneurs and small companies.
    - The assistance provided by the merchant banks include interpreting government policies and identifying business opportunities in the country.
    - Merchant banks help the entrepreneurs and small companies to better utilize options available to their best capabilities.
- Merchant banks help their clients to manage interest on debentures/loans and dividends on shares.
- Merchant banks provide advice on tax matters.
- Merchant banks offer guidance on proper investment decisions to clients.

Building Societies

- A building society is a mutual organization which offers banking and financial services, especially saving and mortgage lending.
- The clients can invest money and earn interest.
- The examples of building societies in Zimbabwe are FBC Building Society and CABS.

Roles of Building Societies

- Building societies provide funds to clients who use them to buy or construct properties.
- Building societies offer building loans to their clients which are called mortgage loans.
- Apart from mortgage loans, they offer other types of building loans.
- They accept deposits from their clients in forms of savings and fixed accounts and fixed share accounts.
- They also have ATMs and other point of sale services.
- Building societies provide advice to customers on their investments.

- They issue and receive cheques on request.

Central Bank

- A central bank can also be called a reserve bank.
- A central bank is an organisation that manages the country's currency.
- Central bank controls money supply in the economy.
- The central bank is responsible for regulating other banks.
- In Zimbabwe, the central bank is called the Reserve Bank of Zimbabwe (RBZ).

Roles of the Reserve Bank of Zimbabwe.

- Issuing of notes and coins
  - The central bank has the role of issuing notes and coins in the economy.
  - Money circulating in the economy is controlled by the central bank.
- Controlling payments to and from the government.
  - Central bank manages all the money earned by the government, for example, revenue collected from taxation.
  - It also controls all the payments that are made by the government such as payment of salaries and wages to government workers.
- Managing the national debt.
  - The central bank is responsible for managing the national debt.
  - The national debt refers to the money the government owes other countries and financial institutions such as the International Monetary Fund.
- Acts as banker's bank
  - The central bank has control over all other banks in Zimbabwe.
  - All other banks in the country keep a certain percentage of their funds at the central bank.
  - It also acts as the lender of last resort to all banks in the country.
  - The central bank is the lender of last resort because it gives loans to other banks and financial institutions in the country.
- Central bank controls the government's monetary policy.
  - Central bank controls money through the monetary policy.
- Manages reserves of the country.
  - These reserves which are managed by the central bank include foreign currency and national gold.
- External control of the currency.
  - The duty of central bank is to maintain and control the external value of the countries' currency.
  - The central bank monitors the exchange rate and takes measures to control or improve it, when necessary.
- It performs the clearing house function.
  - This refers to the function of a bank or its arm to clear up cheques that have been drawn or received.
  - Nowadays, electronic transfers also need to be cleared.

Summary

- Financial institutions include banks and building societies.
- There are different types of banks that include commercial banks, merchant banks and the central bank.
- In Zimbabwe, the Reserve Bank of Zimbabwe (RBZ) is the central bank.
- Commercial banks have many roles in the economy. They:
  - form the capital base in an economy.
  - provide finance to the government.
  - provide long-term credit,

- help in the execution of the monetary policy.
- help in financing consumers' activities.
- help in providing finances for internal and external trade.
- provide long-term finance for the improvement of agriculture.

Merchant banks are important in the economy as they:

- help their clients in raising finance,
- offer promotional activities,
- are brokers in the stock exchange,
- help in project management,
- help their clients in processing the registration of their projects,
- give special assistance to entrepreneurs and small companies.

The reserve bank performs many functions that include:

- formulating the monetary policy,
- ensuring financial stability and controlling the money deposited into financial institutions by clients,
- Serving as the bank for other financial institutions such as commercial banks, merchant banks and building societies,
- giving cheques and lend money to other member banks,
- Controlling inflation by monitoring the exchange rate in the economy,
- ensuring that the exchange rate is stable in the economy and controls speculation which causes fluctuation of the exchange rate,
- printing and supplying money in an economy,

Monetary policy and Fiscal policy

1. distinguish between monetary and fiscal policy
2. describe how a monetary and fiscal policy can be used to achieve economic objectives

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Monetary policy

- Monetary policy involves the change in money supply and interest rate in the economy in a bid to influence the economic activities and the level of aggregate demand.
- It is a tool that is used by the government in order to influence inflation, growth and employment in an economy.
- Monetary policy is mainly focused on interest rates and money supply in an economy.
- It may also focus on the exchange rate of an economy.
- The monetary policy may seek to change the interest rates in an economy so as to influence the level of borrowing, saving and spending by either firms or individuals.
- The government can increase interest rate so as to make borrowing more expensive thus reducing the demand for loans.
- The government can also influence the exchange rate of its currency in a bid to influence its level of trade.
- A direct increase or decrease in supply of money can also help the government to achieve its objectives.
- There are two types of monetary policy and these are expansionary monetary policy and contractionary monetary policy.

Expansionary monetary policy

- Expansionary monetary policy involves an increase in money supply and a decrease in interest rates.
- This is done in order to boost the aggregate demand of the economy.
- If an economy is experiencing a rise in unemployment and/or a fall in economic growth, expansionary monetary policy is used to curb the problem.
- A decrease in interest rate means that firms and individuals will be able to increase their borrowing since it will be cheaper for them to borrow.
- Also, savings are most likely to become less favourable and the incentive to save will not be attractive hence savings will decrease.
- A decrease in interest rate can increase consumer spending on goods and services thus investment expenditure by the private sector is most likely to increase so as to meet the increased demand.
- As investment expenditure increases, national output and employment opportunities will also increase.
- In an expansionary monetary policy, the government can also increase money supply so as to solve economic problems.
- An increase in money supply boosts spending on goods and services hence the government can print more money to increase its supply so as to boost aggregate demand.

Contractionary monetary policy

- Contractionary monetary policy involves an increase in interest rates and reduction in money supply.
- This is done to reduce aggregate demand in an economy.
- An increase in interest rates results in borrowing becoming more expensive thus spending is most likely to decline.
- A decrease in aggregate demand can solve the problem of rising inflation in the economy.
- The government can also reduce the amount of money supply in the economy thus consumers' spending is most likely to decline.
- On the other hand, a fall in aggregate demand can result in a decline in investments thus economic growth can be affected in the future.

Analysis of monetary policy

- Problems of rising inflation and increase in unemployment are quickly corrected by an increase or decrease in money supply and interest rates.
- To reduce unemployment problem, the government can use expansionary monetary policy.
- To reduce inflation, the government can use contractionary monetary policy.
- Monetary policy is also flexible in relation to the size of the change that should be implemented for example, money supply.
- In a bid to reduce fight inflation, the government may also worsen it. This is because if the government decreases money supply and increases interest rate, the price for borrowing will increase.
    - However, businesses or firms that borrow money at this increased rate are most likely to increase their prices in order to cover their costs.
    - Therefore, inflation is most likely to increase.
- Expansionary monetary policy may fail if the confidence of firms and households is low. They may not invest or spend even if there are low interest rates.

Fiscal policy

- Fiscal policy involves the elements of government spending and taxation.

- These elements may help to determine the aggregate demand and the level of economic activities in an economy.
- Fiscal policy can either be expansionary or contractionary.

Expansionary fiscal policy

- Expansionary fiscal policy can also be known as reflationary fiscal policy.
- Under expansionary fiscal policy, the government can increase expenditure so as to boost employment and output in the economy.
- They can also boost employment and output by reducing taxation rate.
- Therefore, with expansionary fiscal policy, for employment and output to increase the government should increase its expenditure and reduce taxation.
- If the government decreases tax rates, for example taxes on profits, then it would mean that firms may have an incentive to increase their output as well as investments.
- As investments increase, it means that the production capacity of firms will increase, hence more workers are most likely to be employed thus reducing unemployment.
- The government can also cut taxes on individual income hence more people will become more willing to work.
- A reduction in taxes may also result in an increase in disposable income, thus there will be an increase in aggregate demand in the end.
- However, as disposable income increases people may decide to save. In that case, the aggregate demand in the economy will not increase.
- Expansionary fiscal policy is mainly implemented during economic recessions when there is rising unemployment and when demand for goods and services is very low in the private sector.
- The implementation of an expansionary fiscal policy may mean that the government is increasing its budget deficit.
- The budget is the amount that the government spends in a given period in relation to the amount of revenue collected in that given period.
- Revenue is mainly collected from taxes.
- Therefore, if expenditure exceeds tax revenue there will be a budget deficit and the government may end up borrowing money in order to finance the deficit.

Contractionary fiscal policy

- Contractionary fiscal policy is also known as deflationary fiscal policy.
- It is mainly aimed at reducing aggregate demand in the economy hence the government will reduce its spending and increase taxation.
- If taxes increase, it means that the disposable income will decline and a decline in disposable income reduces consumer spending.
- However, an increase in taxation may reduce profits of firms hence reducing investments which in turn leads to lower growth of the economy.
- The government can also reduce its spending so as to solve a budget deficit.
- However, a reduction in spending especially on public goods may not be favourable to the economy.

Analysis of fiscal policy

- The instruments of the fiscal policy redistribute income in the economy.
    - The government may charge progressive and regressive taxes.
    - Progressive taxation has a higher percentage rate of tax on individuals with higher income and regressive tax is charged on low income earners.
- Fiscal policy is complicated to use since it may be difficult for the government to come up with the exact amount of government spending and taxation that have to be adjusted during an economic recession.

- An increase in aggregate demand and a decrease in taxation may result in an increase in inflation in the event that aggregate demand increases more than aggregate supply.
- A cut in government spending and an increase in taxation may also lead to a rise in unemployment.
- The government may borrow from the private sector in order to finance its deficit.
  - However, crowding effect is most likely to be experienced.
  - Crowding effect is a situation whereby the private sector lends more money to the government and is left with less money to spend on their errands.
- An increase in taxation may result in a fall in labour productivity, output and profits. As profits decline, firms may retrench some of their workers so unemployment is most likely to increase.
- An expansionary fiscal policy may create speculations of a rise in inflation.
  - This is because, as the government cuts on taxes and increase spending, aggregate demand is most likely to increase.
  - However, if aggregate demand exceeds the aggregate supply, firms may increase their prices.
  - As firms increase their prices, workers may demand for more wages thus wage spiral inflation may be experienced.
  - A demand for more wages also results in an increase in production costs thus firms will be forced to employ less workers.
  - This may result in an increase in the unemployment rate.
- The policy may only be effective for a short period of time since in the long term households and firms may revert to their old ways of operation.
- High taxes may reduce aggregate supply in the economy.

Inflation

1. Explain the meaning of inflation
2. Describe demand pull-inflation
3. Describe cost-push inflation
4. Distinguish between demand pull and cost-push inflation

Inflation

- Inflation means a sustained increase in the aggregate or general price level of goods and services in an economy.
- The term aggregate demand refers to the total demand of a good or service in the whole economy.
- This means there is an increase in the cost of living.
- It is when too much money is chasing too few goods.
- Inflation means that your money won't buy as much today as you could yesterday.
- Inflation creates problems in the economy because it reduces the value of money, thereby increasing the cost of buying products in the country.
- When the general prices of products go up, it does not mean that all prices of goods and services are going up.

- The prices of some products may remain the same or even decrease, but on average the prices of the products are rising.
- In Zimbabwe, the rate of inflation has varied from 50% in 2011 to 3% in 2016.
- The case of the United Kingdom can better illustrate the effect of inflation on the economy.
- Fig 12.1.1 shows inflation rate in the period between 2000 and 2009 in United Kingdom.

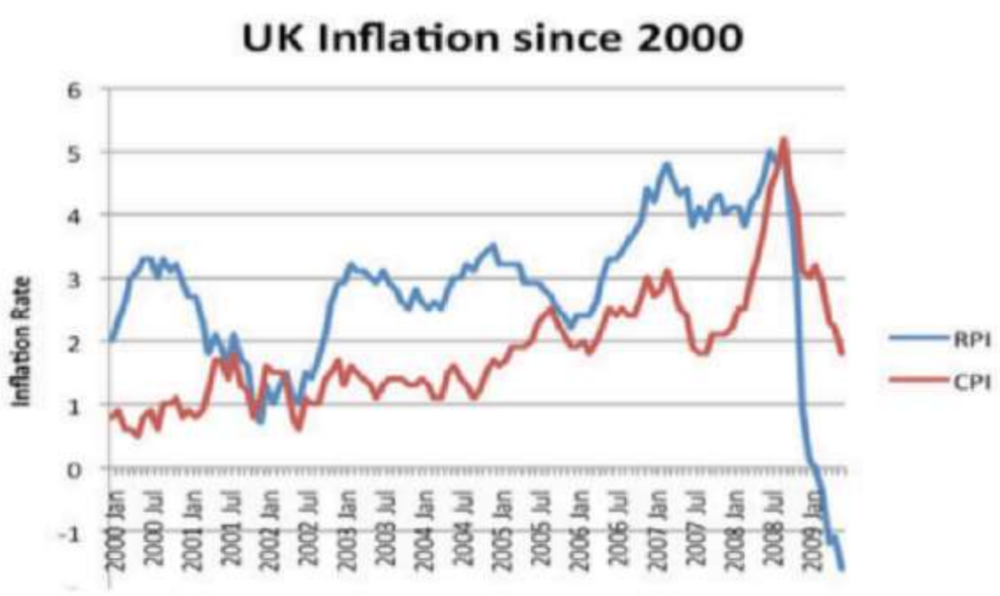

Fig 12.1.1: United Kingdom Inflation Rate

- In 2008, inflation peaked at 5%, primarily because of a surge in the price of oil.
- Inflation fell in 2009, because of the recession and fall in demand.

Causes of inflation

- Inflation can be caused by changes on the demand and the supply side of goods and services in an economy.
- The factors that give rise to inflation can be internal and external.

Internal factors

- Some causes of inflation arise directly from the domestic economy, for example due to the decisions of utility providers to increase the prices of their products such as electricity, fuel or water.
- A rise in the tax rate may increase inflation in the economy in the short term because it increases the production costs of firms.
- An increase in the prices of domestically produced raw materials and other factors of production gives rise to inflation.

- Higher government spending and increased borrowing create extra demand of money leading to price increases.
- A fall in interest rates may stimulate too much demand of money. This may lead to a rise in demand for loans which leads to house price inflation.
- Rising labour costs caused by wage increases which are greater than improvements in productivity also contributes to inflation.
- Another internal factor that gives rise to inflation is rising prices of property and rentals.

External factors

- Inflation can also come from external sources, for example a sustained rise in the price of crude oil or other imported commodities like foodstuffs and beverages.
- Fluctuations in the exchange rate can also affect inflation.
- For example, a fall in the value of the US dollar against other currencies might cause higher import prices for items such as foodstuffs.
- A depreciation of the exchange rate increases the price of imports and reduces the foreign price of a country's exports.

Types of inflation

- The main types of inflation are cost-push inflation, demand-pull inflation and wage spiral inflation.

Cost push inflation

- This is inflation caused by increase in the cost of production of firms.
- The increase in cost of production will push the prices up.
- Cost of production may rise due to an increase in the prices of raw materials, machinery and wages.
- Fig 12.1.2 illustrates how costs of production cause inflation.

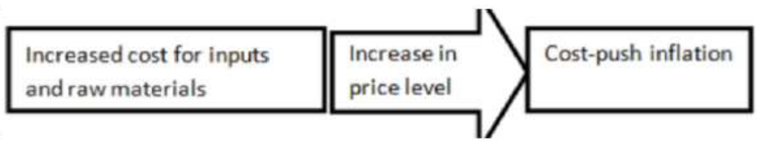

Fig 12.1.2: Cost Push Inflation

- Fig 12.1.3 shows the effect of a rise of cost of production which results in cost push inflation.

- An increase in the cost of production leads to a decrease in the production of goods and services because firms are aiming at maximizing profits.

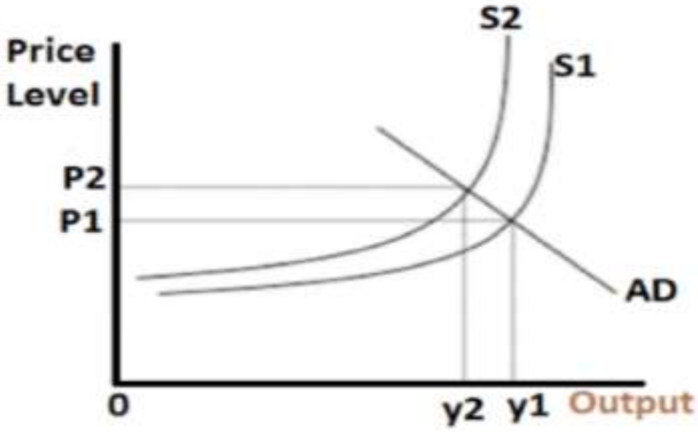

Fig 12.1.3: Effects of Cost of Production

- If the cost of production rises, it forces the supply curve to shift to the left.
- The shift of the supply curve to the left, from S1 to S2, means less goods are now being produced.
- The price of goods will then rise from P1 to P2.

Demand pull inflation

- This occurs when total demand increases at a faster rate than total supply.
- It occurs when the economy is growing faster than the normal trend.
- When the supply of money in an economy exceeds the available goods and services, it will result in demand pull inflation.
- If total demand exceeds total supply, firms will respond by pushing up prices.
- Total demand may rise due to a rise in consumer demand.
- Total demand rises because of a rise in investment demand.
- Increase in government expenditure causes demand to rise.
- An increase in net exports causes total demand to rise due to an increase in income.
- Given full employment, such increase in total demand leads to an upward pressure in prices.
- Fig 12.1.4 illustrates demand pull inflation.

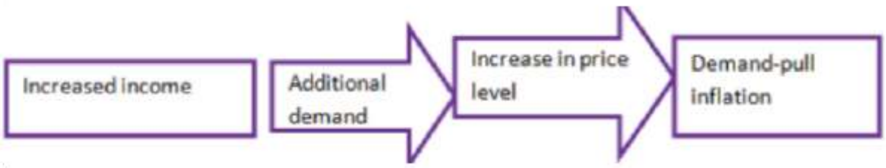

Fig 12.1.4: Demand Pull Inflation

- Fig 12.1.5 shows how a rise in demand causes inflation.

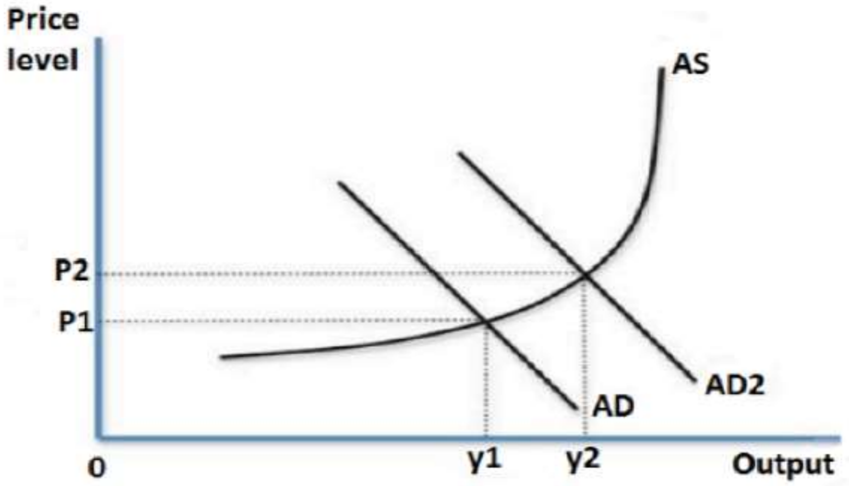

Fig 12.1.5: Effects of a Rise in Demand

- An increase in demand from AD to AD2 will force firms to increase prices from P1 to P2.

Wage push inflation

- Increases in wages cause inflation.
- It is a combination of cost push and demand pull inflation.
- High wages mean high cost of production and more money in circulation.
- Therefore, prices of goods and services are increased.
- A wage-price spiral comes into effect.
- Wage-price spiral is a condition when wages are increased due to inflation.
- This increase in wages causes firms to raise prices further.

- This further increase in prices leads to a further demand for wage increases, which stimulates more price increases.
- The reason is that rising wages increase cost of production and the increased costs are passed on to the consumers in the form of higher prices.
- Also, rising wages give consumers greater disposable income and therefore cause increased consumption and aggregate demand.

EFFECTS OF INFLATION

1. Explain how consumers are affected by inflation,
2. Describe the effects of inflation on producers,
3. Illustrate how the government would be affected by inflation
4. Explain the effects of inflation on the functions of money.

INFLATION

- Inflation refers to the general increase in price levels of goods and services.
- It can also be referred to as a decrease in the purchasing power of money in an economy.
- Inflation results in a general increase in the cost of living due to a continuous rise in price levels.
- Inflation can be divided into demand-pull and cost-push inflation.
- Demand-pull inflation occurs where aggregate demand is more than aggregate supply, causing prices to rise.
- Cost-push inflation is a situation where there is an increase in the cost of production resulting in a decrease in aggregate supply which causes the price level to rise.
- Inflation affects consumers, producers, government and the functions of money in the economy.

How consumers are affected by inflation.

- Inflation causes a fall in the real value of money, reducing the purchasing power of consumers.
    - Due to an increase in the general price levels, consumers can no longer buy the same basket of goods and services using the same income.
    - For example, an individual who was able to buy grocery worth $50 in 2006 would buy the same quantity of goods and services for $100 in 2007.
- Inflation causes a fall in real income of consumers.
    - Real income is the income of individuals that is adjusted for inflation.
    - This affects people with fixed incomes such as pensioners.
- Inflation causes uncertainty to consumers which makes it hard for them to plan ahead.
    - This results in consumers being reluctant to spend their income thereby reducing consumption.
- Inflation reduces consumer savings.
    - If the inflation rate is increasing faster than the interest rate, consumers' savings will lose value.
    - For example, if the inflation rate increases by 9% and the interest rate increases by 5%, it means there is a negative interest of 4%.
- Inflation reduces the variety of products offered to consumers since suppliers will not be able to produce more products as a result of increased cost of production.
- Inflation causes hoarding and black market in an economy which cause shortages of goods and services.
- Inflation causes low standards of living due to shortage of goods and services.
    - This makes it hard for consumers to afford basic goods and services.

Effects of inflation on producers.

- Inflation increases the cost of production since the cost of raw materials increase.
  - This makes it hard for producers to produce more goods and services.
- It reduces competitiveness of domestic products in the international market because an increase in the costs of production results in an increase in exports.
  - This makes consumers to opt for imports which become cheaper.
- Inflation affects infant firms as they find it hard to survive due to higher costs of production.
- It reduces the growth of firms due to uncertainty.
- Inflation makes it hard for firms to plan ahead as they cannot properly forecast on their revenues and costs.
- Inflation results in an increase in menu costs, which are costs of reprinting the price tags of their products since prices keep on changing within a short period
- It increases the cost of borrowing money.
  - This is because during a period of inflation, lenders tend to charge high rate of interest to prevent losing their real incomes.
  - So, the producers will tend to refrain from borrowing leading to less investment in the economy.
- Inflation causes a fall in profits of producers who sell their goods on credit.
  - When the amount of money is paid after a certain period of time, it would have lost its value if it was not adjusted for inflation.
- When the inflation rate is higher than the interest rate, there is reduction in savings.
- The firm's income which is saved for reinvestment will be eroded by inflation.

How the government is affected by inflation

- Inflation affects the government because it results in a decrease in economic growth.
- The decrease in economic growth is illustrated in fig 13.1 below.

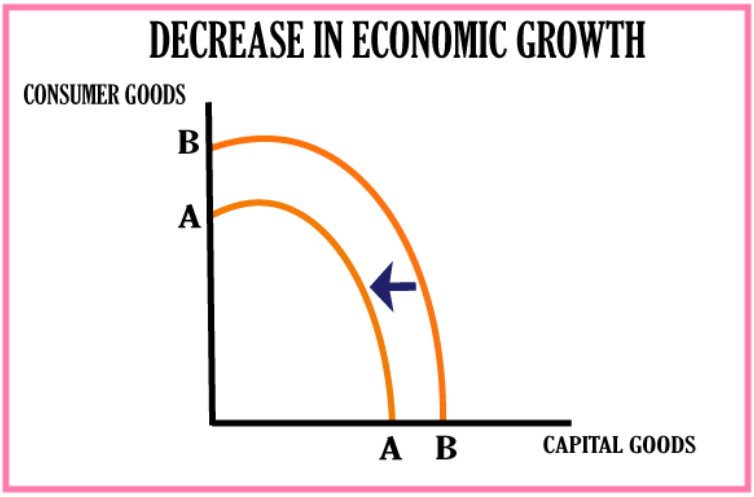

Fig 13.1: Decrease in economic growth

- From the graph, when there is cost push inflation, the PPC shifts inwards resulting in the reduction of both consumer and capital goods produced by firms in an economy.
- Production of goods is reduced from BB to AA, which results in negative growth.
- Negative economic growth is associated with many problems which include increase in unemployment and lower standard of living.
  - Increased unemployment increase government expenditure in trying to cater for the unemployed.
  - Government may incur additional costs trying to provide goods and services that are short in supply.

- The government finds it hard to fulfil its financial obligation such as paying civil servants.
    - This may result in economic unrest due to increased strikes by workers.
- Inflation may lead to the collapse of the monetary system.
    - The government may be forced to introduce a new currency.
- Inflation results in the government being unable to provide essential goods and services like health and education.
- High level of inflation may cause political instability.
-

The effects of inflation on functions of money.

Inflation and medium of exchange

- When inflation is rapid, the currency may become unaccepted as medium of exchange.
- The consumers and other economic agents resort to barter trade or the use of other countries' currencies.
- For example, in Zimbabwe in 2008, the bearer cheques which were being used as a medium of exchange became unaccepted and the government had to legalise the use of currencies from other countries such as the rand from South Africa and US dollar.

Inflation and unit of account.

- Due to an increase in inflation, it becomes hard to compare values of different products in an economy.

Inflation and store of value.

- The wealth of individuals and firms will be eroded away as the money loses value each day.
- So, inflation reduces people's savings in an economy especially when the real rate of interest is negative.

Inflation and standard of deferred payment

- If inflation is high, it becomes unprofitable for firms and individuals who sell on credit.
    - When the consumers finally pay for the goods and services, the money that the supplier gets will be of lesser value.
- The suppliers will not be able to cover the costs they incurred in the production process thereby making losses.
- Producers may shut down their operations because they will no longer be able to cover even the fixed costs of the factories.
- Individuals become unwilling to become creditors, rather they want to become debtors.
- When they pay back, the money would have lost value thereby creditors lose out.

Summary

- Inflation refers to the general increase in price levels of goods and services.
- Inflation causes a fall in the real value of money, reducing the purchasing power of consumers.
- Inflation affects the consumers by causing:
    - A fall in real income of consumers,
    - Uncertainty to consumers which makes it hard for them to plan ahead,
    - A reduction in consumer savings,
    - A reduction in variety of products offered to consumers,
    - Hoarding and black market in an economy,
    - And low standard of living.
- Producers are also affected by inflation as it:
    - increases the cost of production,
    - reduces the competitiveness of domestic products on the international market,

    - negatively affects infant firms,
    - reduces the growth of firms due to uncertainty,
    - results in an increase in menu costs,
    - increases the cost of borrowing money,
    - causes a fall in profits of producers,
    - leads to reduction in savings,
- Inflation affects the government because it:
    - results in a decrease in economic growth,
    - leads to the collapse of the monetary system,
    - results in the government being unable to provide essential goods and services like health and education,
    - and may result in political instability.
- Negative economic growth is associated with many problems such as increasing unemployment rate and lowering of standard of living of the people.
- The role of money in the economy is also adversely affected by inflation.

Measurement of inflation

1. calculate rate of inflation using Consumer Price Index (CPI) and Retail Price Index (RPI)
2. identify the current rate of inflation in Zimbabwe
3. compare rates of inflation for different periods in Zimbabwe
4. explain the monetary and fiscal policy tools used to curb inflation

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Measurement of inflation

- The rate of inflation in a country is measured by calculating the average percentage change in the prices of goods and services over a period of time.
- However, it is difficult to obtain up to date information on prices of a variety of goods and services in a country.
- Most countries track the prices on selected goods and services
- In Zimbabwe, ZIMSTATS collects information and tracks on a number of items that comprise the consumer basket.
- The consumer basket contains essentials and basic goods and services.
- This basket is then tracked across various retailers and wholesalers over a period of time whether a year or half year.
- The prices tracked will then be used to calculate consumer price index(CPI) and retail price index (RPI)
- CPI and RPI are calculated in the same manner, the only difference is type of goods, services and households used.
- The CPI measures price changes from the perspective of the consumer and tracks the price changes in various goods and services.
- The RPI looks at price changes from the sellers' perspective by measuring the prices of raw materials that are in production.

Consumer price index (CPI)

- CPI is a measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food and medical care.
- It is calculated by taking price changes for each item in the predetermined basket of goods and averaging them.
- Changes in the CPI are used to assess price changes associated with the cost of living.
- The CPI is one of the most frequently used statistics for identifying periods of inflation or deflation.
- Most countries use CPI as a measure of inflation providing a cost of living index.
- The average price of the consumer basket in the first year of calculation is 100.
- The first year is termed the base year.
- CPI is calculated as :

CPI = weighted average price level year 1weighted average price level base year×1001CPI = weighted average price level year 1weighted average price level base year×1001

- If on average, the goods and services in the basket rise in price by 30%, the price index will be 130%.

CPI = weighted average price level year 1−weighted average price baseweighted average price level base year×1001CPI = weighted average price level year 1-weighted average price baseweighted average price level base year×1001

=130−100100×100=130-100100×100

=30=30

Retail price index (RPI)

- Retail Price Index (RPI) is a measure of inflation published monthly by the ZIMSTATS office.
- RPI measures the change in the cost of a representative sample of retail goods and services.
- Many employers also use it as a starting point in wage negotiation.
- The RPI includes an element of housing costs, for example Council tax, mortgage interest payments, house depreciation, buildings insurance, ground rent, solar PV feed in tariffs and other house purchase costs such as estate agents' and conveyancing fees.

How to calculate RPI

- A base year is chosen.
- A list of items bought by an average family is drawn up which makes a consumer basket.
- A set of weights are calculated, showing the relative importance of the items in the average family budget.
- The greater the share of the average household bill, the greater the weight.
- The price of each item is multiplied by the weight given to the item, so that the contribution of the item's price is in proportion to its importance.
- The price of each item must be found in both the base year and the year of comparison (or month).
- This enables the percentage change to be calculated over the desired time period.
- For example, let’s assume that an economy has only 4 products (A = Apples; B = Bananas; C = Carrots and D = Doughnuts). Also, imagine that, over a year, apples increase in price by 20%, bananas increase by 10%; carrots fall by 10% and doughnuts fall by 20%.

- You would think that these cancel each other out so that inflation is zero.
- But, what if consumers do not allocate their incomes evenly between the four goods?
- The burden of inflation might actually be ‘positive’ or ‘negative’ rather than neutral.
- For example, households might choose to spend 40% of their income on apples, 30% of their income on bananas, 20% of their income on carrots and only 10% of their income on doughnuts.
- We can put this information into a table:

GOOD	% INCOME (Y) SPENT	PRICE CHANGE	PRICE INDEX*	WEIGHTS**	WEIGHTED INDEX
A	40	+ 20%	120	4	480
B	30	+ 10%	110	3	330
C	20	- 10%	90	2	180
D	10	- 20%	80	1	80

Table 13.1: Inflation

- The base index for each good is 100. A 5% price rise is an index of 105, and a price drop of 5% is an index of 95.
- The weights are based on the relative importance of the product to households.
- For example, if a household spends 8% of their income on chocolate, and 25% on transport, the weights would be 8 and 25 respectively.
- To find the average inflation rate, we multiply the weights by the individual price index for inflation (or deflation), and then sum these and divide by the weights, as follows:

GOOD	% Y SPENT	PRICE CHANGE	PRICE INDEX	WEIGHTS	WEIGHTED INDEX
A	40	+ 20%	120	4	480
B	30	+ 10%	110	3	330
C	20	- 10%	90	2	180
D	10	- 20%	80	1	80
					1070/10

Table 13.1.2: Inflation Index

- Which gives an inflation index of 107, and an inflation rate of 7%.

Current inflation rate in Zimbabwe

- According to ZIMSTATS, the current inflation rate for Zimbabwe is 3.46%.

Comparison of rates of inflation between different periods

- The table shows changes in inflation rates for Zimbabwe from 2012 to 2018.

YEAR	INFLATION RATE
2012	3.74
2013	1.63
2014	-0.21
2015	-2.14
2016	-1.57
2017	2.46
2018	9.47

Table 13.1: Comparison of inflation

- Inflation has gradually decreased from 2012 to 2016 but started rising again in 2017.

Policies to curb inflation

Monetary Policy

- One way of controlling inflation is through a contractionary monetary policy.
- The major goal of a contractionary monetary policy is to reduce the money supply within an economy.
- This is done by decreasing money supply and raising interest rates.
- This leads to a reduction on spending.
- There is also less available credit which leads to less spending.
- Reduction in spending is important during inflation because it helps to reduce the rate of economic growth and, in turn, the rate of inflation.
- When the Reserve Bank of Zimbabwe increases interest rate, banks have to increase their bank rates as well.
- If banks increase their rates, less people want to borrow money because it costs more to do so. Therefore, is decrease in spending which lowers inflation.

Fiscal policy

- Fiscal policy can be defined as government's actions to influence an economy through the use of taxation and spending.
- A contractionary fiscal policy is used to control inflation.
- A contractionary fiscal policy involves reducing government expenditure and increasing taxation.
- The government should reduce its spending.
    - For example, it may stop expenditure on projects such as construction of roads, airports, hospitals and schools, among others.

- It can reduce transfer payments.
- Transfer payments are the payments that are made by the government to households where there is no production of goods and services.
- Employment benefits and assistance when there are emergencies such as floods are examples of transfer payments.
- The government may need to stop provision of subsidies to firms.
- It can also choose to delay the repayment of debts to the public.
- The reason for the government to cut its expenditure is to reduce the level of demand in the economy, which in turn reduces inflationary pressure.

- To control inflation, the government can increase the level of taxation.
    - It can introduce new direct taxes and increase the rate for existing taxes.
    - Raising taxation results in lower purchasing power resulting in less inflationary pressure.

Population

1. Explain the meanings of terms population and population census
2. Discuss on the importance of conducting a population census.

Population

The population of a country usually changes over time.

- Population means the total number of people who live in a place within a certain period of time.
- The information about the country's population is collected through a population census.
- A census shows changes that take place in a country's population.
- Usually the population of a country grows either slowly or rapidly.
- Population growth refers to the increase in the number of people who live in a country or place.
- Population growth can be positive, if the number of people at a certain date is more than what it was in previous years.
- The growth can be negative, if the number of people are now less at a certain date as compared to some previous years.
- The number of births, number of deaths as well as the number of people who migrate in or out of a place influence the change in the population of a place.
- The population of an area affects the level of economic activity as well as use of resources.
- The diagram below shows examples of economic activities that can be affected by population size.

Population size

- Population size is the actual number of people within a certain place in a given period of time.
- It is measured using a population census.

Population census

- Population census means the counting of people in a place at a certain date.
- The national census means the counting of people in the country at a particular date.
- Census involves collecting, sorting, analyzing, evaluating of relevant information as well as publishing the reports.
- Those who count people during a census are called enumerators.
- A census is held after a certain period of time. For example, in Zimbabwe a census is normally held after ten years.
- A census provides a lot of information on the population that is used by many groups of people for planning purposes.
- Economists, educationists, the central government, the local government, politicians, and business people make use of such information.

Information obtained from national census

- At national level, there are three main aspects that may need to be addressed by a census:
- The number of people in the country,
- The kind of people they are,
- The distribution of the people throughout the country.
- Information that relates to the population is called demographics.
- The census gathers and publishes information that relates to families such as marriages, childbearing, citizenship, divorces, number of children, level of education, the sex of the family members, the type and nature of accommodation.

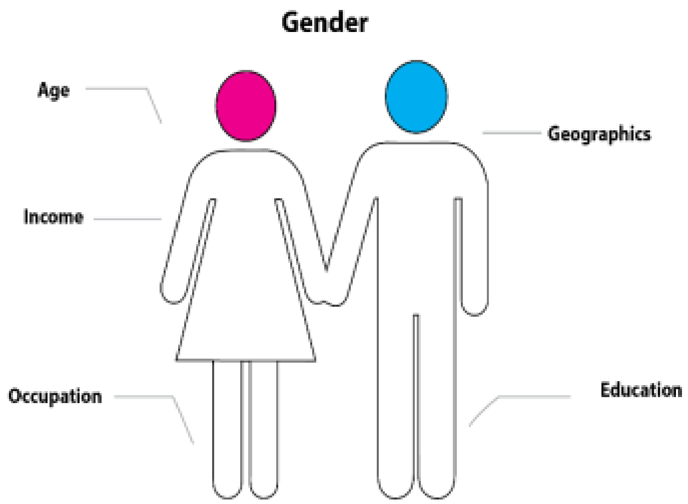


Fig 11.4: Demographic information

- The above diagram shows aspects that comes under demographic information.
- The information that is gathered can be used to show various ratios and trends.
- Some of the trends that can be indicated relate to birth rates, death rates, employment rate, literacy rate and growth rate among others.
- The number of people in the country
- The aim is to know the total number of people in the country.
- Population census focuses on how population size changes over time.
- The kind of people
- The census must help to identify the characteristics of the people that make up the population.
- The characteristics that are studied through the census include the age structure, sex, languages spoken, nature of employment, nature of accommodation and level of education.
- The statistics of the characteristics of people at a certain period may be used by a country to estimate the future population size.
- Population distribution

Population distribution shows how the people are spread all over the place or country.

- In a country, the government and other stakeholders need to know the number of people who live in the rural areas, in the urban areas, in each growth point, town, city, district and province.

The importance of population census

- The information that is obtained from a census is used for many reasons and by many groups of people, individuals and the government.
- For example, firms and non-governmental organizations use the information for planning purposes.

The government uses the information to make its plans.

- The government plans how best it can provide social services to its citizens.
- In order to make good plans, there must be enough, accurate and up to date information on population size and characteristics.
- It may plan on how to help disadvantaged people such as the aged, the disabled and children.
- It uses the information to find how it can distribute the resources available.
- It can also estimate the amount of revenue it can get from taxable individuals and firms.
- It will decide on the type of education that best meets the needs of its people and how it will deliver such education.
- The government needs to plan how to provide adequate houses to its citizens.
- The government makes plans on how best it can provide healthcare facilities.

Census information is used for political reasons.

- The size and composition of the residents can be used to demarcate constituencies.
- It can be used as well to determine the number of individuals to become members of parliament, senators or cabinet ministers.
- The information can show the number of eligible voters who are in the country.

Other essential uses of population statistics

- The government, including local authorities plans how to provide infrastructure such as roads, transport system and energy supply, among others that are needed for the existence and survival of businesses in the country.
- The government uses the information to help in employment creation.
- With an understanding of the population structure, the government is able to plan how to allocate resources such as water, land and capital resources it has.
- For example, the citizens may require land for farming, establishing factories and for mining.
- Businesses also use information obtained through census to plan how to invest in a country.
- If there are many households in an area, such as a city it means that there is more buying power. Therefore, more products should be availed to such people.
- The different businesses will produce the products that best suit the characteristics, sizes and composition of the population of a certain area.

Summary

- Population means the total number of people who live in a place within a certain period of time.
- The number of people who live in a place or country can increase or decrease as a result of factors that include deaths, number of birth and migration.
- Population growth refers to the increase in the number of people who live in a country or place.
- Population census means the counting of people in a place at a certain date.
- Census involves collecting, sorting, analyzing, evaluation of relevant information.
- Through a national census, the following information is obtained:
- The number of people in the country,

- The kind of people they are,
- The distribution of the people throughout the country.
- The information gathered through a census is used by various groups and organizations in the country for planning purposes.

Population distribution

1. Describe how population is distributed
2. Explain the meaning of population distribution
3. Explain population growth
4. Identify factors affecting population growth
5. Identify population size
6. Discuss the effects of population size

Population distribution

- Population distribution refers to how the members of the population are spread out according to their ages, sex, region and race, among others.
- The way the population of a country is distributed has a great impact on the allocation of resources in an economy.
- People of different ages make up the population of the country.
- Age distribution refers to the number of males or females who are at each age group.
- It is important for the government to know the number of people at various age ranges of the population.
- This helps in planning how to use the resources of the country to meet the various needs of people in the country.
- Population distribution can be demographic, geographical or occupational.

Demographic distribution

- Demographic distribution involves looking at the characteristics of population and the changes in population structures in different countries and economies.
- Demographic distribution mainly focuses on age and sex distribution.
- All the children, women and men in the country are put into various age ranges.
- Demographic distribution is denoted by the population pyramids.

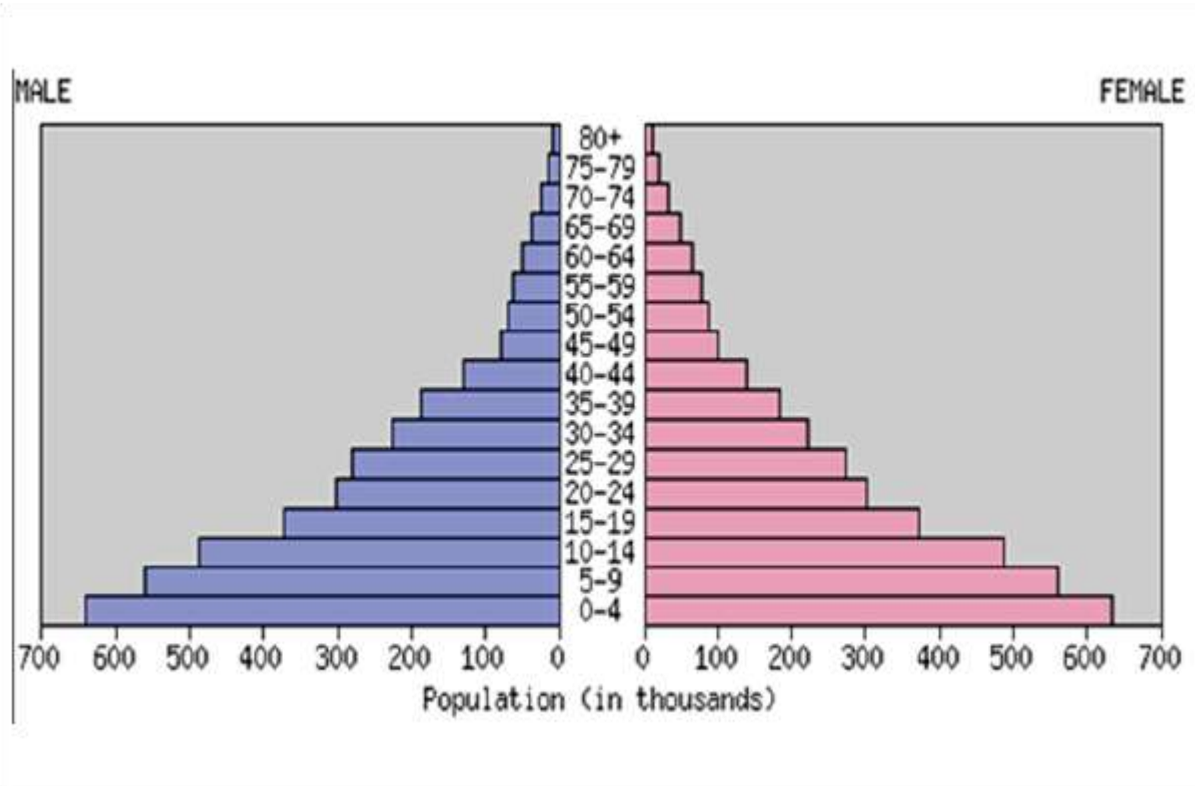
Population pyramid

- A population pyramid is a graph that shows the compositions of males and females arranged by their age ranges.
- The population pyramids show demographic distribution for both developed and under developed nations.

Population pyramid for a developing country

- This pyramid shows that the population is made by many young people.

Fig
13.1.1:



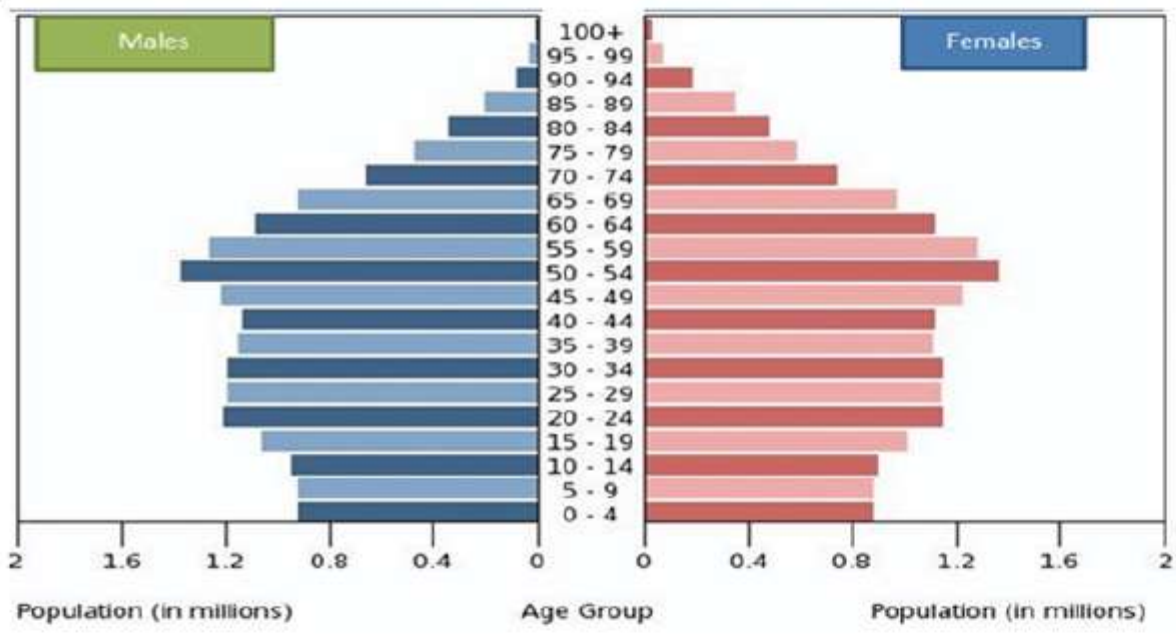
Population pyramid for a developing country

- There are fewer old people in this country or place.
- This type of population pyramid is mainly found in developing countries such as Zimbabwe, Nigeria, Zambia, etc.
- This is so because in such countries there is high birth rate and low life expectancy.
- The life expectancy for Zimbabwe according to United Nations Agency for Population is 58 years for males and 62 years for females by end of the year 2017.

Population pyramid of a developed country

- This population pyramid shows a country that has got more middle aged people than those who are below 15 years or those who are 65 years and above.

Fig 13.1.2:



Population pyramid of a developed country

- There are lower birth rates and examples include USA, United Kingdom and Canada.
- The country with such a population pyramid has got a low dependency ratio, since many of the people are within the working population.
- The country with more people in the age range 15- 65 has a large labour force.
- High population of aged people leads to a high dependency ratio.
- This also puts a lot of pressure on the working population as it takes care of the aged people.

Ageing population

- This refers to a situation where the number of old and elderly people are increasing in a country, whereas the proportion of children and young adults decreases.
- An ageing population leads the government and individual households to allocate more resources to meet the needs of these old people.
- This ageing population is mainly found in rural areas.
- The elderly will be moving to their retirement homes where they will rest and the young will be moving to cities for better opportunities and seeking for better jobs.
- The elderly will also be moving from the noise and pollution found in cities and towns.

Fig 13.1.3: Ageing population

Gender imbalance in a population

- This is caused by having many people of one sex as compared to another sex.
- There is a gender imbalance in a population if there are too many males over females or vice versa.
- A number of causes have been identified for such a situation.
- Gender ratio in Zimbabwe states that there are 93 males for every 100 females.

Geographical population distribution

- It relates to where people are living and how they are spread around various places in the country or the world over.
- The size of population varies from place to place, for example there are more people in Africa than in Europe.
- The government needs to understand the number of people who live in each geographical area so that it plans on how best to use the national resources to enhance the welfare of its people.
- This will also assist the government to distribute its wealth among its provinces or districts.
- According to the 2012 Zimbabwean census results, 33% of Zimbabwe's population live in the urban centers, whereas 67% lives in the rural areas.
- The population size in an area changes from time to time due to people migrating from one place to another in search of employment, better opportunities, and education or for weather purposes.
- In Zimbabwe, most people had to migrate to South Africa to look for employment.
- As more people move to urban areas, the government is forced to allocate more resources to accommodate the increasing population through:
    - Housing land
    - Business premises
    - Roads, water and infrastructure
    - Other infrastructures like hospitals, clinics.

Occupational distribution of population

- It relates to how the working population is spread among the different sectors of the economy.
- The three main sectors of the economy are primary, secondary and tertiary.
- The distribution of the working population into occupation determines the level of development of a country.
- Developing countries have a higher proportion of working population in the primary sector and smaller proportion in the tertiary sector.
- Developed countries have got a higher proportion of employees in the tertiary sector as compared to developing countries.
- In Zimbabwe, there is a large working population in the primary sector, particularly in agriculture.
- In developed countries, most of the population are employed in the services sector whereas in the developing most are in agriculture.

Population growth

- It is the increase in the number of people in a country.
- The population of the world is increasing year after year.
- Zimbabwe's population is also increasing.
- There are a number of factors that explain population growth.

Factors affecting population growth

Birth rate

- This is the main factor that influences the population growth rate of a country.
- The natural rate of increase of population is the difference between birth rate and death rate.
- Birth rate = total birthstotal population × 1000
- If the birth rate is greater than the death rate, there is a positive population growth rate in the country.
- However, if the death rate is greater than the birth rate there is a negative growth rate in that country.
- There are very few countries, if any, in the world that experience negative growth rates.
- Most countries of the world have higher birth rates than death rates leading to population growth.
- The following factors affect birth rate in a country:

Family planning services

- The availability of family planning services such as contraception has led to smaller family sizes.
- In some countries, contraceptives are given for free. In Zimbabwe, birth control pills are given for free at local clinics.
- Most educated people are now opting for smaller sizes of families than before.
- This is because they will need more time to chase their careers and to continue with education.

Customs and religion

- People in certain areas are influenced by their cultures or religious beliefs to avoid the use of birth control measures hence leading to an increase in birth rate.
- In Zimbabwe, there are some religious sects that do not allow the use of family planning methods.

Infant mortality rate

- The infant mortality (death of children under the age of one) rate in many countries has gone down because there are improved health facilities in the countries.
- The health care facilities are now better equipped to deal with diseases that affect children.
- Sanitation and housing conditions have improved greatly leading to lower infant mortality rate.
- In the past, many children would die during infancy which led to parents to have many children as a means to compensate for possible child deaths.
- Continuous education and awareness campaigns from the ministry of health and child care have helped in the Zimbabwean community in the reduction of child mortality.

Increased female employment

- Women who work do not want to break their career, so they avoid having many children.
- Some companies also do not give paid maternity leave, so women are discouraged from having children with the fear of forgoing wages and salaries.
- Another factor is women who work avoid having more children because they would want to go further with education so that they can aim for better jobs.

Marriage age

- Many people these days tend to marry late in life, after they would have worked for a long time.

- Late marriages reduce the family sizes.
- Women reach their menopause around forty to fifty years of age, hence the more late one marries the less the children one has.
- In some religions, women are forced to marry while still young, this leads to a high birth rate in those communities.

Economic prosperity of the country

- In countries where there is high economic prosperity, some people may be willing to have children but their lifestyles can affect their fertility.
- In developed countries, people's life styles lead them to be obese. Obesity can lead to low fertility rate.
- Fertility means the ability of the people to bear children.
- Fertility rate is the average number of children a woman can bear in her life time.
- If fertility rate is high, the population will grow. If fertility rate is low, population growth is reduced.
- In some countries where there is poverty, parents choose to bear more children with the hope that these children would provide labour for their economic activities such as farming.
- Some parents believe that if they have many children, these children will look after them when they are old.
- Some girls in certain communities in Zimbabwe are forced into early marriages to rich old men so that their families can get some food and money from the richer family.

Death rate

- Death rate refers to the number of people who die compared to every 1000 members of the population in a year.
- If the life expectancy in the country improves, it means that people live longer than before.
- Increased life expectancy leads to a higher population growth within a certain period.
- The life expectancy for Zimbabwe is 58 for males and 62 for females.
- If the number of people who die decreases, then there is a lower death rate.
- A low death rate in a country leads to high dependency ratio.

death rate = total deathstotal population × 1000

Factors that affect the death rate

- Availability of health care facilities and services in a country.
- The standard of living levels in the country.
- Availability of good sanitation and clean water.
- Spreading of infectious diseases in the country such as Ebola, Cholera and bird flu.
- Presence and nature of conflicts and crimes in the country.
- Occurrence of natural disasters in the country, for example earth quake, floods or veld fire.

Net migration

- Migration means the movement of people from one place to the other.
- The movement of the people from other countries into our country is called immigration.
- When people move out of the country, it is called emigration.
- Net migration is the difference between immigration and emigration.
- Labour mobility has a great effect on net migration.
- If many people leave the country in search of employment outside the country, the population of the country decreases.

- In recent years, many Zimbabweans left the country in search of employment in other countries like South Africa, UK Namibia and Botswana.
- This has led to brain drain as most of the qualified personnel are immigrating to other countries for greener pastures.

Government policy

- The government can influence population growth through the policies which it adopts.
- Since population growth is affected by birth rate, death rate and net migration, government regulations and programs on these aspects have direct or indirect effects on population growth.
- Some policies that affect population growth include:
    - Family planning programs
    - Promotion of education and women empowerment
    - Social and economic policies
    - Regulations on migration and citizenship

Family planning programs

- The government can encourage family planning through its programs.
- The government can provide cheap or free contraceptives in public clinics and hospitals.
- It can spearhead campaigns on contraceptives and small families in public media such as televisions, newspapers and radios.
- The government sometimes adopts integrated education touching on contraceptives, reproductive health, medical care, child care and nutrition.

Information and advocacy

- Provision of education on birth control measures among the population, particularly women helps in reducing the birth rate.
- Women are made aware of the various family planning options available to them.
- These include among others pills, the loop and injections.

Expansion and promotion of education in the country

- Education empowers both women and men to have small families.
- Educated women and men are more willing to use contraceptives and adopt smaller families.
- When educated women are employed, they will bear less children than the unemployed ones.

Government regulations on population growth.

- The government requires permits for foreigners to come and work in the country. This controls the number of job seekers that come into the country.
- The government has stiff laws that govern how a foreigner gets citizenship of the country.
- In Zimbabwe, for example dual citizenship is not allowed. Dual citizenship takes place if an individual becomes a citizen of two countries.
- In countries like South Africa, abortion is legalized. If couples have unwanted pregnancies, they can easily terminate them.
- Some countries can give a limit to the number of children a couple should have. Other countries with low population incentivize people to have more children.
- China, for example had a one-child policy, where only a single child was allowed per family.
- Some governments put in place policies and programs that encourage population growth.
- In such cases the government can subsidize houses, offer long maternity leave with full benefits and provide benefits when people marry or have a child.

- Some countries ban the use of contraceptives.
- Married people can be given tax benefits as the number of children they have increases.

Population size

- Population size is the total number of people who live in a given area or a country.

High population

- High population occurs when there are too many people relative to the resources available locally to maintain an adequate standard of living.
- This is because they have insufficient food, minerals and energy resources to sustain the population.
- The locals have low incomes, poverty, poor living conditions and high levels of emigration.

Low population

- This is a situation where there are far more resources than can be used by the number of locals living in that area.
- Standards of living usually rise through increased production and exploitation of resources available.
- Countries like Canada and Australia are good examples of such countries with low population.
- These countries export their surplus almost every year.
- They have high income levels, good living conditions, high levels of immigration and high levels of technological advancements.

Sustainable population

- Is a situation whereby the number of people when working with all the available resources will produce the highest per capita economic return.
- There are high standards of living and the quality of life is also high.
- If the size of population increases or decreases, from the optimum population, the output per capita and standards of living will also change respectively.

Effects of population size

- Changes in population size have effects on the economy.
- Changes that increase the population of labour force will affect the production level in the economy.
- The reason for this is that labour is one of the factors of production.
- When there is enough supply of skilled and experienced labour in the country, productivity is most likely to increase.
- An increase in population leads to a higher demand of goods and services in the economy.
- Therefore, businesses in the country will respond by producing more goods and services to meet the demand level.
- As the businesses increase production of goods and services, more employment is created in the country.

An increase in working population

- An increase in the working population reduces the dependency ratio.
- Higher labour force can stimulate economic growth and increase the national output.
- The standard of living of the people in the country is likely to improve.
- To further enhance productivity of the labour force, training and educational opportunities must exist so that the employees acquire the required knowledge and skills.

A rise in dependency rate

- An increase in the dependency ratio means that the income received by the workers is spread over many people.

- The government will be forced to allocate more resources to the production of social services such as schools, hospitals and housing.
- The production of more consumer goods on the expense of capital goods reduces the rate of economic growth.

Increase in ageing population

- More resources will be allocated to the production of consumer products that cater for the need of the aged.
- The ageing population is composed of all people who are 65 years and more.
- The main needs of the ageing population include good health care, old people's homes and enough supply of food and clothes.
- When there is more government and household spending on consumer goods, the economic growth rate of the country is reduced.

POPULATION GROWTH

1. Identify factors affecting population
2. Explain factors affecting population
3. Explain the meaning of economic development
4. Discuss how population affects economic development
5. Identify the causes of HIV and AIDS
6. Explain the effects of HIV and AIDS on population and economic development
7. Suggest solutions to HIV and AIDS.

Population is the total number of people who live in a country within a period of time.

- The size of the population determines the economic activities in a country.
- Due to the impact of population size on the economy, the government should have correct statistics on the composition of the population.

POPULATION GROWTH

- Population growth is the increase in the number of people in a country.
- Population size is the total number of people who live in a given area or a country.
- There are a number of factors that determine population growth.

Birth rate

- This is the main factor that influences the population growth rate of a country.
- The natural rate of increase in population is the difference between birth rate and death rate.

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- If the birth rate is greater than the death rate, there is a positive population growth rate in the country.
- However, if the death rate is greater than the birth rate there is a negative growth rate in that country
- Most countries in the world have higher birth rates than death rates leading to population growth.
- The following factors affect birth rate in a country:

Family planning services

- The availability of family planning services such as contraception has led to smaller family sizes.
- Most educated people are now opting for smaller sizes of families.

Customs and religion

- People in certain areas are influenced by their cultures or religious beliefs to avoid the use of birth control measures hence leading to an increase in birth rate.

Living standards

- The infant mortality (death of children under the age of one year) rate in many countries has gone down because there are improved health facilities in the countries.
- The hospitals and clinics are now better equipped to deal with diseases that affect children.
- Sanitation and housing conditions have improved greatly leading to lower infant mortality rate.
- In the past, many children would die during infancy, which led to parents to have many children as a means to compensate for possible child deaths.

Increased female employment

- Women who work do not want to break their career, so they avoid having many children.

Marriage age

- Many people these days tend to marry later in life, after they would have worked for a long time.
- Late marriages reduce the family sizes.
- In some countries people marry while still young, this leads to a high birth rate.

Economic prosperity of the country

- In countries where there is high economic prosperity some people may be willing to have children but their life styles affect their fertility.
- In developed countries, people’s life styles lead them to be obese. Obesity can lead to low fertility rate.
- Fertility means the ability of the people to bear children.
- Fertility rate is the average number of children a woman can bear in her life time.
- If fertility rate is high, the population will grow. If fertility rate is low, population growth is reduced.

Level of poverty

- In some countries where there is poverty, parents choose to bear more children with the hope that these children would provide labour for their economic activities such as farming.
- Some parents believe that if they have many children, these children will look after them when they are old.

Infant mortality

- If there is a high level of infant deaths in a country, normally the birth rate would be high as parents would expect some of their children to die before they reach adult age.

Death rate

- Death rate refers to the number of people who die compared to every 1000 members of the population in a year.
- If the life expectancy in the country improves, it means that people live longer than before.
- Increased life expectancy leads to higher population growth within a certain period.
- If the number of people who die decreases, then there is a lower death rate.

Death rate=total deathtotal population× 1000

Factors that affect the death rate

Death rate is affected by:

- Availability of health care facilities and services in a country,
- The level of standard of living in the country,
- Availability of good sanitation and clean water,
- Spreading of infectious diseases in the country, such as Ebola and bird flu,
- Presence and nature of conflicts and crimes in the country and
- Occurrence of natural disasters in the country such as earthquakes, floods or veld fire.

Net migration

- Migration means the movement of people from one place to the other.
- The movement of the people from other countries into our country is called immigration.
- When people move out of the country it is called emigration.
- Net migration is the difference between immigration and emigration.
- When the total number of people who leave the country is less than the total number of people who come into the country during a period of time, it is called positive net migration.
- When the number of emigrants is more than that of immigrants, there is negative net migration.
- The population size of a country increases when there is a positive net migration, whereas the population will decrease if there is negative net migration.
- Labour mobility has a great effect on net migration.
- If many people leave the country in search of employment, the population of the country decreases.
- In recent years, many Zimbabweans left the country in search of employment in other countries like South Africa, United Kingdom, Namibia and Botswana.

Government policy

- The government can influence population growth through the policies which it adopts.
- Since population growth is affected by birth rate, death rate and net migration, government regulations and programmes on these aspects have direct or indirect effects on population growth.
- Some policies that affect population growth include:
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    - Promotion of education and women empowerment
    - Social and economic policies
    - Regulations on migration and citizenship

Family planning programmes

- The government can encourage family planning through its programmes.
- The government can provide cheap or free contraceptives in public clinics and hospitals.
- It can spearhead campaigns on contraceptives and small families in public media such as televisions, newspapers and radios.
- In rural areas in Zimbabwe, for example, the government uses village health workers to educate women on the use of contraceptives.
- The government sometimes adopts integrated education touching on contraceptives, reproductive health, medical care, child care and nutrition.

Information and advocacy

- Provision of education on birth control measures among the population, particularly women help in reducing the birth rate.

- Women are made aware of the various family planning options available to them.

Expansion and promotion of education in the country

- Education empowers both women and men to have small families.
- Educated women and men are more willing to use contraceptives and adopt smaller families.
- When educated women are employed, they tend to have less children than the uneducated ones.

The government regulations on migration and citizenship have an effect on population growth.

- The government requires permit for foreigners to come and work in the country. This controls the number of job seekers that come into the country.
- The government has stiff laws that govern how a foreigner gets citizenship of the country.
- In Zimbabwe, for example, dual citizenship is not allowed.
    - Dual citizenship takes place when an individual becomes a citizen of two countries.
- In some countries, abortion is legalized. If couples have unwanted pregnancies, they can easily terminate them.
- Some countries can give a limit to the number of children a couple should have.
    - China for example, had a one-child policy where only a single child was allowed per family.

Government policies that promote population growth

- Some governments put in place policies and programmes that encourage population growth.
- In such cases, the government can subsidise houses, offer long maternity leave with full benefits and provide benefits when people marry or have a child.
- Some countries ban the use of contraceptives.
- Married people can be given tax benefits as the number of children they have increases.

Impact of HIV/AIDS on economic activities

- The HIV/AIDS epidemic is negatively affecting economic activities in the world.
- HIV stands for Human Immunodeficiency Virus.
- If someone is infected by HIV, the virus destroys the immune system.
- Since there is no cure nor vaccine for HIV/AIDS, it means the virus will remain in the human body for life.
- After a person has been infected with HIV for a long time, he/she develops AIDS.
- AIDS stands for Acquired ImmunoDeficiency Syndrome.
- A person who has been infected by AIDS will be attacked by opportunistic infections that include tuberculosis, pneumonia and hepatitis.
- These opportunistic infections are the ones that kill people.

Causes of HIV/AIDS

- HIV is transmitted through infected blood or other body.
- The body fluids where the HIV virus is found include semen, vaginal fluids and cervical secretions.
- Although other body fluids such as tears, saliva and sweat may contain the virus, they do not contain the virus in large numbers to enable it to infect another person.
- The following are ways in which people can be infected by HIV:
    - Transmission through sexual contact
    - Injection of infected blood into another person
    - Mother to child transmission

Injection of infected blood into blood stream

- Someone can get HIV when infected blood is injected into his/her blood stream.
- If people share unsterilized syringes or needles with infected persons, HIV is transmitted.
- People who share drugs such as cocaine and heroin using needles are at great risk of infection.
- Sharing other sharp objects such as razor blades, where they are used to pierce the body can also transmit the virus.
- Blood transfusion can lead to transmission of the virus if the blood originates from an infected person.
- The transfusion of whole blood or blood components from infected persons lead to HIV infection.

Transmission from mother to child.

- An infected mother can transmit HIV to the foetus.
- This transmission takes place during pregnancy or during delivery.
- This is referred to as vertical or perinatal transmission of HIV.
- After birth, the infected mother can transmit the virus through breast milk.
- To reduce the risk of vertical transmission, the infected mother can use antiretroviral drugs during pregnancy.
- The use of caesarean section at birth can help to stop infection.
- The infected mother should not breast feed the baby.

Transmission through sexual contact

- The main cause of HIV transmission is through sexual contact, where one of the partners is HIV positive.
- Through sexual intercourse ,there is movement of fluids from one person to the other.
- HIV can get into the body through semen, vaginal fluid and urethra secretion.
- Anal or vaginal sexual intercourse can lead to HIV infection, if one partner is infected.
- HIV transmission takes place in both heterosexual and homosexual contact.
- Heterosexual intercourse is sexual intercourse between a man and a woman.
- Homosexual intercourse is sexual contact between people of the same sex such as man and man.
- Oral sexual contact can lead to infection if there are wounds or cuts in the mouth of one of the persons involved.

Effects of HIV/AIDS on the community

- HIV/ AIDS has got many effects to the economy and the community.

Effects on health

- HIV/AIDS leads to high mortality rate and lower life expectancy.
- The people who are infected by HIV/AIDS are susceptible to opportunistic diseases such as pneumonia, hepatitis, tuberculosis and meningitis, among others.
- Opportunistic infections occur because HIV/AIDS weakens the immune system, making people prone to many infections.
- Opportunistic infections refer to the diseases that affect people who have been attacked by HIV/AIDS because they have weak immunity systems.
- Many HIV positive people, who develop AIDS eventually die.
- If many people in a country or community are infected by AIDS, the death rate increases.
- As many people die from opportunistic infections, the life expectancy of a country declines.

- Life expectancy refers to the average number of years that people in a country or community are expected to live.

Effects on age and population structure

- The deaths that arise from HIV/AIDS change the age structure of a population.
- In developing countries that have low incidence of HIV/AIDS most deaths affect the young and old people.
- This leads to the bulk of population to be within the middle age.
- However, in countries where there are high incidences of HIV/AIDS, the majority of the people who die are the middle aged ones, mainly of the age between 25 and 50.
- Women are more affected by the epidemic than men.
- Countries with high HIV/AIDS incidence rate will also experience high mortality rate, leading to slow population growth.
- The lower life expectancy means that population growth is negatively affected.

Economic effects of HIV/AIDS

- The HIV/AIDS pandemic has caused widespread effects on the society including loss of parents and workers.
- It has also brought constraints on the healthcare system and government finances.

Economic effects on families and households

- HIV/AIDS may lead to loss of income for families, if the working members of the family become infected and ill.
- Ill family members stop going to work and there will be loss of income to the household.
- The bedridden members virtually earn nothing.
- Family members who look after the ill people also lose income from their employment.
- If the parents die, the household may be closed as children may stay with relatives.
- Households may even sell their assets in order to cover increased medical or funeral expenses.
- The increase in household medical expenses reduces money for savings or investment.

Economic impact of HIV/AIDS on the healthcare system.

- A lot of resources are used in caring for the ill patients, who suffer from opportunistic infections.
- Apart from securing antiretroviral drugs, hospitals and clinics need resources to secure drugs to treat opportunistic infections such as pneumonia.
- The government needs to reallocate funds to hospitals and clinics to meet the increased demand for medical care.

Effects on businesses

- The AIDS pandemic robs firms of skilled and experienced employees.
- Sick employees become absent from work as they seek medical care, resulting in loss of many hours of work.
- The labour force will be comprised of younger and inexperienced employees, leading to reduced productivity.
- Companies that provide health care through their hospitals and clinics need to put aside huge resources to care for the ill employees.
- If the employees die, companies normally provide funds to assist bereaved families.
- Firms use additional resources to train other workers to replace the deceased ones.
- The death of other workers may reduce the morale and motivation of the remaining employees.
- If key employees die, productivity is affected, as new employees may not have the required skills and experience to operate machines or carrying out critical tasks.

- The agriculture sector is normally hard hit by the epidemic. The loss of many experienced employees lead to reduced food production.
- Generally, HIV/AIDS is likely to reduce productivity and increase costs which leads to low profit or loss.

Effects on investment and consumption

- The funds that are supposed to be invested are channelled towards caring for the sick people.
- The governments of worst hit countries channel resources that are supposed to be used for infrastructural developments and other social services, to the improvement and sustenance of the health system.
- The government also releases resources to support the families whose members are affected by HIV/AIDS.

Effects on education

- The AIDS pandemic demotivates some people from continuing with their educational pursuits.
- The individuals who are infected by HIV/AIDS may discontinue their education and training programs.
- Children whose parents or guardians die from HIV/AIDS related diseases may fail to raise money to go to school.
- Experienced and trained teachers also die of HIV/AIDS related illnesses.

Effects on economic development

- The death of trained and experienced labour force lead to reduced productivity in many sectors of the economy.
- Reduced productivity has an impact on gross domestic product.
- The increased pressure on government funds leads to slower growth of the economy.
- The decrease in life expectancy negatively affects economic growth, thereby affecting economic development.
- Low household and government incomes lead to increase in poverty levels in developing countries.
- Many families are affected by hunger and poverty.
- Some children fail to access adequate education.

Solutions to the problem of HIV/AIDS

- With no treatment or vaccine in sight, the problem of HIV/AIDS is dealt with through:
    - Information and advocacy
    - Voluntary counselling and testing (VCT)
    - Care, support and treatment

Awareness and advocacy

- People must be made aware of how HIV/AIDS spread and how to prevent its transmission.
- Awareness should focus on abstinence, being faithful and using protection.
- People must be aware of the need to abstain from sex, delaying involvement in sexual activities and sticking to one faithful sexual partner.
- For those involved in sexual activities, there is need to limit the number of partners.
- There is need for continued and accurate use of protectors such as condoms.
- Information on the transmission of HIV/AIDS from mother to child must be shared.
- HIV Positive women need to be encouraged to avoid unplanned pregnancies, as these put the mother and the child at risk.
- Infected women should use protectors to prevent pregnancies and re-infection.

- Women who fall pregnant must be encouraged to take anti-retroviral drugs, which may prevent transmission of the virus to the child.
- HIV positive mothers must avoid breast feeding as the virus can be passed through the mother's milk.
- The government, non-governmental organizations, schools, hospitals and private organizations must all be involved in the awareness programmes.

Voluntary testing and counselling.

- If people have accurate information on HIV/AIDS, there is need for them to take action.
- Individuals should be tested so that they understand their HIV statuses.
- Early detection of one's HIV status enables a person to use antiretroviral drugs at an early stage.
- HIV/AIDS positive people also receive continuous monitoring and guidance through hospitals and clinics, which prolongs their lives.
- When tested, people must receive pre-testing and post testing counselling.
- Pre-testing counselling involves getting advice that enables one to avoid possible shocks if they test positive.
- Post-testing counselling is given to only those who test positive to HIV, so that they understand how they need to deal with their status.

Support and treatment

- A person who has tested positive can live for a long time depending on the care and support he/she gets from hospitals, the family and friends.
- HIV positive people require consistent counselling and guidance in aspects such as dealing with stress and nutrition.
- They also need medical care in dealing with opportunistic infections.
- Firms can provide treatment to their employees at subsidized costs.
- The provision of ant-retroviral drugs is important. Both the government and other organizations must provide free or subsidized medication.
- Some organizations provide supplementary nutrition to those who have divulged their HIV status.
- Establishment of community programs aimed at assisting HIV positive people goes a long way in helping the affected people.
- Home based care is effective in helping those who are positive.
- In Zimbabwe, many care givers assist AIDS patients.
- They help by offering emotional support, preparation of food, giving medication and any additional services.
- Village health workers normally assist the ill people in rural and resettlement areas in Zimbabwe.

Economic development

- Economic development refers to the continuous increase in income of people in a country, leading to better standard of living, improved education, better healthcare, higher income per capita, improved life expectancy and better recreational facilities, among others.
- In other words, economic development means the sustained increase in income levels of citizens of a country, coupled with an improvement in material provisions, freedom of choice, life style and living conditions.
- Economic development consists of positive changes in supply and demand factors which lead to continued increase in production, supply, demand and consumption of goods and services in the economy.
- A number of aspects indicate the level of economic development of a society or country. The following are some of the indicators of economic development:

- There is a rise in total output of goods and services in the country, measured in terms of gross domestic product.
- The gross domestic per capita increases when there is economic development.
- The gap in wealth and income distribution between the richest and the poorest people in the country declines.
- Economic development is accompanied by low levels of unemployment in the society.
- Economic development is characterised by high capital base, high productivity of labour and efficient utilization of other resources.
- The financial sector is composed of stable banks and other financial institutions.
- Some other social indicators of economic development include high literacy level, high life expectancy and strong health sector.
- There is modern transport and communication infrastructure, stable social security schemes and developed recreational facilities.
- There are also increased availability of facilities that enable people to have high standard of living, such as enough food supplies, accommodation and education services.
- Political welfare and maturity also forms part of economic development.

Effects of population growth on economic development

Population growth influences the rate of economic development of a country in a number of ways:

1. Population growth affects production, consumption and saving functions of an economy.
    - Technological advancement of a country is influenced by population growth.
    - As the population grows, the demand for goods and services increases, leading to innovators and inventors to come up with new machinery, equipment and methods of production.
    - An increase in population also creates new needs and wants among the people.
    - For example, the increase in the number of school going age around the world has necessitated the need to introduce e-learning platforms.
2. As population grows, a stable demand for goods and services arises which leads to new investment in the economy.
    - As individuals and firms increase investment to meet the rise in demand, the economy expands.
3. Population growth leads to increased supply of labour, enabling more productive capacity in the economy.
    - As the labour force grows, more output will be produced in industries and farms.
4. Population growth affects the level of savings and investment in the economy.
    - The increase in population tends to increase consumption, thereby lowering savings and investment.
    - As population grows, the demand of consumer goods and services rises, forcing households and individuals to spend their funds on purchasing such products.
    - Rapid population increase leads to high dependency ratio, diverting available resources to consumption, hence reducing savings.
    - Rapid population growth promotes consumption and lowering capital formation, hence slowing down economic growth and development.
5. If a rapid population increase is not supported by increased productivity, it leads to a decrease in income per capita lowering the standard of living of the people.

6. Population growth forces the government to invest in social welfare facilities such as education and health care instead of investing in capital goods like irrigation facilities, machinery, and other infrastructure.

- Therefore, uncontrolled population growth negatively affects economic development by stalling investment in capital resources.

7. Rapid population growth leads to unemployment

- With most firms adopting capital intensive production methods, rapid increase in population results in shortage of employment opportunities in the economy.
- This may put pressure on land available for industrial expansion as many people tend to depend more on agricultural activities.

Summary

- Population is the total number of people who live in a country within a period of time.
- Population growth is the increase in the number of people in a country, whereas population size is the total number of people who live in a given area or a country.
- Population growth of a country is influenced by the following factors:
  - Birth rate
  - Death rate
  - Net migration
  - Government policy
  - HIV/Aids pandemic
  - Mobility of labour

The three main ways in which HIV/AIDS is transmitted are:

- Sexual contact with infected people
- Injection of infected blood into another person
- Mother to child transmission

Some effects of HIV/AIDS include:

  - Loss of income for families,
  - Use of resources in caring for the ill patients,
  - Loss of skilled and experienced employees.
  - The funds that are supposed to be invested are channelled towards caring for the infected and affected people,

Indicators of economic development include the following:

  - A rise in total output of goods and services in the country,
  - Increase in the gross domestic income per capita,
  - Decline in the gap between the richest and the poorest people in the country,
  - Levels of unemployment in the society decreases,
  - Increased capital base and productivity of factors of production
  - Stable financial sector,
  - Higher literacy level and life expectancy,
  - Existence of more modern transport and communication infrastructure,
  - More stable social security schemes and more developed recreational facilities.

Sustainable resource management

1. explain the concepts of sustainable resource management
2. explain how economic agents should manage their resources for sustainability
3. relate the composition of population to labour force
4. explain the factors affecting composition and size of labour force

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Economic resources

- Both human beings and wildlife depend on the availability of resources.
- Human beings use natural resources to produce goods and services that we need to survive.
- Economic resources are resources that are scarce and are required for use by human beings either directly or indirectly.
- Resources are either natural or man-made.
- Natural resources are classified into renewable and non-renewable categories.
- To sustain economic activities and human life, the available resources must be used with great care so that they do not get exhausted.
- Sustainable resource management means the use of resources in a way that enable the current and future generations to benefit from the available resources.
- Sustainable management deals with the management of both renewable and non-renewable resources.
- The need for sustainable use of resources is high in the face of increasing human wants and needs.
- If resources are not used wisely, humans can only be able to meet their needs now and fail to meet future needs.
- As a result, the stock of our resources must be conserved or used efficiently so that they last for a long time.
- The natural resources should be used efficiently so that they do not get depleted.
- For the renewable resources, the rate of extraction must be less than the ability of the resource to regenerate.
- Trees for instance regenerate through growth.
- On the other hand, even if the non-renewable resources may get depleted in the future, efforts must be made to use them efficiently.
- Production methods that maximize productive efficiency should be adopted.
- Efficiency can be increased by using modern technology and trained workers.
- The focus is that the available resources should support the welfare of current and future generations.

Major attributes of sustainability

- With sustainability, the level of consumption of resources must not decline.
- Production must be sustained by the available resources now and in the future.
- The stock of natural resources must remain unchanged.

Two main approaches to achieve sustainability

- The two methods to explain how a country can achieve sustainability are the constant capital approach and the natural capital approach

Constant capital approach

- According to this approach, the economy should work to maintain the available stock of the country's assets.
- However, the country can maintain that by substituting natural assets by human made assets.
- Countries that adopt such approach would invest their resources in creating physical assets such as roads, railway lines, airports, hospitals and schools, among many others.

Natural capital approach

- With this approach, the country aims to preserve its stock of natural resources.
- The country is concerned about the depletion of the natural resources it has.

What should be done to enhance sustainability?

- All economic agents should find ways of reducing and eliminating the negative impact of production and consumption of goods and services.

- For example, there should be reduction of disposal of hazardous substances in the environment.
- The natural resources should be maintained intact through the use of conservative ways.
- Natural resources include air, wildlife, fishery, soils and marine ecosystem, from which our resources are obtained.

Management of renewable resources

- Renewable resources are natural resources which cannot get spent when they are used.
- Renewable resources can easily be replenished in a short time period.
- An example of a renewable resource is solar power.
- Other examples of renewable resources are wind, water and geothermal.
- Renewable resources are unlimited in supply since they can be continuously generated.
- Most renewable resources are sustainable, meaning that such resources cannot be exhausted and can contribute meaningfully to economic activities of the country.
- A sustainable renewable resource cannot decrease even if the rate of economic activity increases.
- The best way to manage our renewable resources is to ensure that we harvest them in a way that they do not get exhausted.
- Room must be given for the resources to regenerate naturally to the point that they meet our needs.

Management of non-renewable resources

- Non-renewable resources are natural resources which get depleted if they are used to a certain level.
- Since they are fixed in quantity, once the amount used equals the existing quantity, they get depleted.
- As with non-renewable resources, the more they are consumed the less they remain for future generations.
- Minerals and crude oil are examples of non-renewable resources.
- Therefore, it is best for economic planners to search for alternative, renewable means of energy source.
- Recycling and reusing non-renewable resources can help to prolong the benefit that businesses derive from the existing resources.
- Alternatively, industrialists can substitute non-renewable resources with sustainable renewable resources as sources of raw materials or energy.

Management of natural resources by various economic agents

- The main economic agents are the households, firms, the government and international organizations.

Households

- Households can reuse some of their resources.
- Plastic containers can be used, for example, to store water, sugar and mealie meal.
- Instead of using non-organic fertilizers in their fields, some households can opt to use organic material such as compost.
- In Zimbabwe, some households are already using zero tillage methods to conserve the fertility of the soil.
- The households can stop cultivating close to river banks and waters to stop soil erosion.
- Although households use trees, they should plant more in return.
- People can choose to use natural sources of energy such as solar, wind power and stop using fossil fuels such as paraffin.

- They can also recycle some materials. For example, households can make floor polish and shoe polish using waste plastics.
- Waste material should be disposed-off in designated areas.
- People should avoid causing veld fires which can destroy forests and animals.

Firms

- Firms can do a number of things to increase sustainability.
- Non-renewable resources should be transformed into capital assets that will benefit future generations.
- For example, mineral resources must be transformed into physical assets such as roads, airports, telecommunication infrastructures and dams among others.
- Firms can switch from fossil fuel forms such as diesel to renewable resources such as solar and tidal power.
- Wherever possible, producers should recycle materials. Plastics and paper can be recycled. This means that our reserves of non-renewable energy will last longer.
- Producers in the timber and forestry business should only harvest mature trees and leave immature ones to grow.
- In the same way, those in wildlife and fishery business should only harvest mature animals.
- Farming firms may resort to the use of organic fertilizers. They may leave some of their farming areas fallow so that they regenerate naturally.

The government

- The government can help by training people in various sectors of the economy on how to use sustainable means in production processes.
- It can employ experts who teach various stakeholders in various sectors of the economy on the preservation of nature and sustainable uses of resources.
- For example, Agritex extension workers teach communal farmers on how to farm sustainably.
- The government also creates departments that help in monitoring resource usage. An example of such an agency is the Environmental Management Agency (EMA), which monitors the use of natural resources in the country.
- The government can also fund conservation programmes in the country.
- It can also introduce measures to reduce carbon emissions into the atmosphere as that leads to climate change.
- The government can craft and enforce policies that deal with various environmental issues such as deforestation, veld fires, protection of endangered species and river bank cultivation.

Initiatives to manage resources sustainably

- The government and communities have adopted many ways of managing natural resources.
- The following are initiatives used in Zimbabwe to manage community resources:
    - Environmental Management Agency (EMA)
    - Community share trusts
    - Recycling of material
    - The Communal Areas Management Programme for Indigenous Resources (CAMPFIRE)

Environmental management agency (EMA)

- EMA is a government agency that works to ensure that there is sustainable use of resources in the country.
- For example, it targets to preserve water, soils, animals and other natural resources.

- It creates standards which households and firms must abide by.
- It monitors the levels of noise, pollution, damage to land and the environment.
- It also ensures that wastes are disposed off in ways that do not damage the environment.
- It regulates the emission of dangerous gases and other pollutants.
- EMA also raises awareness of the need and the way to conserve the environment.
- It carries out audits on how firms and individuals manage natural resources under their control.
- EMA can charge a fee to people and firms that do things that damage the environment.
- People must not cultivate in wetlands and near rivers.
- Firms that put dangerous waste material in the environment are charged a fee by EMA.

Communal Areas Management Programme for Indigenous Resources (CAMPFIRE)

- CAMPFIRE has been created in order to manage wildlife and the environment in communal areas.
- The objective of CAMPFIRE is to ensure that there is sustainable use of natural resources, especially wildlife and their habitats.
- The main resources to be managed through CAMPFIRE include water, grazing lands, woodlands and animals.
- The people who live in a communal area are responsible for managing the resources in their communities.
- In return, the community uses the revenue generated from the use of these resources for community development.
- CAMPFIRE programmes in Zimbabwe are mainly carried out in areas that are close to game reserves.
- Such communities get revenue from hunting and game viewing.
- Since communities benefit from such revenue, it is assumed that the community would do everything to conserve these resources.
- Community members normally have input in decision making, patrolling the environment and curbing poaching.
- They are also involved in fire prevention and control measures.
- The revenue raised is used to build community infrastructure such as roads, dip tanks, clinics and schools, grinding mills and boreholes among others.
- Some of the money is used in anti-poaching activities.

Community share trust

- Community ownership scheme is a means in which the community should benefit from the extraction of resources in the area.
- The main resources from which local communities should benefit from these ownership schemes are minerals.
- As a result, community share trusts are established in areas where precious minerals such as platinum and diamonds are mined.
- Some examples of community share trust are Marange- Zimunya Trust and Mhondoro-Ngezi Ownership Trust.
- In Marange there are diamond mines whereas in Ngezi there are platinum mines.
- The community share ownership scheme is designed to help in poverty reduction in the country.
- Through the scheme, the community gets shares from mining companies that operate in these communities.
- In Zimbabwe, the government and business agreed on a 10% shareholding of the community.
- One reason for this scheme is to ensure that the communities do not lose out completely in the extraction of the local resources.

- The income that comes from the operating firms are used in various community projects such as road construction, hospitals, bridges and schools.
- Some of the resources have been used in developing towns.
- Part of the income can also be used to develop the human capital of the community.
- The infrastructure that are constructed using the income from the exploited resources will be used by many generations to come, thereby increasing sustainability.

Recycling of resources

- Whereas some firms and households reuse their resources, others recycle them.
- Recycling refers to using some previously manufactured products as inputs to other production process.
- The advantage of recycling is that no new resources will be extracted for such purpose.
- Therefore, there will be delay in resources exhaustion.
- For instance if plastics are recycled, there will be a lower demand for their raw materials.
- When products that come from timber such as papers are recycled, it means that there will be less harvesting of trees.
- The main problem in recycling materials is that poor quality products will be produced.
- On the other hand, recycling reduces the quantity of waste material in the environment.
- With recycling, less energy is used in processing of the recycled material than if original raw materials are used.

Labour force

Composition and size of labour force

The size of labour force in an economy depends on the size and distribution of population.

- The size of population refers to the number of people who live in a country or place within a period of time.
- Normally, an increase in population means that the people who are able and willing to work are also increasing.
- A country with 20 million people is most likely to have a larger labour force than a country with 14 million people, all other things being equal.
- Other things that can remain the same include:
    - proportion of women and men who are willing to engage in employment
    - distribution of population by age,
    - The level of education
    - Culture of countries.

The distribution of population of a country determines the size of the labour force.

- Population distribution refers to how the people in a country can fit under various categories such as age, gender, geographical location and occupation.
- Age distribution refers to how many people in the country come under the various age ranges.
- If a large proportion of the population are under 16 years in a country, it means that the labor force will be smaller as compared to a situation where most of the people in a country are between the ages of 16 and 64.
- If a country has a very large proportion of its people within the ageing population, it also means that less people will be in the working age.
- The size of the labour force is also determined by the proportion of women in the country.
- The ratio of women to men in a country is referred to as the sex distribution.
- It shows the number of females and males who are at various age ranges of the population.

- In some cultures, many women do not go to work, hence many of them do not make part of the labour force.
- If women form the larger part of the population in countries that prohibit women from working, it means that there will be a smaller labour force.
- On the other hand, if the larger part of the population are men, it means the labour force is relatively large.

Factors that affect the size of labour force in a country

There are a number of factors that affect the size of the labour force in any country.
The change in population

- If the population increases, it is most likely that there will be an increase in the labour force.
- A decrease in the population may lead to a reduction of the labour force.

Change in national income

- If there is an increase in national income, many people may be attracted to the labour force.
- This can be more enhanced if the economy is stable in terms of inflation.

Change in educational level.

- If there is an increase in the number of people who acquire required education, labour force increases.
- For example if many children in the country go for secondary education, there will acquire skills that are required in the industry.
- An increase in universities and colleges in the country broadens people's skills and expertise.
- Societies that give equal education opportunities to both males and females are most likely to have a higher labour force.
- In general, the more educated a society becomes, the more labour force it has.

Home ownership

- In countries where many people own their homes, the labour force is likely to be low.
- The reason being that home owners are usually unwilling to relocate to other places.
- They are less mobile, hence they can only wish to work in places where they have own houses.
- Once there is low labour mobility in a country, the labour force size decreases.

Government policy

- Government legislation has an impact on the size of the labour force.
- Government policy affects the age of school leaving.
- If there is a short school going period, there will be a higher labour force.
- If students finish form four at 16 years, for example, those who may not wish to seek advanced education can join the workforce.
- However, if students finish ordinary level when they are 18 years, it means that there is a smaller labor force.
- The other regulation that influences the size of labour force is the minimum age, set by the government for people to start working.
- In countries where the minimum working age is 16, there is a bigger labour force than in a country where the minimum working age is 18.
- On the other hand, a lower retirement age in a country means that many people will be able to work for long.
- A country with people retiring at 65 years has a bigger labour force than a country whose official retirement age is 50.

The level of immigration and emigration affects the size of labour force

- If a country has more people of the working age coming into the country than those going out of the country, the labour force will increase.
- If, on the other hand, more people of working age leave the country than those coming in, the labour force will decline.
- Therefore, migration policy of the country can also have an effect on the size of the working population in the country.

The dependency ratio also indicates the size of the labour force.

- A higher dependency ratio means that many people may still be in schools and are unable to work.
- A higher dependency ratio may also arise if many people have retired from work.
- A lower dependency ratio means that many people in the country are of the working age.

Level of participation of women in employment

- Countries that allow women to be employed have higher labour force than countries that restrict the participation of women in employment.
- Normally, culture and religion influence the level of women participation in employment.
- In some countries, women are not allowed to participate in employment because of culture.

How to control population growth

- Some developing countries face high population growth rates.
- The following are some of the measures which some countries use to control population growth in developing countries:

Family planning

- Family planning leads women to have only children that they want.
- It reduces the chances of mothers to fall into unplanned pregnancies.
- As a result, the couple can only have the number of children that they want and not more.
- If the government helps in the provision of effective contraceptives, the birth rate can decline in a country.
- With the availability of various contraceptive methods in the country, it is possible to increase birth spacing.
- Birth spacing refers to the time period between the births of two children within a family.
- Proper family planning plus the use and availability of contraceptives will make child spacing an easier task for them.

Increased level of education in the country

- If there is access to education in the country, the birth rate is most likely to be reduced.
- When children, especially girls access education to secondary level, they are more likely to have smaller families.
- Education helps in changing cultural and social beliefs of people.
- Also, family planning education should be incorporated in the school curriculum.
- Family education can continue even beyond school days.
- Adult education can be used to reach out people who are no longer attending formal schools.

Putting an end to all forms of gender bias in the community.

- Women must be given equal opportunities as men in all sectors of the economy.
- Girls must be given equal educational opportunities.
- Women should be given the right and opportunity to get property, to be employed and to participate in social activities on an equal basis with men.

- Women who are given these opportunities are most likely to have smaller families than those who do not have such freedoms.

Government policies

- The policies of the government can help in reducing birth rates in the country.
- The government should set a higher marriage age. In Zimbabwe, people can marry at 18 years.
- If the government puts measures to stop people from marrying below the legal age of majority, the birth rate of the country can go down.
- For example, the government's drive to end child marriage in the country will lead to lower birth rate hence lower population growth.
- The Chinese are known for using the one-child policy in order to reduce population growth.

More employment opportunities must be given to women

- Employed women are more likely to have smaller families than the unemployed ones.
- Working women may wish not to disturb their careers due to child birth and rearing processes.
- In many countries, working women are given minimum opportunities to go for maternity leave.

Need to increase security for the aged people

- The country needs to create measures to help the elderly.
- Many people bear many children so that they help them when they are old.
- If the government introduces security measures such as pension and insurance schemes, people will value that as a means for survival when they are old.
- This helps people to reduce the number of children.

Awareness campaigns can help people to reduce number of children.

- There should be publicity on the importance of having small families and family planning.
- Campaigns in radios, TVs and newspapers may help many people to change their attitudes.

Improved healthcare can help in reducing birth rate.

- When there is high child mortality rate, parents bear many children to compensate for any possible deaths.
- With improved healthcare, people may be more assured that their children will survive into adulthood.

Unemployment

1. Explain the terms unemployment and labour force
2. Differentiate the employed from unemployed.

Unemployment

- Unemployment refers to people of working age looking for and are currently available for work but do not have jobs.
- It is also defined as a situation where people of working age are not able to get jobs but they want to work.
- It includes people who are laid off for a certain period of time but are waiting to be called back to their jobs.
- The people who do not look for work are not counted among the unemployed.

- The workforce is made up of people who want and are able to work.
- The unemployment data is used by the government to gauge the state of the economy.
- If the number of the unemployed is large, it means the economy is not healthy.
- If the number of the unemployed is low, that means the economy is strong.

Unemployment rate

- Unemployment rate measures the total number of the unemployed as a percentage of total available workforce.
- In other words, unemployment rate is the percentage of unemployed individuals divided by the percentage of labour force available.
- The formula for calculating unemployment rate is shown below

Unemployment rate =

number of unemployedlabour force x 1001number of unemployedlabour force x 1001

Conditions for an individual to be counted as unemployed are:

- The individual is actively looking for a job,
- The individual should be within the working age,
- The individual is not currently employed,
- Retired people are not included.

Labour force

- Labour force refers to all individuals of the working age who are employed and unemployed.
- From the above definition, it means labour force equals to the number of the employed plus the unemployed.
- Labour force is the total supply of workers in the economy.

The following groups of people are not included under labour force:

- All people under the age of 16.
- Those who don't want to work.
- Those who are physically and mentally disabled to an extent of not being able to carry out economic activity.
- Retired people
- Students in education.
- People in prisons.

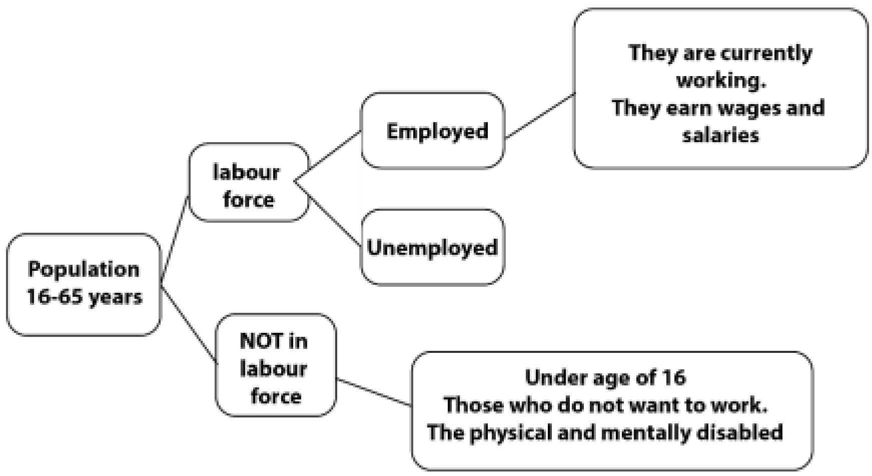


Fig 12.1: Labour force

- The diagram above shows the summary of labour force.

Labour force participation rate

- It measures the percentage of the working age either employed or unemployed.
- It is a proportion of labour force to total working age.
- Working-age individuals is defined as people between the ages of 16 and 64.
- Labour force participation rate =

labour forceworking age population x 1001labour forceworking age population x 1001

- Working age population refers to the number of people between the ages of 16-65.

Summary on labour force formula

- Labour force = employed + unemployed individuals

How labour force affects the economy

- The labour force is responsible for providing labour in the economy.
- The firms use labour to produce and distribute goods and services in the economy.
- The size of labour force rises when the number of individuals actually working or willing to work increases.
- Also, the size of labour force falls when the number of individuals actually working or willing to work decreases.

Difference between labour force and workforce.

LABOUR FORCE	WORKFORCE
Refers to the number of individuals actually working or willing to work.	Refers to the number of individuals actually working.
	Does not include those who are willing to work.

Employed and unemployed

Employed people

- Employed individuals are those who work for an organisation or company.
- Employed individuals get paid in return for the services or the effort they contribute in the production process.
- They earn salaries or wages as compensation for their efforts or services.

Unemployed people

- Unemployed are people between the age of 16 and 65 who are not working but are willing to work.
- These individuals are available and are actively looking for work but are failing to get one.
- It also includes people waiting to be recalled for work, but are currently not employed.

Summary

- Unemployment occurs when people who are willing and able to work cannot find suitable jobs.
- Unemployment rate measures the total number of the unemployed as a percentage of the total available workforce.
- The workforce is made up of people who want and are able to work.
- Labour force refers to all individuals of the working age who are employed and unemployed.
- Unemployed are people between the age of 16 and 65 who are not working but are willing to work.

- Employed individuals are those who work for private individuals, firms and the government.

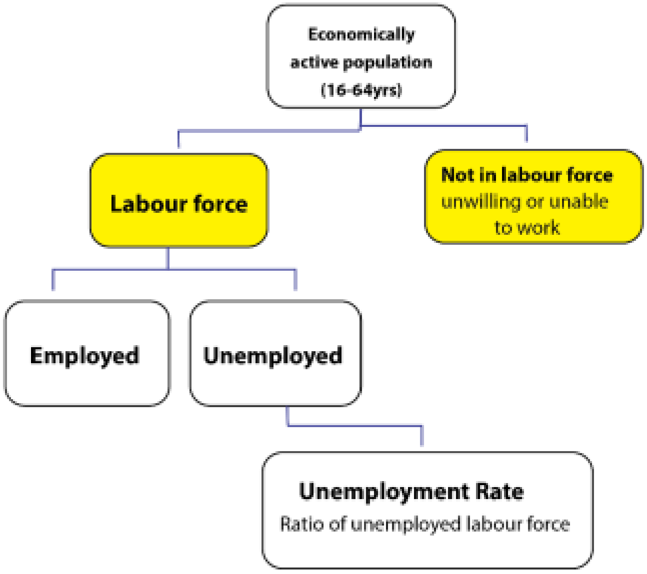


Fig 12.3: The employed and the unemployed in the economy

Types of Unemployment

1. Identify the types of unemployment
2. Explain the types of unemployment

Types of Unemployment

- Unemployment is not a uniform phenomenon, it is caused by a number of factors.
- The following are the types of unemployment and their causes.

Structural unemployment

- A major cause of structural unemployment is a change in demand in consumer markets, together with the time lag needed for existing employees to acquire new skills.
- Structural unemployment occurs because of the absence of demand for certain types of workers.
- This happens when there is a mismatch between the skills employers want and the skills workers have.
- Structural unemployment can also arise from a fundamental change in the structure of industry.
- For example, the decline in the mining industry in Zimbabwe has resulted in a large number of miners becoming unemployed.

Frictional unemployment

- Frictional unemployment occurs when workers leave their jobs to find better ones.
- It's usually a voluntary exit or can occur as a result of layoff or termination with cause.
- In the labour market, some workers change jobs during the course of the year and it will take time to match potential employees with new employers.
- Even if there are enough workers to satisfy every job opening, it will take time for them to learn new job skills for them to be considered.
- Some people can remain unemployed despite the fact that there are jobs available either in other parts of the country or requiring skills they do have.

Seasonal Unemployment

- Seasonal unemployment occurs because some jobs are dependent upon seasons.
- Industries such as farming, building and tourism are affected in this way.
- Ice-cream vendors often suffer the same consequences during winter season as the demand for ice-cream will be very low.
- In some seasons, there is low demand of particular types of employees.
- For example, some agriculture employees are laid off during off pick periods.

Regional Unemployment

- Regional unemployment is linked to structural unemployment.
- It arises when the declining industry is based in one area zone.
- The industry in the region may suffer heavy unemployment because of declining demand of a particular product.

Cyclical Unemployment

- Cyclical unemployment exists when an economy is in a recession and there is a fall in the aggregate demand for goods and services.
- It is also called demand deficiency unemployment.
- Firms reduce their levels of output and eventually lay off workers.
- Cyclical unemployment occurs because of these economic cycles.
- Fig 14.1.1 illustrate cyclical unemployment.

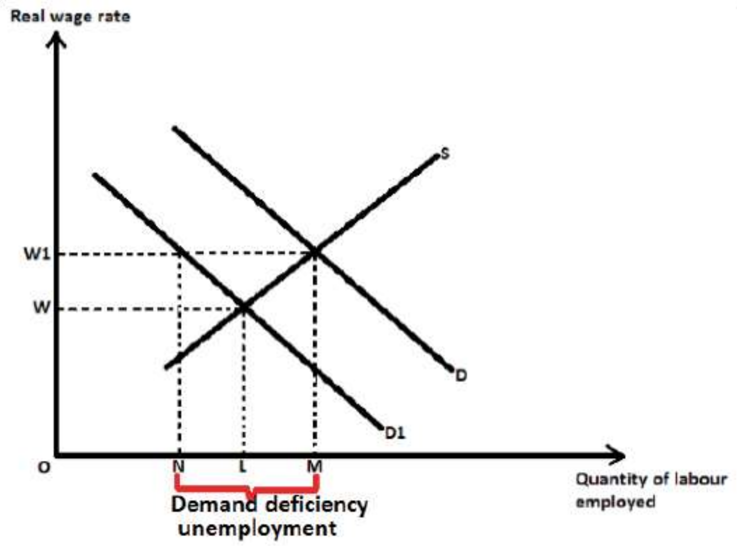


Fig 14.1.1 Demand-deficiency Unemployment

- On Fig 14.1.1, the demand for labour falls from D to D1 due to a recession in the economy.
- Assuming that wages remain at W, the level of employment declines from its M to N.
- Demand-deficient unemployment equals NM.

Technological unemployment

- This type of unemployment occurs when technological advancement ensures that labour is eliminated in the line of production.
- Only few workers will be required to operate machines causing organisations to reduce man power.
- For example, the use of weed chemicals, sprayers, combine harvesters, will eventually lead to redundancy of agricultural labour.
- Technology in the use of computer robots in sectors like motor industry have seen many workers losing their jobs.

Effects of unemployment

1. Outline the effects of unemployment,
2. Propose solutions unemployment

Introduction

- Many developing countries such as Zimbabwe face the problem of high unemployment rate.
- As a result the governments of such countries put measures to increase job creation.
- Unemployment is a condition whereby people who are able to work and are searching for jobs cannot find work.
- Job creation is a process of creating job opportunities for people who are actively looking for employment.
- Unemployment affects the performance of the economy and the welfare of the citizens.

Effects of unemployment

- Unemployment affects the economy in many ways.
- It affects the unemployed future ability to find a job and their psychological well-being.
- Even the employed are disadvantaged as effects of unemployment affect the overall performance of the economy.

Economic effects of unemployment

- The following are the effects of unemployment to the whole economy:

1. The government incurs financial cost
- In some countries, the government gives unemployment benefits to its people.
- The greater the number of unemployed individuals, the greater the amount of money the government has to spent on those individuals.
- Therefore, unemployment benefits create additional costs to the government.

2. Spending power reduced
- Spending power is the ability of individuals to buy certain goods and services for their consumption.
- Unemployment causes the spending power of individuals to decrease.
- Individuals tend to spend the little they have than to save.

3. Reduced spending power of the employed
- The government increases tax to those who are working so that it can get revenue to meet its expenditure.
- This reduces the disposable income of the employed thus affecting aggregate demand in the economy.

4. Increased government borrowing.
- Higher unemployment causes a fall in tax revenue because there is less people paying income tax.
- The government, therefore, borrows money to spend on unemployment benefits and to create jobs.

5. Lower GDP for the economy.
- High unemployment leads to the economy to operate below full capacity.
- This leads to lower national output.
- The firms have no incentives to produce because of low aggregate demand in the economy as many people are not employed

6. Unemployment causes recession
- Unemployment reduces the demand of goods and services.
- The reduction in demand of goods and services leads to firms to cut down on production and investment.
- Therefore, the economy operates at low capacity.

7. Political instability:

- There is likely political instability if there is high unemployment in the country.
- Unemployed persons engage in demonstrations.
- Economic growth becomes difficult when there is political instability.

Effects of unemployment to an individual

Mental health problems

- Individuals who are unemployed face mental health problems such as stress, depression and hopelessness.

Insecurity among employees

- The prevailing rate of unemployment in the economy creates fear and insecurity to those employed as they may be afraid of losing current jobs.

Exploitation of labour

- Due to the high rate of unemployment, workers may be exploited.
- The employed accept low wages and work under unfavorable conditions.
- They can go for a long period without being paid.

Employment gaps

- The longer the individual is out of job, the more difficult it becomes to find another one.
- Employers find employment gaps as a negative due to high costs of retraining.
- No one wants to hire a person who has been out of work for some time even when there's no fault arising from the individual.
- For instance, individuals from colleges and universities become unemployed soon after their study hence their skills deteriorate.

Effects of unemployment to the society

- Unemployment does not only affect the unemployed, it also affects their families and the society.
- Unemployment reduces life expectancy of the people due to poor living standards and stress.

1. Political issues

- Unemployment leads to political instability as aggressive groups are formed to attack the government.
- Trade unions can be forced to take part in political affairs of the country through strikes and demonstrations.

2. Standard of living is reduced

- The living standard of people is reduced as their remuneration decreases.
- Children may fail to attend school due to unavailability of income to pay school fees.
- People with low income may fail to access appropriate health care.
- The people may also fail to have good nutrition.

3. Unemployment causes crime and violence

- As many people in the society are unemployed, the rate of crime increases.
- The unemployed people may resort to taking drugs and carrying out illegal economic activities such as selling prohibited products.

Solutions to unemployment

Decentralisation of industrial activity.

- Decentralisation of industrial activities is necessary to reduce unemployment in a country.
- The government should establish many growth points in rural areas.

- Each town should have more industries so that people surrounding that town can be employed in those industries.

More assistance to self-employed people

- Most people in Zimbabwe are self-employed.
- They are engaged in agriculture, trade and small scale industries.
- These persons should be helped with financial resources and technical training by the government.
- Government can facilitate the availability of low interest loans to small and medium enterprises.

Change in industrial techniques

- Production techniques should suit the needs and means of the country.
- It is essential that labour intensive technology should be encouraged instead of capital intensive technology.
- Labour intensive methods of production enable many people to be employed.

Employment subsidies

- Employment subsidy is a financial incentive given to firms by the government so that they can be able to hire and retain more employees.
- An employment subsidy can be given to firms that keep on employing part-time workers during recession period.
- This helps the government to reduce unemployment.
- Employment subsidies also prevent workers from being idle.
- Idle employees may lose their technical skills.

Population control

- When the population of a country is reduced, it will help to reduce the number of those who are looking for jobs.
- Population can be controlled through the restriction of the maximum number of children a married couple can have, for example, one child policy.
- The population should match with the available resources.

Summary

The effects of unemployment to the whole economy include:

- The government incurs financial costs as it provides more welfare services to the unemployed
- Consumer spending power declines
- Government may increase borrowing since revenue from taxation decreases
- High unemployment forces the economy to operate below full capacity thereby lowering GDP
- It causes recession as the demand for products decreases
- High unemployment may trigger political instability in the country.

Unemployment affects the society as it leads to:

- Lower life expectancy,
- Political instability in the country,
- Poor standard of living,
- And higher crime rate.

In order to solve the problem of high unemployment rate, the following must be done:

- Decentralization of industrial activity.
- Offering assistance to self-employed people
- Changing industrial techniques
- Government gives employment Subsidies
- Controlling population growth

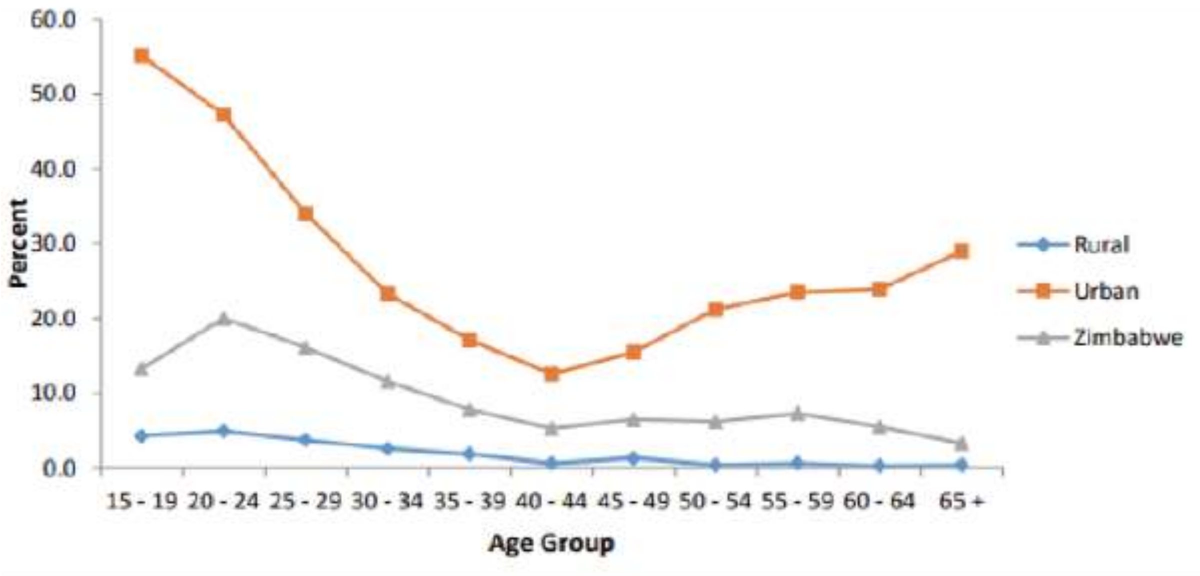
Unemployment Trends

1. describe unemployment trends in Zimbabwe
2. describe job creation
3. explain how enterprising and indigenisation can solve the problem of unemployment
4. initiate a mini project

Unemployment Trends

- Unemployment trend is the tendency that shows increase or decrease in unemployment.
- Unemployment trend can be triggered by the changes in employment.
- For example, workers in the agriculture sector may lose their jobs during the off seasons.
- Fig 15.1 shows broad unemployment trends.

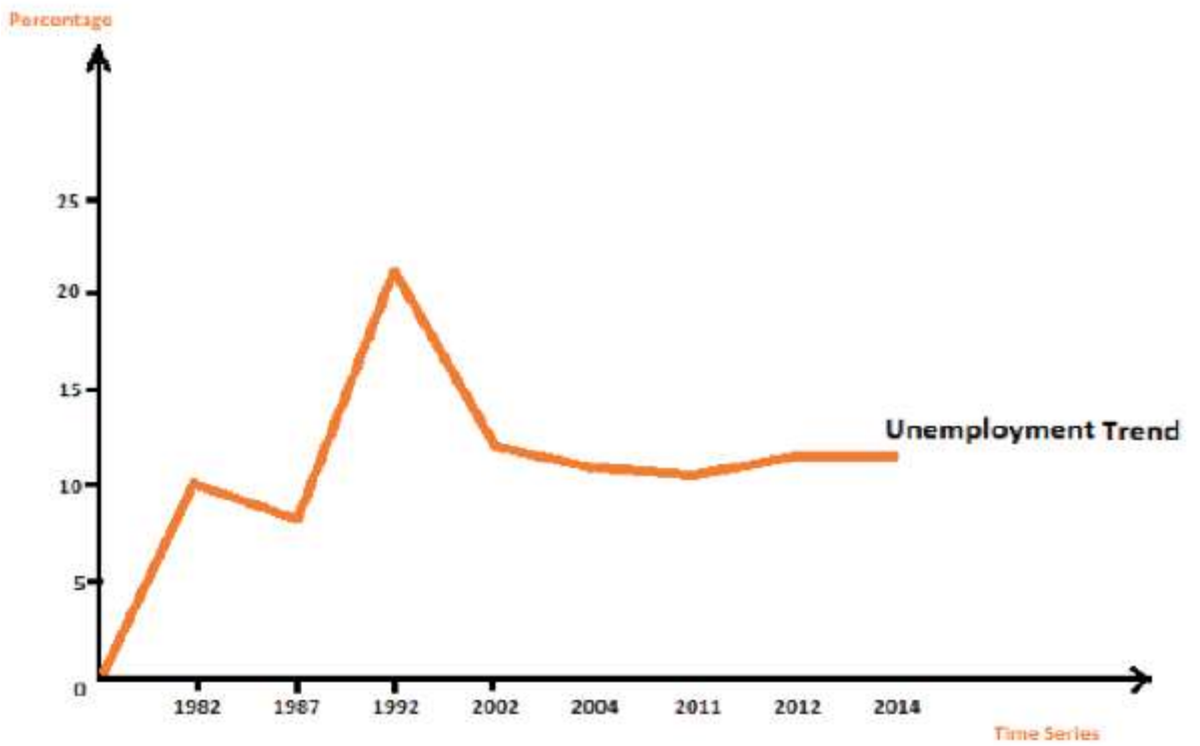
Fig 15.1:



Unemployment Trends

- The trend is categorised according to age group, sex and area.
- The highest age group of the unemployed is between 15-34 years.
- In the rural areas, there is high unemployment rate among youth aged 15-34years
- In urban areas, there is high unemployment rate in the age group 15-29 years.
- Fig 15.2 shows the general unemployment trend in Zimbabwe between 1982 and 2014.

Fig 15.2:



Unemployment Rate

- The trend line shows the change in unemployment due to different reasons.
- For example, in 1992 the unemployment rate was roughly 20% and in 2002 it dropped to about 11%.

Job creation

- Job creation is the process of providing jobs intended for people who are not working.
- It is the role of the government to create a strategy and conducive environment for business to take place.
- The objective of job creation is to stimulate a healthy economic growth.
- Job creation through enterprising and indigenisation can be used to solve the problem of unemployment.

Job creation through enterprising

- Enterprising comprise of undertaking a project.
- Enterprising fulfils two very important functions:
  a. Hiring and combining other factors of production.
  b. Taking risks by producing goods and services in anticipation of demand.
- Entrepreneurship is a very important catalyst in job-creation.
- All new businesses need to hire employees.

Importance of enterprising

- It creates jobs faster.
- Encourages self-employment as people will engage in business activities other than seeking for jobs.
- The jobs created through enterprising uplift the economy and support communities through improved standard of living.
- It contributes to national output.
- It increases utilisation of resources in a country.
- It increases competition in a market hence high quality and cheap products are produced as firms compete.

- It increases revenue for the government through taxation.

Disadvantages of enterprising

- Not all resources are used efficiently.
- Income and wealth are unevenly distributed.

Job creation through indigenisation

- Indigenisation is the transfer of ownership and control of business enterprises from foreign owners to the indigenous people.
- It is the act of increasing local participation and empowering indigenous people to own business enterprises.
- In Zimbabwe, the Indigenisation and Empowerment Act of the 2008 required Zimbabweans to own 51% stake of foreign owned diamond and platinum companies which have a net value of USD$500 000+.
- Foreigners were only allowed to own 49% stake.
- The law gave Zimbabweans the right to own and benefit from the exploitation and utilisation of the country's natural resources.
- Unemployed people benefited from community projects such as fish farming, mushroom farming, vegetable farming, poultry and many others.

Importance of indigenisation

i. It ensures self-reliance- Local citizens will be able to eliminate the spirit of dependence on foreign goods.
ii. Development of private initiatives- It encourages indigenous people to participate in business activities.
iii. It helps reduce foreign control, ownership and domination of the country's economy.
iv. It leads to locals to earn the profits- The profits which were meant for foreign countries will be entitled for use in the country.
v. The indigenisation policy gives the right to locals to participate in the control and running of the businesses in a country.

Disadvantages of indigenisation

i. It can lead to capital flight- Capital flight will occur as a result of foreign investors' departure, as they relocate to invest somewhere else.
ii. Indigenisation discourages foreign direct investment in a country.
iii. Due to lack of competences, businesses can be distracted by people who lack experience and this will cause businesses to fail.
iv. It can lead to disharmony between countries- The friendship between countries can be strained.
v. It becomes easy for rich people to take over the economy as they will use their wealth to take over existing business enterprises.

Mini-income generating projects

- Mini income generating projects are ventures that are run by individuals or a small group of people to raise income for their personal use or other purposes.
- The mini projects are sufficiently flexible to run and they cater for the needs of a variety of people.
- The income generated can improve the standards of living for that particular person or group, leading to quality life.
- The following are examples of mini projects.

Selling produce

- Selling fruits, vegetables, or even eggs are some common ways of income generating projects.
- Such projects require small amounts of money to start.

- There are many ways to sell the produce, from a vendor's table or to sell to other businesses such as restaurants and shops.
- The produce can also be sold from door-to-door in the neighborhood.

Selling plants

- Selling seedlings and plants is another good way of running an income generating project.
- One can grow exotic plants as well as popular fruit and vegetable plants.

Events

- Events are a great way to generate income and engage many people in your project especially during the holidays of festive seasons, or at events like music concert, agricultural show, soccer matches.
- You can sell hot food, hotdogs, burgers, drinks, water, stickers, flags, face painting and many more.
- This project requires a very small amount of capital.

Trade

1. Describe characteristics of domestic trade
2. Outline characteristics of retailers and wholesalers
3. Identify retailers and wholesalers in the local community.
4. Distinguish formal and informal trade
5. Explain the importance of domestic trade
6. State the roles of informal traders.

Trade

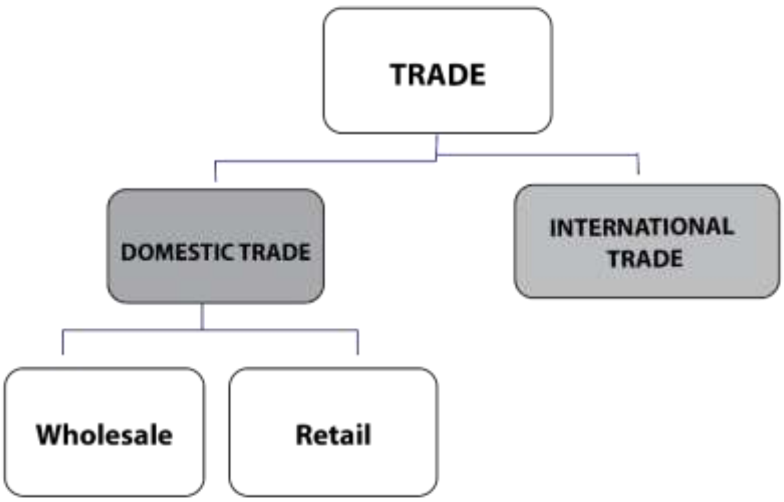


Fig 13.1: Trade

- Trade can either be domestic or international as shown in the diagram.
- Trade is the exchange of goods and services between sellers and buyers.
- It involves the flow of goods and services from producers to consumers.
- Producers are firms and individuals who make the products.
- Consumers are those who use what has been produced.

Domestic trade

- Domestic trade involves the exchange of products from various sectors of production within the country.
- The goods and services are produced in the country.
- The goods and services are purchased by people staying in the country.

Characteristics of domestic trade

- Trade takes place within the country.
- Local rules and regulations are followed.
- There is use of local currency in trade.
- The goods and services traded are carried either by road or rail to the market.
- The individuals and firms obtain licenses of operating their businesses from the government.
- There are a variety of goods and services sold to the consumers by firms and individuals.

Importance of domestic trade

- It enables the exchange of goods and services in the local economy.
- It improves the standard of living of the residents as goods reach all corners of the country.
- It creates employment for the country's residents.
- It assists in the mobility of factors of production within the country which leads to economic growth.
- The government generates revenue through tax paid by individuals and firms operating in the country.
- It ensures the availability of raw materials to various industries in the economy.

Advantages of domestic trade

- There is mobility of factors of production, meaning that factors of production are free to move from one point to another within the country.
- Goods are free to move from one place to another without tariffs or embargoes.
- There is use of the same currency, therefore it is easy for people to trade within the country.
- There are limited language and cultural barriers leading to easy flow of information.
- It preserves the culture of the country.
- The individuals and firms incur low transportation costs for their goods and services.
- There is employment creation as labour is required during production and distribution of goods and services.
- Domestic trade enables the local currency to circulate within the country.
- Domestic trade encourages development and investment within the country, leading to low dependency on other countries.
- It preserves the country's resources since these resources are not exported.

Disadvantages

- There is limited market. Domestic trade gives a smaller market for the firms and individuals selling their products due to limited population size within the country.
- With domestic trade, consumers access lesser varieties of goods and services due to reliance on local products.
- There is low level of competition resulting in low qualities of goods and services to be produced.
- There is low rate of technological advancement since firms and individuals may not have access to advanced machinery and equipment from other countries.

Organization of domestic trade

- Trade within a country may involve producers exchanging goods and services directly with consumers.

- However, domestic trade mainly involves the movement of goods and services to consumers through wholesalers and retailers.

Wholesale trade

- Wholesale trade involves the buying of goods in large quantities from various producers and breaking down of bulk into smaller units that are sold to retailers or consumers.
  - Examples of wholesalers in Zimbabwe are:
  - Jaggers
  - Bhadhella
  - Elecrosales
  - Mahomed Mussa
  - Metro Peech
  - N Richards

Characteristics of wholesalers

- Wholesalers source and sell few lines of products.
- They buy goods in large quantities and sell them in smaller quantities to retailers.
- They need large capital to operate.
- They have large warehouses for storing their products.
- They operate as middlemen between producers and consumers.
- They provide selling and non-selling services to producers and retailers such as packaging, grading and branding.
- A wholesaler can be an individual or a firm.

Functions of wholesalers

Wholesalers perform the following functions:

- Assembling the products and packing them into smaller units.
- Offering storage facilities and ensuring the goods are available in proper quantities.
- Grading and packing of products according to their qualities, sizes and quantities before selling them to retailers.
- Offering financial services such as discounts and credit facilities to retailers.
- Offering transport facilities to retailers when they purchase the goods.
- Taking risks. Wholesalers bear financial risks as well as trade risks such as inflation, product spoilage, quality deterioration and damage when the goods are in the warehouses.
- Providing product information to retailers and manufacturers such as demand patterns, preferences and changes in tastes of consumers.
- Ensuring smooth flowing of products from manufacturers to retailers.

Importance of Wholesalers to consumers

- Wholesalers provide products that meet consumer needs and wants.
- Consumer choice is widened as a variety of products are distributed by wholesalers to the market through retailers.
- Wholesalers advertise available products to consumers.
- They may prevent price fluctuations by continuous supply of goods and services to the market.

Retail trade

- Retailing involves the selling of products in small quantities to consumers.
- Retailers buy goods from wholesalers in larger quantities and sell them in smaller units to consumers.
- A retailer is a middleman between the wholesalers and the end user.
- They have a direct relationship or interaction with consumers.
- Retailers bring a variety of goods closer to consumers.
- They may also offer after sale services, for example installations or deliveries.

- Retailers may give important information to wholesalers, for example changes in demand and consumers' preferences.
- They give information and advice on the use of products to consumers.

Characteristics of retailers

- Retailers trade in a variety of products.
- They buy goods from wholesalers and sell them to consumers in smaller units.
- They can buy goods on credit from wholesalers and sell them for cash to consumers.
- They maintain interaction with consumers and wholesalers.
- They are located near customers for accessibility
- They display products to attract customers
- Retailers are classified into small and large scale retailers.

Formal and informal trade

- Formal trade refers to businesses that are registered, regulated, protected, controlled and monitored by the government.
- In formal trade, businesses pay tax to the government.
- Formal trade involves the exchange of products in well-defined limits that are set by the government.
- When firms are trading formally, it means that they are trading legally.
- These businesses trade in goods and services that are allowed by the government.
- The businesses sell the products in places that are well designated by the government.
- Formal trading activities are included in a country's GDP account.
- In Zimbabwe, the wages and working conditions of the workers are approved and regulated by the government.

Informal trade

- Informal trade refers to businesses that are not registered, regulated, protected, controlled and monitored by the government.
- The businesses do not pay tax to the government.
- They may pay operating licenses to local authorities.
- They my sell legal or illegal products.
- For example, the sale of second hand clothes from other countries is not allowed in Zimbabwe, but these are sold by informal traders.
- Informal traders may be exchanging legal products but in an illegal way. For example, they may sell their products in undesignated areas.
- Some of the businesses operate in designated areas while others sell in undesignated places.
- Their activities are not included in the GDP account.

Importance of informal trade in the economy

- Informal sector provides employment as the sector absorbs many job seekers.
- It improves living standards of the residents as more goods and services are produced.
- It provides cheap goods and services since they have low cost of production.
- There is increased investment as many entrepreneurs start their businesses.
- It results in reduction of rural-to-urban migration due to job creation in rural areas.
- It has the flexibility to provide goods and services for low income earners at low prices.
- Informal trade helps people to sustain themselves hence reducing their dependence on government support.

Summary

- Trade refers to the exchange of goods and services.
- Domestic trade is the exchange of goods and services that takes place within the country.

- Wholesalers and retailers are the middlemen that are involved in the movement of goods from producers to consumers.
- The main functions of wholesalers include bulky buying, warehousing, transportation and bulk-breaking.
- Retailers buy goods in bulk from wholesalers and sell them to consumers in smaller quantities.
- Formal trade relates to all businesses that are registered with and regulated by the government.
- Informal sector is composed of businesses that are not registered or regulated by the government.

Home trade

1. Describe characteristics of home trade
2. Describe characteristics of foreign trade
3. Compare home trade and foreign trade
4. Outline the advantages and disadvantages of international trade

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Trade

- Trade involves the exchange of goods and services between individuals or entities.
- It is the central commercial activity in the economy.
- Trade is not limited to one country but also involves the exchange of goods and services between two or more countries.
- There are two categories of trade namely home trade and foreign trade.

Home trade

- Home trade is also known as domestic trade or internal trade.
- It is the act of buying and selling of products within the boundaries of a country.
- Home trade involves retailers and wholesalers.
- The buyers and sellers involved in trade are within the same country.

Characteristics of home trade

- Home trade takes place within the same country.
- Buyers and sellers involved in trade use the same currency.
- It has fewer transport costs since trade takes place within the same country.
- There are fewer documents and approvals from the government to transfer goods.
- Volume of goods to be traded depends on the population of the country and demand for the product.
- Only goods available within the country are traded.

Foreign trade

- Most countries are becoming more interdependent and that process of interdependence is called globalization.
- Due to this interdependency, countries exchange goods and services across their international borders.
- This exchange of goods and services between two or more countries is called international trade.
- However, a government can also put restrictions on the movement of goods and services to and from other countries.
- Foreign trade is also called international trade.

Main features of international trade

- There is limited mobility of factors of production.

    - Factors of production, such as labour and capital move freely within a country but do not freely move between countries.
- Market conditions are different in other countries. For example, countries may use different units of measurements and have different tastes and preferences.
- Transfer costs of products are high as a result of transport costs and the costs of middlemen when trading between countries.
- Goods and services are exchanged between countries that have different political systems.
- Goods and services that may come from other countries do not promote national interests. Examples of products that cannot suit Zimbabwe's interests is that of mini-skirts that are imported.
- Countries that trade internationally have different economic and trade policies, for example in terms of taxation, tariffs and licensing of products.
- The producers and buyers of goods and services are geographically separated.

Factors that lead to international trade

- Limited mobility of factors of production.
- Land is immobile
- Mobility of labour is restricted by language and customs. There are also restrictions on immigration.
- Capital is mobile, but usually crosses boundaries if the conditions are favourable, for example, if there is political stability and if there are no barriers of ploughing back profits.
- Due to challenges in movement of factors of production like land and labour, countries with abundant land compared to labour may specialize on commodities that are land intensive, for example, maize, tobacco and poultry.
- Those goods may be exchanged for labour intensive products such as manufactured products that are produced in other countries.
- Countries have different geographical locations and various climatic differences, thus they can specialize on the production of different goods and services.
    - For example, some countries may focus on the production of agricultural products due to their climatic conditions.
- Some locations have valuable natural resources, for example Gulf countries, where there is oil. That can determine what a country will specialize on.
- There are also differences in skills, hence a need to trade internationally so as to benefit from the variety of skills.
- Technological differences between countries may also foster international trade.
- There are differences in goods produced in different countries, hence trade may allow variety of goods and services to be exchanged around the globe.

Advantages of international trade

- International trade aims at maximum gains from importing and exporting goods and services.
- It allows various types of goods to be distributed around the globe.
- It promotes optimal use of resources since each country focuses on the production of goods and services that suits its resources.
- It allows for specialization.
- International trade promotes more production since firms will be producing for both home and foreign markets.
- International trade can also stabilize international prices.
- There is exchange of technical knowledge between countries, thus economic development is more likely to increase.

- Competition from other countries is most likely to improve efficiency of production in developing countries.
- International trade improves relations between countries, hence countries are most likely to cooperate with each other, for example they can exchange cultures and ideas.
- It boosts financial positions of countries as it leads to the inflow of foreign currency.
- International trade allows risks to be spread out. For example, in a situation where the home country's economy is not stable, goods may be sold to other countries with stable economies.
- Foreign trade also increases revenue to the government and other firms involved in international trade.
- Domestic firms will have access to larger markets enabling them to take advantage of economies of scale.
  - Economies of scale are the advantages that a firm obtains from operating at a large scale.
  - The advantages help to reduce costs of production and enhance the potential of the country to acquire advanced technology and equipment.
- Consumers will have a variety of products to choose from.
- Consumers may also benefit from increased competition since quality products will be sold at lower prices.
- International trade also allows division of labour.
  - Division of labour refers to the splitting of the process of production into different stages to enable workers to focus on their specific tasks.
  - This division of labour improves the efficiency of firms as well as quality of products since workers will be concentrating on jobs that best suit their skills.

Disadvantages of international trade

- Developing countries will depend more on developed countries, thus they can be exploited in the end.
- There is a risk of proprietary information theft by other foreign firms. Take for instance, marketing concepts of the products may be duplicated by other foreign firms.
- Foreign trade has high credit risks.
- There may be overuse of resources in order to meet external and internal demand.
- Trading firms should study and adopt cultures or policies of foreign countries involved in trade.
- There is a need for middlemen to facilitate the trade.
- International trade can also lead to political interference as developed countries may end up influencing the politics of developing countries for their own benefits. This may lead to political instability.
- International trade may threaten the survival of small or infant firms.
- There may be importation of goods that have an adverse effect on the economy, for example harmful drugs.
- Excessive international trade can lead to dumping, whereby foreign countries can sell goods of very low quality to developing countries.
- Excessive trade between countries can also lead to shortages in the home country.
- Developing countries may fail to improve their economies since they may focus on selling primary commodities and purchasing secondary or manufactured goods from other countries.
- There is likely to be problems of imported inflation and other economic troubles.
- Trade rivalries may lead to war or friction between countries.
- There can be exchange rate risks as exchange rate is most likely to highly fluctuate.
- Higher costs are usually incurred, for example, on the transportation of goods.

- There will be need for translation of languages for people of the intended country to understand each other.
- The local currency should be converted to different currencies hence a need for foreign currency reserves. However, the reserves may be depleted if foreign exchange is excessive.
- There are risks of changes in government policies in order to suit the international community as well as risks of wars.
- There is a problem of keeping up with the changes of tastes in foreign countries.

Differences between international and internal trade

Comparison table

Home trade	Foreign trade
Trade within the boundaries of a country	Trade between two or more countries
There is use of the same currency	There is use of different currencies
There is limited or no restrictions on the movement of goods from one point to another	There may be restrictions on the movement of goods and services from one country to another
Less transport costs and risks involved in transportation of goods	High transport costs and risks involved in transportation
Leads to self-sufficiency or independence of an economy	Leads to interdependence of countries
Few documents are required by the government from the trading firms	The government requires more documents from trading companies
Trade usually depends on demand and production in the home country	Trade is determined by restrictions like duties and taxes.
There is less time gap in delivery of goods and services	Wide time gap in delivery of goods and services

FOREIGN TRADE

1. Distinguish between exports and import
2. Describe reasons for engaging in international trade
3. Explain comparative and absolute advantage theories
4. Calculate balance of trade (BOT)
5. Calculate balance of payments (BOP)
6. Interpret BOP figures (deficit/surplus).

FOREIGN TRADE

- Most countries around the world are becoming more dependent on each other.
- The process of interdependence of countries is called globalization.

- Due to this interdependency, countries exchange goods and services.
- The exchange of goods and services between two or more countries is called international trade.

Exports

- Exports are domestically produced goods and services that are sold to other countries.
- Exports play an important role in the economy because they influence the level of economic growth, employment and balance of payments.
- An increase in exports creates employment.
- As demand for exports increases, producers employ more workers to meet the increase in demand.
- As exports increase, aggregate demand increases leading to higher economic growth.
- Increased value of exports mean that the country is less likely to experience a current account deficit.

Imports

- Imports are goods and services that are produced by foreign firms and sold to the citizens, businesses or government of a domestic country.
- When the value of imports is greater than the value of exports, a country has a trade deficit.
- Countries with high imports are supposed to increase their foreign reserves so as to pay for imports.
- However, an increase in foreign reserves can affect the value of domestic currency.
- More imports instill competition to local firms thus small firms may find it difficult to survive.

Factors that lead to international trade

Countries engage in international trade due to:

- Limited mobility of factors of production
    - Land is immobile
    - Mobility of labour is restricted by language and customs. There are also restrictions on immigration.
    - Capital is mobile but usually crosses boundaries if the conditions are favourable. For example, if there is political stability.
    - Due to challenges in movement of factors of production, countries specialize in producing certain products.
- Climatic differences
- Differences in skills
- Technological differences

Challenges faced in international trade

- Higher costs are usually incurred, for example, on the transportation of goods.
- There will be a need for translation of language for the people of the intended country to understand.
- The local currency should be converted to different currencies.
- There are risks of changes in government policies as well as risks of wars.
- There is a problem of keeping up with the changes of tastes in foreign countries.

Benefits of international trade

- Domestic firms have access to larger markets thus enabling them to take advantage of economies of scale.
    - Economies of scale are the advantages that a firm obtains from operating at a large scale.
    - The advantages involve reduction in costs of production.

    - There is a high potential for the country to acquire advanced technology and new equipment.
- Consumers have access to a variety of products.
- Consumers benefit from increased competition as they get quality products at lower prices.
- International trade also allows division of labour.
    - Division of labour refers to a situation where the work process is divided into smaller tasks which are performed by separate individuals or work groups.
    - This division of labour improves the efficiency of a firm as well as quality of products since workers will be concentrating on jobs that best suit their skills.
- Countries may benefit from the gains of comparative advantage and absolute advantage.

Comparative advantage and absolute advantage

- In international trade, there is need for countries to specialize in the production of goods and services to which they have a comparative or absolute advantage over.

Comparative advantage

- Comparative advantage focuses on how much cost efficient and productive efficient one country is as compared to another country.
- Efficiency relates to the capability of producing a product with the fewest possible resources or incurring the minimum possible cost.
- Cost efficiency can be referred to as the ability of a country to produce goods and services at the possible lowest cost.
- Therefore, a country that has comparative advantage is cost efficient as well as productive efficient than another country.
- Comparative advantage may also mean that a country can produce a good at a lower opportunity cost than another country.
- The following example can be used to illustrate comparative advantage.
- There are two countries, Zimbabwe and Zambia, producing only two goods, stationery and clothes. Table 16.1 below shows their production.

Table 16.1: Output of Zimbabwe and Zambia

	Zimbabwe	Zambia
Stationery	4	8
Clothes	5	3
Total	9	11

- From the table above, one can tell that for Zimbabwe to produce 1 unit of stationery it has to forego 1.25 units of clothes. [5/4 = 1.25]
- For Zambia to produce 1 unit of stationery it is supposed to forego 0.38 units of clothes. [3/8 = 0.38]
- Therefore, Zambia has a comparative advantage in the production of stationery than Zimbabwe.
- This is because Zambia has a lower opportunity cost in producing stationery than Zimbabwe.
- For Zimbabwe to produce 1 unit of clothes, it has to forego 0.8 units of stationery. [4/5 = 0.8]
- For Zambia to produce 1 unit of clothes, the opportunity cost is 2.67 units of stationery. [8/3 = 2.67]

- Therefore, Zimbabwe has a comparative advantage in the production of clothes since the country has a lower opportunity cost than Zambia.
- When each country specializes in production of one product, then output will double using the assumption of constant returns to scale.
- Constant returns to scale assumes that if we increase inputs, for example by 10%, the output will also increase by the same proportion, that is, 10%.
- The table below shows the output of Zimbabwe and Zambia if they specialize.

Table 16. 2: Output after specialisation

	Zimbabwe	Zambia
Stationery	0	16
Clothes	10	0
Total	10	16

- From table 2, one can tell that when countries specialise, their output will double.
- The output of both countries increased.
- Before specialisation, Zimbabwe produced a total output of 9 units but after specializing on clothes its production increased to a total of 10 units.
- Zambia produced 11 units of output before specialisation and after specialising, its output increased to 16 units.
- Therefore, specialising increases the output level of a country.

Limitations of comparative advantage theory

- Transport costs that may be incurred may outweigh the gains from specialising.
- As specialisation increases, firms in a country may face diseconomies of scale.
  - Diseconomies of scale are the costs incurred when a firm grows larger in size and production.
- Government may restrict trade.
- Comparative advantage theory only measures static advantages or fixed advantages but does not consider progressive advantages.
  - Take for instance, if Zimbabwe invests in the production of stationery, in the future it will become an expert in production of stationery.
  - However, comparative advantage theory only focuses on the present advantages and not on what the future holds.
- External costs related to trade, like air pollution, are ignored hence the benefits may be overstated.
- Specialisation may end up creating structural unemployment where it may be difficult for workers to transfer from one sector to another.

Absolute advantage

- Absolute advantage means that a country will be producing goods at a lower cost than another country.
- A country will be using less resources to produce the same amount of goods.
- If a country has an absolute advantage in the production of a certain good, it may not necessarily mean that the country is supposed to produce that good.
- The country is supposed to have a comparative advantage towards the production of that good.
- Also, absolute advantage may mean that a country is producing using smaller quantities of inputs compared to another country.
- The following example will help to explain the theory of absolute advantage.

Example 16.1

There are two countries, Zimbabwe and Zambia, producing only two goods, stationery and clothes. The table below shows their production at a given time period.

Table 16.3: Output of Zimbabwe and Zambia

	Zimbabwe	Zambia
Stationery	4	8
Clothes	5	3
Total	9	11

- For a given time period, Zimbabwe is producing 4 units of stationery while Zambia is producing 8 units of stationery.
- Zimbabwe is producing 5 units of clothes whilst Zambia is producing 3 units.
- Zimbabwe has an absolute advantage in producing clothes and Zambia has an absolute advantage in producing stationery.
- From the previous calculations of comparative advantage, one can tell that Zimbabwe has both comparative and absolute advantage in the production of clothes whilst Zambia has both comparative and absolute advantage in the production of stationery.
-

BALANCE OF TRADE AND BALANCE OF PAYMENTS

Balance of payments

- Balance of payments account records financial flows between a particular country and other countries.
- When a country is involved in foreign trade, it makes certain payments to other countries.
    - In turn, it also receives payments from its trading partners.
    - These financial flows are captured in the balance of payments account.
- Financial flows that are also recorded in the balance of payments account apart from foreign trade are international borrowing, international investments and loan repayments.
- Balance of payments account is usually divided into three main accounts which are current account, capital account and financial account.
- The accounts are presented in the form of a balance sheet account.

Credit items

- Exports
- Current transfers into the country
- Capital transfers into the country
- Direct and portfolio investments into the country

Debit items

- Imports
- Current transfers out of the country
- Capital transfers out of the country
- Direct and portfolio investments out of the country

Sections of balance of payments account

Current account

- This section is concerned with income and expenditure that relate to foreign trade.
- It records a nation's transactions in international trade of goods and services as well as other inflows or outflows of income and transfers.

- The current account records visible trade in goods and invisible trade in services.
- It also records incomes received from other countries and payments that are made to other countries.
    - Take for instance in Zimbabwe, payments that are recorded on the debit side include wages that are paid to foreigners working in Zimbabwe and interests, profits and dividends paid to people from other countries who have invested in Zimbabwe.
    - If Zimbabwean residents are working in other countries, their wages are recorded on the credit side of the current account.
    - Interest, profits and dividends that are earned by Zimbabweans who have invested in other countries are also recorded on the credit side.
- Current account also records current transfers.
    - These include payments between governments and other transactions that have no direct payments for productive activities.

Debit items in the current account include:

- Donations, gifts of money and pension payments made by Zimbabweans to residents of other countries.
- Aids and other payments made to other countries by Zimbabwe.
- Taxes and excise duties paid by Zimbabweans to governments of other countries.

Credit items in the current account

- The following are examples of some current account credits:
    - Donations, gifts of money and pension payments received from other countries' residents.
    - Aids and other payments made by other countries to Zimbabwe.
    - Taxes and excise duties paid to Zimbabwean government by residents from other countries.
    - Grants received from other countries.
- In overall, the current account records four items which are:
    - Balance of goods
    - Balance of services
    - Balance of income
    - Balance of current transfers
- The current account will be in deficit if the values of debit items exceed the values of credit items.
- There is current account surplus if credits exceed debits.

Capital account

- This account records capital transfers, acquisition and disposal of non-financial assets.
- Capital transfers include grants from the government and debt forgiveness.
- Acquisition and disposal of non-financial assets is concerned with purchases and sales of assets. For example, purchases and sales of land, copyrights, trademarks and patents.

Financial account

- The financial account records transactions of changes in ownership of a country's foreign assets and liabilities.

Four main sub-accounts under financial account are:

- Direct investments. These are investments in productive assets such as purchase of machinery, factories, equipment and setting new branches in foreign countries.
    - These investments help in the process of wealth creation.
- Portfolio investments. These are investments in paper assets for example, shares, treasury bills and government bonds.

- Other financial flows. These include bank deposits from overseas residents and loans from abroad into a country.
- Reserve assets. They involve changes in national reserves.

Causes of deficit in balance of payments account

- High income levels in the domestic economy results in a deficit.
  - This is because when people have high incomes, they usually demand more goods and services from other countries.
  - When people demand more of domestic products there will be a reduction in exports.
  - If the people demand more foreign products, there will be an increase in imports.
  - Local firms may also increase their imports of raw materials in a bid to expand their output so as to meet increased demand.
  - However, the incomes from other countries should be low so that there will not increase the value of imports.
- An overvalued exchange rate can also lead to a deficit.
  - Overvalued exchange rate will make exports more expensive in terms of foreign currency and imports will be cheaper in terms of domestic currency.
  - If the demand for exports and imports is elastic, revenue on exports will fall and expenditure on imports will rise.
- A country may be producing goods and services of low quality.
- A country may be producing goods and services that have low world demand.
- A deficit may also be caused by higher costs of production.

Effects of balance of payments deficit and surplus

- The effects of a deficit or a surplus depend on the size, the cause and the duration of the deficit or surplus.
- In the short run, a deficit will increase the standards of living because a country will be consuming more goods and services than what it is actually producing.
  - On the other hand, if the deficit is not financed by income from investments, it may be financed by either borrowing or reserves.
  - Borrowing may result in weakened investment account in the future due to an outflow of interest, dividends as well as profits.
- A deficit can also reduce money supply if it is not offset by monetary controls hence it will lead to a reduction in inflationary pressure.
- A surplus would mean that there is increased opportunity cost since the country will be foregoing the opportunity to consume its goods and services.
- Surplus may also cause an inflationary pressure because it involves net inflow of money and a net outflow of goods and services.

Balance of Trade

- Balance of trade is the difference between a country's imports and exports.
- It is the largest part of a country's balance of payments account.
- Balance of trade records flows of income from visible trade in and out of the country.
- When calculating balance of trade, the following formula is used:
  - ***visible balance = value of visible exports - value of visible imports***
  - Visible exports are goods sold to foreign countries in order to earn income.
  - These goods include equipment and other manufactured products like food stuffs.
  - Visible exports indicate an inflow of money from the sale of goods into the country.
  - Visible imports are goods bought from other countries.

- Therefore, visible imports indicate leakages of money out of a country.
- Visible balance of trade is the difference between the value of visible exports and visible imports.
- Balance of trade will be favourable if the exports of a country are more than the imports.
- A favourable balance of trade is known as trade surplus.
- If a country spends more than what it earns from selling its goods to other countries, then it is operating under a trade deficit
- A trade deficit can also be referred to as an unfavourable balance of trade.
- In order to maintain a favourable balance of trade, the government should put restrictions on international trade or create trade policies that boost trade surplus.
- This restriction of international trade is called protectionism.
- Balance of trade is the most important element of the current account.
- A current account is a component of the balance of payments of a nation and it records exchange of goods and services the country has with trading partners.
- The three components of a current account are;
    - Visible trade
    - Invisible trade
    - Net transfers
- It is called the current account because only the values of goods and services traded within the current period are recorded in there.

Current account - Table 16.4:

DEBIT	CREDIT
Imports Foreign aid Domestic spending abroad Domestic investments abroad	Exports Foreign spending in the domestic markets Foreign investments in the domestic economy

- If the debit side is greater than the credit side or if imports are greater than exports, it means that there is a net outflow or a trade deficit.
- If the credit side is greater than the debit side, it means that there is a positive balance of trade or a net inflow or a trade surplus.

Trade Deficit

- Trade deficit puts pressure on the country's exchange rate, inflation and foreign debts thus, having adverse effects on the stability of the economy.
- Trade deficit has a negative impact on a country's currency.
    - If imports are greater than exports, the demand for the local currency will be low.
- A low demand for currency makes the currency less valuable on the international market.
- There are various reasons that cause trade deficit and these include:
    - Higher level of consumers spending on foreign goods and services against low savings,
    - Overvalued exchange rates,
    - Falling comparative advantage in manufactured goods.

Trade Surplus

- Trade surplus influences a country's value of currency in the global market.
- Trade surplus can help a country to control its currency through trade thus strengthening its currency.

- Trade surplus means that there is a higher demand for a country's goods and services in the global market and that scenario pushes prices higher leading to direct strengthening of that country's currency.

Solutions to trade deficit

- The government should agree on a pegged exchange rate that keeps currency at a fixed rate, unlike a floating exchange rate where the exchange rate is determined by market forces.
- Government should also manage investments in foreign accounts so as to control volatility and the movement of currency.
    - Volatility of currency refers to the amount of risk that is involved with the size of changes in currency exchange rate.
    - Higher volatility means that the price of the currency can change drastically over a short period.
    - Lower volatility means that exchange is not fluctuating drastically but steadily changes in value over time.
    - Therefore, the higher the volatility, the higher the risk, hence volatility is to be controlled to solve trade deficit.

Calculating balance of payment (BOP) and balance of trade (BOT)

Example 16.2: Balance of payment and balance of trade

From the following figures calculate a country's balance of trade. (The figures are in millions)

Imports of goods	\$135
Imports of services	\$115
Exports of goods	\$165
Exports of services	\$85

Answer

Balance of trade = value of visible exports – value of visible imports

= \$165 - \$135

= \$30

Interpretation of results

- From the calculations of BOT, imports of services and exports of services are excluded since they are not visible trade.
- Therefore, balance of trade encompasses a country's visible trade.
- The value of the country's BOT is \$30 million. This indicates a favourable balance of trade.
- This is because the value of exports is greater than the value of imports, hence there is a trade surplus.
- Given that the visible imports were greater than the visible exports, the country was going to experience a trade deficit.

Example 16.3: Balance of payments

	\$ By 1 000 000
EXPORTS: SERVICES GOODS	125 350
IMPORTS: SERVICES GOODS	120 200

Profits earned by Zimbabwean companies based in other countries	900
Dividends paid to foreigners working in Zimbabwe	450
Zimbabwe received grants from China	200
Bank deposits from Zimbabweans in South Africa	100
Transfer of funds to a foreign country by a Multinational company based in another country	550

Answer

	$ By 1 000 000	$ By 1 000 000
CREDIT ITEMS: Exports: Services Goods		 125 350
Current transfers into the country:		
Profits earned by Zimbabwean companies based in other countries		900
Zimbabwe received grants from China		200
Financial transfers:		
Bank deposits from Zimbabweans in South Africa		100
		1 675
DEBIT ITEMS:		
Imports: Services Goods	120 200	
Current transfers out of the country		
Dividends paid to foreigners working in Zimbabwe	450	

Financial transfers:		
Transfer of funds to another country	550	
Total debits	1 320	(1 320)
BALANCE OF PAYMENT		355

Interpretation of results

- From the calculations above, one should tell that the credit items have a positive balance and the debit items have a negative balance.
- Credit items consist of all the inflows into the economy and debit items are the outflows from the economy.
- The BOP for Zimbabwe is $355 million and it is positive since the credit items are greater than the debit items.
- Therefore, the country is experiencing a favourable balance of payments

Summary

- Many countries around the world are dependent on each other through trade.
- The exchange of goods and services between two or more countries is called international trade.
- Due to globalization, people import and export goods and services.
- Imports are goods and services that local people buy from other countries.
- Exports are goods and services that residents and firms of a country sell to other countries.
- The following factors promote international trade:
    - Limited mobility of factors of production
    - Countries have different natural resources,
    - Differences in human capital base,
    - And technological differences.
- The two main reasons for nations to involve in international trade are existence of comparative and absolute advantages.
- Comparative advantage focuses on how cost efficient and productive efficient one country is as compared to another country.
- Absolute advantage simply means that a country produces a certain good at a lower cost than another country.
- A country’s balance of trade account is a record of financial flows between a particular country and the rest of the world.
- The balance of payments account has three accounts namely, current account, capital account and financial account.
- The balance of trade is the difference between a country’s imports and its exports.
- A current account is a component of the balance of payments of a nation which records exchange of goods and services that the country has with its trading partners.
- The three components of a current account are;
    - Visible trade
    - Invisible trade
    - Net transfers

- Visible exports are goods sold to other countries in order to earn income.
- Visible imports are goods bought from other countries.
- Balance of trade will be favourable if the exports of a country are more than the imports.
- On the other hand, if a country spends more than what it earns, it is operating under a trade deficit.

Terms of trade

1. describe terms of trade
2. calculate terms of trade

Terms of trade

- Terms of trade (TOT) measures the rate at which a country's products are exchanged for goods and services of other countries.
- It records the quantity of goods and services that a particular country exchanges for products of other countries.
- It is a trade ratio between index of import prices and index of export prices.
- The indices of import and export prices are weighted average prices.
- The import index is calculated from a sample of goods and services that are imported. It is the calculation of average prices of all or major imports of a country.
- The export index is calculated by finding the average prices of a number of goods and services that comprise the basket of major export products.
- The formula of terms of trade is: index ofexport pricesindex ofimport prices×100

Example 16.1: Terms of Trade

Take for instance, if the index of export prices rise from 100% to115% and the index of import prices increases by 10% to 110%, terms of trade will be calculated as follows:115110×100=104.55

- This means that trade improved by 4.55%.
- If the value of terms of trade is above 100%, it means that there is an improvement. However, if it is below 100% then it is adverse.
- When terms of trade is less than 100%, it means that there is more capital going out of the country than what is coming in.
- When terms of trade is greater than 100%, it means that the value of exports is greater than that of imports.
- Therefore, from **Example 16.1**, there is an improvement since terms of trade is at 104.55%.
- A rise in terms of trade is favourable to an economy and it means that any given amount of exports will exchange for a greater value of imports.
- An improvement in the terms of trade may arise from any of the following conditions:
    a. If there is an increase in export prices holding import prices constant.
    b. If there is an increase in export prices and a decline in import prices.
    c. If export prices are increasing at a faster rate than prices of imports.
    d. If export prices remained constant but import prices declined.
    e. If the fall in export prices is less than the fall of import prices.
- A fall in terms of trade is unfavourable or adverse to the economy.
- However, terms of trade may mislead in some circumstances. For example, in cases where a rise in terms of trade leads to an adverse effect on a nation's trade position.
- This is because export revenue and import expenditure do not only depend on price but on quantity changes as well.

Causes of change in the terms of trade are:

- Changes in demand and supply conditions.
- Changes in rate of inflation.
- Changes in a currency's external value.

Reasons for unfavourable terms of trade

There are a number of factors that lead to unfavourable terms of trade such as:

- A decrease in external or foreign demand for a country's exports which causes a decline in the price of exports.
- A fall in value of a nation's currency which results in a fall in price of exports compared to imports.
- Prices of imports may increase due to a rise in inflation rate of other countries relative to the exporting country's inflation rate.
- If there is an increase in the supply of exports, the prices of exports will fall thereby causing unfavourable terms of trade.

Effects of changes in terms of trade

- An increase in prices of exports due to an increase in demand has a beneficial effect on the balance of payment position.

Causes of changes in terms of trade

- Since terms of trade is a price relationship between a nation's exports and imports, it is influenced by factors that determine prices of exports and imports.

Short run

- A change in prices of imports and exports is usually caused by exchange rate fluctuations, especially in floating exchange rate system.
- Fluctuations in exchange rate are as a result of changes in inflation and interest rates.
- In the short run, fluctuations of the prices of commodities affect the terms of trade.
- For example, agricultural products are usually affected by drought or diseases, thus leading to fluctuations of their prices.
- If demand and supply for such products is inelastic, then a change in supply will cause a greater change in price of such products.
- Fig 16.1 indicates the effects of inelastic demand and supply on terms of trade.

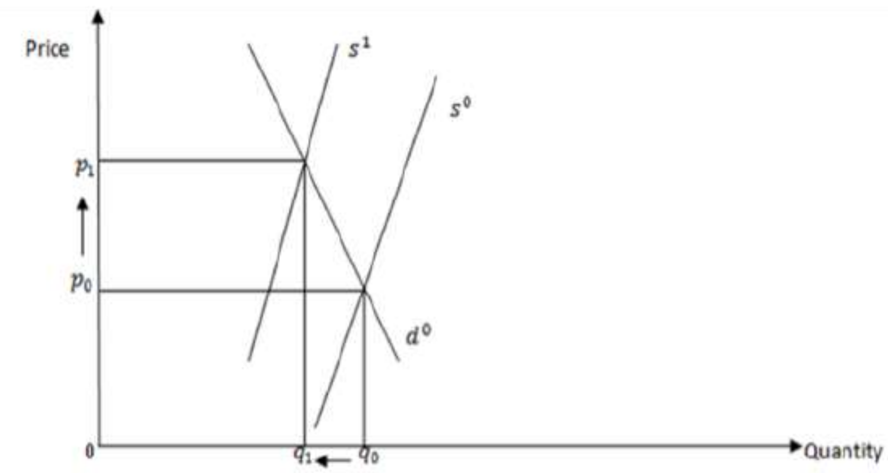


Fig 16.1: Effect of elasticity on Terms of trade

- From **Fig 16.1**, it can be noted that when demand for and supply of exports is inelastic a decrease in supply of exports from s0 to s1 will result in an increase in export prices from p0 to p1 and a smaller percentage decrease in demand for exports from q0 to q1.
- This indicates a rise in export revenue for the country.
- Also, an inelastic demand for imports would mean that a fall in price of imports from p0 to p1, would lead to a rise in demand by a smaller percentage from q0 to q1, thus a fall in import expenditure.

Long run

- In the long run, developing countries that export primary goods are likely to experience a fall in export prices because of increased supply of exports.
- Although the price of the imports falls due to this increased supply of the products, the demand for imports declines.
- Increased supply of exports is due to improvement in technology, for example, an improvement in farming equipment may increase the output.
- A fall in demand may be as a result of development of new substitutes in foreign countries and/or protection of agricultural products.
- Developing countries may sell agricultural products at lower prices but protectionism makes these developing countries to face difficulties in exporting their products. This once happened in the European Union where an external tariff was imposed.
- If demand for imports is elastic, then a rise in their price results in a greater percentage fall in demand for imports thus a fall in import expenditure.
- If demand for exports is elastic, then an increase in price means demand for exports will decrease more than the fall in imports hence a rise in export revenue.
- However, a favourable movement in terms of trade can have an adverse effect on the balance of payment account and an unfavourable movement can lead to an improvement in the current account of a country.

Improvement in terms of trade

- An improvement in terms of trade may mean that there is deterioration in competitiveness of the exporting country and this may lead to a fall in demand for exports in the future.
- As exports decrease, balance of payments is adversely affected.
- However, an improvement in terms of trade worsens the trade balance if demand for imports and exports is price elastic.
- Fig 16.2 shows the effects of an increase in prices on the demand for exports.

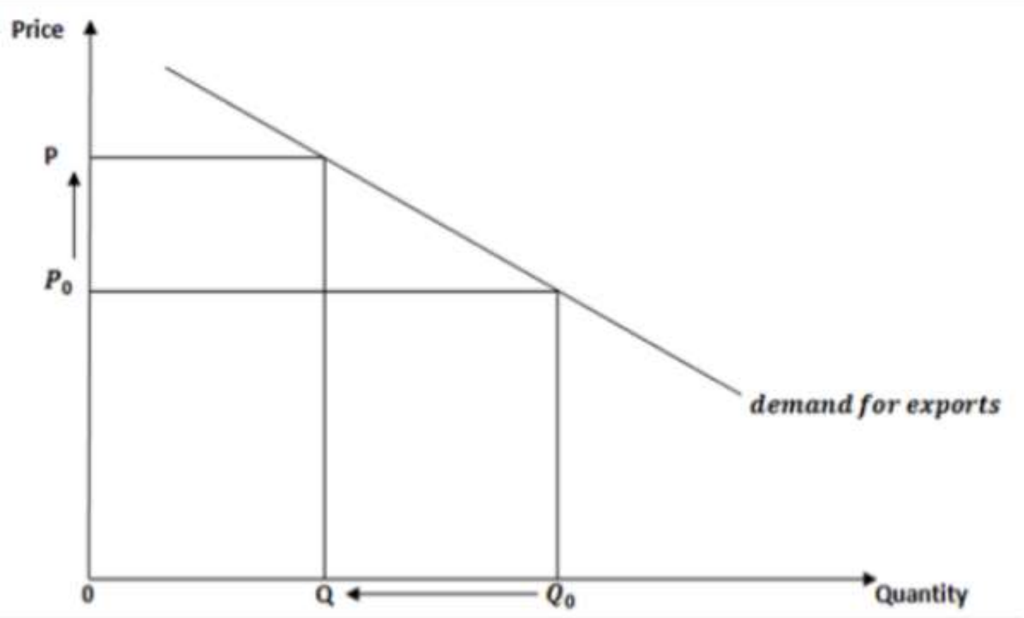


Fig 16.2: Effects of increase in price on demand for exports

- From fig 16.2, it can be noted that when price increases from P0 to P quantity demanded decreases from Q0 to Q.
- The rise in price causes a more than proportionate fall in quantity demanded, thus less is spent on exports.
- As exports decrease, revenue will also decrease.
- Fig 16.3 indicates the effects of a fall in price on demand for imports.

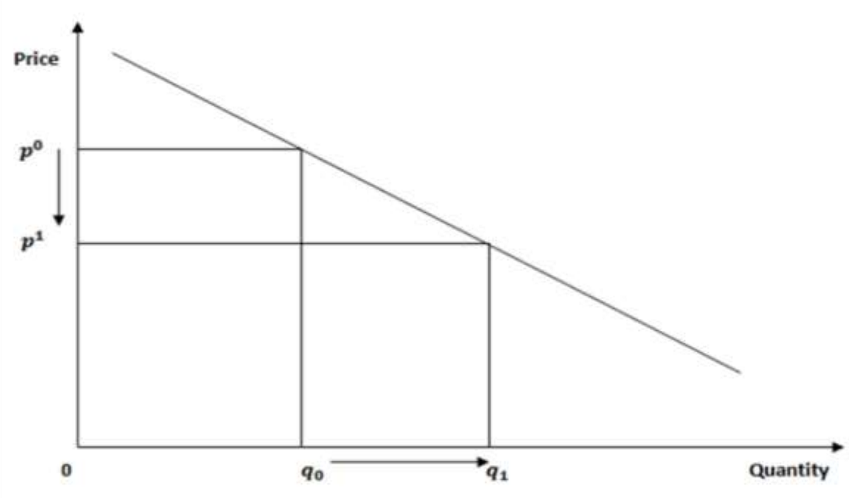


Fig 16.3: Effects of a fall in price on demand for exports

- From **Fig 16. 3,** it can be noted that when price decreases from p0 to p1 quantity demanded increases from q0 to q1.
- A decrease in price causes a more than proportionate increase in quantity demanded for imports, thus more is spent on imports.
- As imports increase, expenditure will also increase.
- Therefore, if demand for exports and imports is elastic, increased export prices and reduced import prices will have an adverse effect on the trade balance.

Deterioration of terms of trade

- Deterioration in terms of trade means that there is an improvement in competitiveness of exports since import prices increase more than export prices.
- As demand for exports increases, there will be an improvement in the current account.
- An unfavourable movement of terms of trade can improve the trade balance only if demand for exports and imports is price elastic.
- Fig 16.4 shows the effects of a decrease in price on demand for exports.

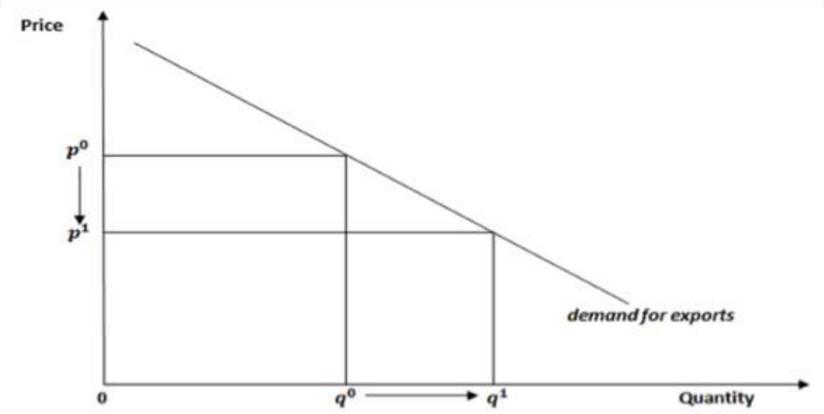


Fig 16.4: Effects of a decrease in price on the demand for exports

- A decrease in price from to   results in a more than proportionate increase in quantity demanded of exports from to as indicated in fig 16.4.
- This means that exports will increase thus revenue will also increase.
- Fig 16. 5 shows the effects of a decrease in price on demand for imports.

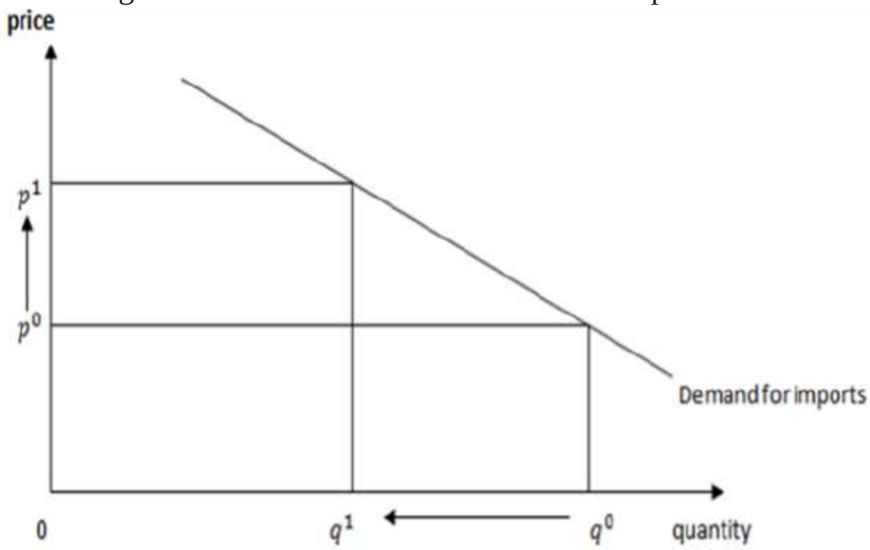


Fig 16.5: Effects of a decrease in price on demand for imports

- From Fig 16.5, an increase in price from to   results in a more than proportionate decrease in quantity demanded of imports from to.
- This means that imports will decrease thus expenditure will also decrease.

- Therefore, terms of trade worsens the balance of payments if demand for exports and imports is price elastic and improve if demand for exports and imports is price inelastic.

Impact of changes in terms of trade

- Changes in terms of trade affect the standards of living for developing countries since they depend more on exports of primary products like minerals and agricultural produce.
- The effects may either be positive or negative depending on whether it is an improvement or deterioration.
- An improvement leads to improved living standards and deterioration reduces living standards.

Foreign exchange

- Exchange rate refers to the price of one currency in relation to another.
- It is the market price of one country's currency in terms of another.
- Take for instance, if the exchange rate between United States Dollar(USD) and South African Rand(R) is USD1 = R14. This means that, it costs R14 in order to get US$1.
- Major influences of exchange rates are:
  - Interest rates
  - Export demand
  - Import demand
  - Inflation
  - Political factors
- There are three types of exchange rates which are:

  a. Freely floating exchange rate

b. Managed exchange rate

c. Fixed exchange rate

Freely floating exchange rate system

  - This type of exchange rate can also be called freely fluctuating exchange rate.
  - This exchange rate system is self-correcting meaning that the exchange rate is determined solely by market forces of demand and supply without or with insignificant government interference.
  - Take for instance, if Zimbabwe is trading with South Africa, the market price for dollar ($) will be determined by the demand for dollar from holders of Rand and supply of dollar from holders willing to buy the Rand.
  - Since Zimbabweans are buying from South Africa, they will supply their dollar and demand the Rand.
  - However, if other countries want to buy from Zimbabwe, they supply foreign currency and demand Zimbabwean dollar, meaning if South Africans demand goods and services from Zimbabwe then they will also demand the Zimbabwean dollar and supply their Rand.
  - The exchange rate will then be the equilibrium price from the forces of demand and supply.
  - The price of Zimbabwean dollar will be expressed in terms of foreign currency or in terms of Rand.
  - Fig 16.6 indicates how the market forces of demand and supply determine the exchange rate.

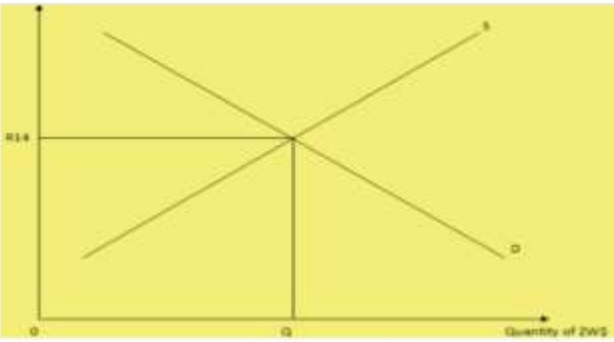


Fig 16.6: Determination of exchange rate by demand and supply

- From Fig 16.6, the exchange rate is determined where supply and demand for ZW$ meet, meaning the exchange rate will be $ 1 = R14.
- If there is an improvement in quality of Zimbabwean products, then there may be an increase in demand for Zimbabwean products from foreign countries.
- Increased demand for Zimbabwean products would mean an increase in demand for ZW$ and that increase in demand for ZW$ will cause the price of dollar to rise.
- A rise in price or value of one currency in terms of another is referred to as an appreciation of exchange rate.
- An appreciation of exchange rate will cause foreign exchangers to increase their supply of foreign currency since they will be selling foreign currency at a higher price.

Fixed exchange rates

- Fixed exchange rate is the value of a country's currency that is pegged against another currency and the fixed value is set by the government.
- Since the government influences the exchange rate in a fixed exchange rate system, to maintain the fixed value the government should be in a position to buy and sell foreign currency.
- The government can purchase its currency on the foreign exchange market if the price is low or below the desired set price and can sell reserves in order to increase supply if the value of exchange is too high or above the desired price.
- Fig 16.7 shows the limits where government is supposed to buy or sell its currency.

Fig 16.7:

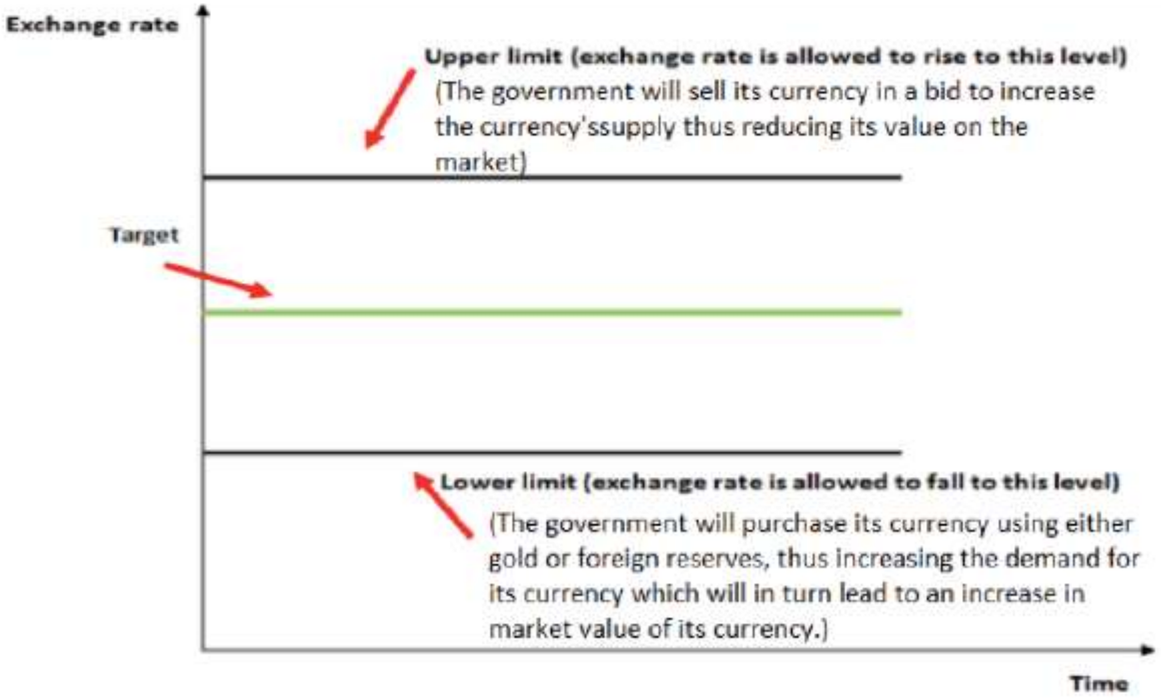


Diagram 7: Upper and Lower limits of exchange rates

Upper and lower limits of exchange rates

- The government fixes its exchange rates so as to control the prices of exports and imports thus reducing uncertainty caused by exchange rate fluctuations for exporters and importers.
- Fixed exchange rate also keeps imported inflation under control hence the government will not allow exchange rate to depreciate making exports cheaper.
- Under a fixed exchange rate system, an upward movement of the exchange rate caused by deliberate changes done by the government is referred to as revaluation.
- Devaluation is when a government deliberately adjusts its currency in terms of another currency.
- Fig 16.8 shows how fixed exchange rates operate.

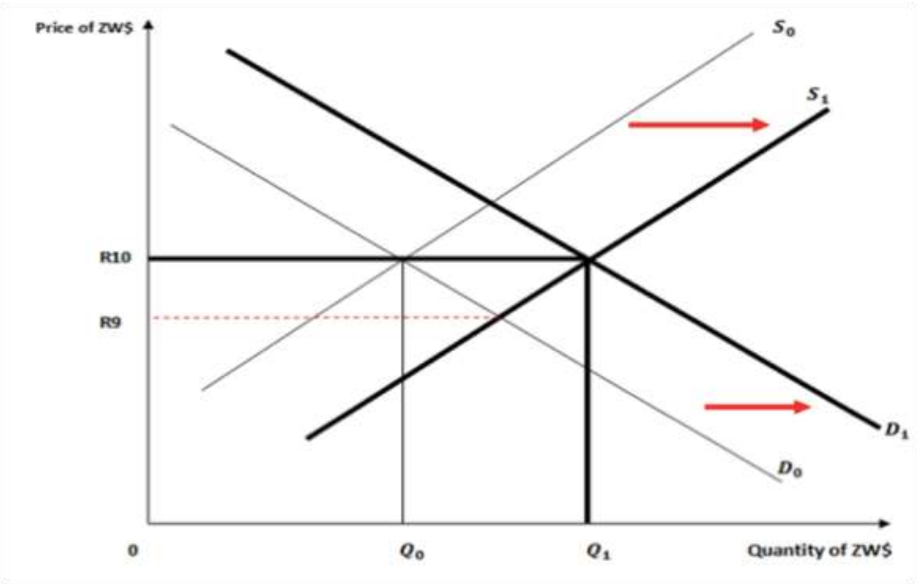


Fig 16.8: Effects of fixed exchange rate

- From Fig 16.8, the fixed exchange rate that was set by the government is ZW$ 1 = R10.
- If imports increase the supply of ZW$ will shift from S0 to S1.
- Without government intervention the exchange price will be at ZW$ 1 = R9, where S1 is at equilibrium with D0.
- However, in a fixed exchange rate system the government will intervene through the central bank by purchasing ZW$ and the result of that move will be an increase in demand from D0 to D1 thus maintaining the initial exchange rate.

Managed exchange rates

- Managed exchange rates can also be called dirty float exchange rate.
- Under managed exchange rate system, the government through the central bank periodically intervenes to change the value of a country's currency.
- The currency is allowed to float or to be determined by market forces up to a point where there are no undesirable external shocks.
- However, beyond that level the government may be involved in a bid to prevent the undesired shocks to take place.
- When intervening, the government can sell foreign currency or buy domestic currency.
- The government can also intervene through change of interest rate policy, for example, increasing short term interest rates in order to attract inflows from investments.

Problems of foreign exchange shortages

- If a country is using fixed exchange rate system, shortages in foreign exchange would mean that the government will fail to purchase its currency in order to increase its currency's demand.
- Shortages of foreign currency especially in a developing country would mean that the country may fail to import critical materials or machinery needed for production.
- The government may also find its difficult to pay their international debts.

Possible sources of earning foreign currency

- The country should produce high quality goods for export. Competitive prices should be charged on products for the export market in order to increase the demand of goods and services in these markets.
- Foreign investors should also be engaged in foreign trade so that when international demand for a country's products increases, the demand and price of the country's currency will increase as well.

- Government can borrow from international institutions for example, International Monetary Fund (IMF), African Development Bank (ADB) and World Bank.
- It can also borrow from other countries or multinational banks.
- Government should encourage foreign direct investments.

Free Trade

1. interpret results from terms of trade
2. explain foreign exchange
3. outline problems resulting from foreign exchange shortages
4. outline reasons and demerits of free trade
5. describe ways of protectionism
6. give reasons for economic integration

Free Trade

- Free trade refers to unrestricted purchase and sell of goods and services between nations.
- The trade of goods and services is without barriers, hindrances or constraints such as tariffs, quotas or embargoes.
- It enables countries to focus on their core advantages or to manufacture products and provide services that they have a comparative advantage.

Advantages of free trade

- Countries can benefit from specialization.
  - Countries will focus on production of goods and services which they have a comparative advantage in their production.
  - This means that a country will specialize on goods and services in which it has a lower opportunity cost.
  - This could lead to an increase in economic welfare.
- Free trade increases consumer choices since there will be a variety of goods and services from which they can choose.
- Increased competition from abroad may lead to an improvement in efficiency in production.
- Increase in competition could also prevent domestic monopolies from charging prices that are too high, thus consumers will benefit from lowly priced goods and services.
- Firms may benefit from improved technology, competitive workers and improved resources.
- Free trade results in an increased dependency between countries, thus conflicts are likely to be reduced because countries will be helping each other.
- Low or no tariffs may boost the exports of a country, thus boosting the economy of the country.

Disadvantages of free trade

- Increased competition can threaten the survival of new and small firms in a developing economy.
  - Newly established firms are likely to face growth challenges since consumers will be opting to purchase foreign goods and services that are cheaper and of higher quality.
  - Established firms may lose market share or can close if they fail to compete with foreign businesses.
- Free trade may lead to a rapid exhaustion of resources of a country.

    - Natural resources are also being used excessively in a bid to try and meet demand, thus there will be rapid exhaustion of those resources.
    - Free trade may lead to rapid changes in climate.
- There is likely to be an increase in pollution due to transportation of goods by road, ship, rail or air.
    - When the atmosphere is polluted, there is likely to be changes in climate.
- Multi-national companies moving from one country to another, may end up exploiting workers in developing countries by paying low wages.

Protectionism

- Protectionism is when an economy guards itself against an increase in imports and/or exports.
- It involves the use of trade barriers in order to restrict international trade and competition or in order to protect local firms and jobs.
- The trade barriers involve tariffs, embargoes, quotas, government regulations and use of subsidies by the government.

Tariffs

- A tariff is a duty or a fee that is imposed on imports or exports.
- Tariffs make imports more expensive thus discouraging local consumers from demanding them.
- Take for instance, a tariff on importation of cooking oil increases its price which leads to less demand for imported cooking oil.
    - If less cooking oil is imported, the demand for local cooking oil increases. This promotes local producers in the country to increase cooking oil production.
- A tariff is an indirect tax and can either be specific or ad valorem.
    - Specific tax is a levy that is set by the government or authorities and is based on particular quantity of a product.
    - It is a levy that is set per unit of imported products.
    - *Ad valorem* tax is levied as a percentage of the total value added by the producer.
    - The tax depends on value or price of an asset or good being imported.
- These tariffs or taxes raise the price of imports, consequently reducing the supply of imports.
- Some countries may agree to form a customs union whereby they trade freely amongst themselves but charge a common agreed tariff on goods and services imported from non-member countries.

Benefits of tariffs

- Domestic products will become more attractive than imports thus local sales are likely to increase.
- Producers will be protected from external competition.
- Tariffs increase revenue for the government.
    - A tariff used for raising government revenue is an excise duty.
- Tariffs help to protect local products from foreign competition.
    - A tariff used to protect local products is called a customs duty.

Disadvantages of tariffs

- Increase in cost of imports will cause a fall in consumer surplus since the importing firms may pass the burden to consumers.
- There may be inefficient production in local firms because there will be no competition from abroad. Therefore, in the long run local firms may fail to continually improve the quality of their products.

- Imposition of tariffs may also lead to retaliation from foreign countries as they may also increase their tariffs.
- If tariffs are too high, the government may get limited revenue because foreign firms will reduce their exports or cease to export and local people may fail to import as well due to increased charges.
- Tariffs may also distort forces of demand and supply.

Subsidising local firms

- Subsidies are benefits or incentives that are given to local producers in a bid to reduce their production costs.
- A subsidy may be given in the form of cash or a reduction in tax.
- Subsidies are given in order to keep prices lower than the market value.
- When local firms are given subsidises, local products will be sold at lower prices than imported products.
- When a government gives farming equipment to farmers, it is a form of a subsidy intended to cut the costs of production.
- Therefore, subsidies help to keep the price of goods low and encourage more consumption.

Disadvantages of subsidies

- Consumers and firms may pay higher taxes to the government because governments usually raise money for subsidies through tax.
    - As taxes increase, for example income tax, people's incentive to work will be reduced and this may lead to higher labour turnover.
- Firms are more likely to become inefficient since they are likely to rely on government subsidies than improving their efficiency.
- Subsidies may also lead to product shortages.
    - When a government subsidizes a product, the price of the product will go down and this is likely to increase the product's consumption.
    - However, producers may fail to meet the sudden increase in demand thus leading to a shortage.

Quotas

- A quota is a quantitative restriction to trade.
- A quota is a fixed amount of imports or exports that are allowed into a country.
- Imports should not exceed the limit given by the government.
- A restriction on the supply of imported goods tends to push up the market prices of imports.
- Quotas help to regulate volume of trade between countries.
- A quota can be imposed on specific products in a bid to reduce their imports thus promoting local production of such products.
- Infant industries are also protected due to a decrease in competition.
    - Therefore, local producers will benefit more.
    - Importers who manage to get costly and scarce import permits will also benefit as they will sell the products at higher prices.
- They keep the amount of imports unchanged even if demand for imports increase.

Disadvantages of a quota

- A quota can promote corruption since officials can be bribed to smuggle goods from one country to another.
- Monopoly profits may also be created by those with licenses. Therefore, consumer surplus can be converted to monopoly profits, thus, consumer welfare is lost.

Embargo

- An embargo is a total ban of a particular product or on all imports from a particular country.
- Embargoes can be used to control trade in weapons or other products that are harmful to people or the environment.
- They can also be imposed for health purposes, for example, a total ban on importation of beef in order to avoid spread of diseases like anthrax.

Content laws

- The government can put laws on imports that specify the amount of either essential content or specified content of products allowed in a country.
- Take for instance, the percentage of caffeine that is allowed in coffee and percentage of sugars allowed in energy drinks can be regulated by the government.
- These specifications limit the type of products imported to those that meet specifications set by authorities only.
- The government can also set quality standard for goods to be imported.
- The standards can be health related such as control on importation of Genetically Modified Organism (GMO).

Bureaucracy

- Bureaucracy can be used to limit the quantity of goods imported or exported.
- Bureaucracy refers to an administrative procedure that is followed when decisions are being made.
- It can also be referred to as red tape.
- If there is a long process of getting permission for importing into a country or getting foreign currency then some importers may become frustrated thus imports may decline.
- The delays involved in approving the imports may also lead to a reduction in imports.

Advantages of protectionism

- Embargoes protect infant industries.
  - Newly established firms will be given time to grow in an environment where there is limited competition from abroad.
  - However, the infant industries may continue to require protection even when they are established.
- Local firms are protected from dumping.
  - Dumping is the selling of goods and services at a price that is below the cost of production.
  - Goods and services will be priced at a lower level such that other firms may fail to compete and are forced to leave the market thus leading to unfair competition.
  - The price will be below the global market price in order to increase sales. However, producers who are importing will be eventually forced out of the business.
- Protectionism corrects trade imbalances, thus helps to reduce trade deficit.
- It protects declining industries being affected by an increase in competition.
- It also protects strategic industries like agriculture, defense, mining and energy.

Disadvantages of protectionism

- Choices of consumers are restricted since they will have few goods and services to choose from.
- Local firms that are inefficient but protected from external competition may be reluctant to improve their productivity and efficiency.
- When a country introduces trade restrictions, other countries may retaliate by introducing some similar trade restrictions.

Economic integration

- Economic integration occurs when two or more countries cooperate to increase the ease of trading between or among them by reducing or eliminating barriers to trade as well as promoting the mobility of factors of production.
- Usually countries which are in same geographical area form trading groups, which are popularly referred to as economic blocs.
- A regional bloc is a group of countries that have created close trading ties by having preferential agreements between or among them.
- Examples of economic trading blocs include Southern Africa Development Community (SADC), European Union (EU) and Common Market for Eastern and Sothern Africa (COMESA).

Southern African Development Community (SADC)

- SADC is a regional economic community that comprises of 15 members which are; Angola, Botswana, Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe.
- It was set up in 1992 and is mainly concerned with regional integration and eradication of poverty within Southern Africa.
- SADC ensures that there is peace, security as well as economic development in the region.
- In 2005, SADC proposed to establish a free trade area by 2008, so as to benefit from the advantages of free trade.
- Therefore, SADC aimed towards loosening restrictions on intra-regional trade so as to ensure efficiency in production.
- SADC also wanted to enhance economic development and economic diversification in the region.
- The free trade area that was to be created was seeking to meet the needs of the private sector as well as other stakeholders.
- Some of the needs were:
  - Increased local production
  - Increased regional exports and imports
  - Access to cheaper consumer goods and inputs
  - Increased foreign direct investments and joint ventures between countries
  - Increased business opportunities
- The overall aim of SADC is to achieve regional integration and to eradicate poverty.
- In August 2008, SADC achieved free trade area and some of the tariffs were reduced and about 85% of intra-regional trade amongst members attained zero duty level.
- From the fifteen member states, thirteen of them were part of the free trade area except Angola, Seychelles and Democratic Republic of Congo.

Objectives of SADC

- To promote and defend security and peace of the region.
- To promote a self-sustaining development as well as inter-dependence of members.
- To have effective utilization of natural resources and to protect the environment.
- To have a gradual development of political values, systems and institutions for member countries.
- To achieve economic growth and development.
- To alleviate poverty in the region.
- To ensure there is an increase in standard and quality of life for people in Southern Africa.

- To support those who are socially disadvantaged.
- To fight HIV and AIDS and other deadly diseases.

Common Market for Eastern and Southern Africa (COMESA)

- COMESA was formed to replace preferential trade area (PTA) and it has 19 member States.
- The member states are Zimbabwe, Kenya, Madagascar, Rwanda, Swaziland, Democratic Republic of Congo, Mauritius, Libya, Ethiopia, Egypt, Union of Comoros, Uganda, Burundi, Djibouti, Eritrea, Malawi, Sudan and Seychelles.
- COMESA was formed in 1994 and was formed by independent countries in order to develop their human and natural resources for the benefit of their citizens.
- They mainly focused on developing their economies and reducing trade barriers among the member states.
- The main objectives of this organisation are as follows:
  - To attain sustainable growth and development for its members
  - To have an understanding of the aims, functions and institutions of COMESA
  - To know the economy of the region
  - To analyse free-trade area, customs union, common market and economic community
  - To evaluate the benefits for member countries
  - To know the trade facilitation programs and transport systems.

African Union (AU)

- African Union (AU) consists of 55 countries on the African continent and it was established in 2001.
- The objectives of AU are as follows:
  - To defend sovereignty of member states
  - To achieve unity and solidarity between African countries and their citizens
  - To promote peace, stability and security on the continent
  - To promote sustainable development
  - To coordinate their economic policies for growth and development of their economies
  - To promote democracy in their member countries
  - To be able to work with other international countries in order to eradicate poverty and to control and prevent diseases
- The African Union has various bodies and these bodies include;
  - Pan-African Parliament (PAP)
  - Assembly of the African Union
  - Peace and Security Council (PSC)
  - Executive Council
  - African Union Commission
  - Court of Justice
  - Permanent Representatives’ Committee
  - Specialised Technical Committee
  - Economic, Social and Cultural Council
- AU has 3 financial institutions which are Africa Central Bank, African Investment Bank and African Monetary fund.
- These financial institutions help in implementing economic integration in Africa.
- African Central Bank is mainly focused on promoting international exchange stability, monetary cooperation as well as eliminating foreign exchange restrictions that may affect growth.

- African Central Bank is located in Nigeria.
- African Investment Bank is concerned with promoting investment activities for the members, mobilizing resources for investment projects and providing technical assistance. This bank is located in Libya.

Other important concepts

Customs Union

- Customs union is a trade bloc that is composed of an area with free trade and with a common external tariff.
- In SADC, a group of countries established a customs union with a common tariff and a common external trade policy.
- The establishment of SADC customs union was mainly focused on increasing investment, diversifying industrial development and liberalization of trade in the region.

Common Market

- A common market is a free trade area with no restrictions on the movement of goods and services.
- Two or more countries will agree to remove trade barriers and establish a common tariff as well as non-tariff restrictions for importers.
- The countries may also agree on allowing free movement of capital, labour and services among themselves.
- An example of a common market is COMESA.

Monetary Union

- Monetary union or currency union is composed of two or more countries that agree to share the same currency.
- The countries will aim to achieve macroeconomic convergence, to harmonize exchange rates and to stabilize their economies.

Preferential Trade Agreements (PTA)

- A preferential trade agreement is a trade pact that is made among countries whereby tariffs are reduced for particular products amongst member states.
- It is a trading bloc that gives preferential access to certain products from the member states.
    - A trade bloc is an agreement between governments whereby trade restrictions are reduced or eliminated amongst the member states.
    - These trading blocs encourage regional trading.
    - Examples of trade blocs are North American Free Trade Area (NAFTA) and European Union (EU).
    - The different categories of trade blocs are preferential trade areas, common markets, free trade areas, customs union economic and monetary unions.
- In a preferential trade agreement, the member states will lower tariffs amongst themselves but not with the rest of the world.
- Preferential trade agreement is also known as preferential trade area.
- The formation of PTA can lead to a replacement of costly local production by low cost imports from other members, thus, there is trade creation.
- It also leads to trade diversion. Trade diversion takes place when imports of goods shift from low cost countries to countries with high cost structures.
- A PTA is often among nations that are closely linked and it can be done for specified products only.

Economic growth

1. Explain the meaning of economic growth
2. Identify signs of economic development

Economic growth

- Economic growth is the increase in the total output of the country over a specified period of time.
- Gross Domestic Product means the value of national output.
- National output are goods and services produced within the country.
- Gross Domestic Product is the value of final goods and services produced in the country.
- Thus, an increase in GDP shows economic growth of the economy.
- Economic growth is an expansion of production in the economy.
- When the total production increases from the previous year, there is economic growth.

Measuring economic growth

- Economic growth is measured by the changes in the Gross Domestic Product from one year to another.
- The rate of economic growth is measured on how quickly or slowly output increases over time.
- Economic growth is only measured on final production.
- When measuring economic growth, imports are subtracted because these are goods from other countries.

Economic growth rate

- Economic growth rate is the percentage change in the quantity of goods and services produced from one year to another.
- Economic growth is measured basing on changes in Gross Domestic Product (GDP).
- An increase in Gross Domestic Product is a good indication of economic growth.
- When the economic growth rate is above zero, it means the economy is experiencing positive growth.
- The Formula for calculating growth rate is:current output - previous outputprevious output x 1001

Example 14.1

- In 2015, real output in Zimbabwe grew by 5% over 2014.
- Therefore, year 2015 is the current year,

Year 2014 is the previous year,
5% is the economic growth rate

Negative growth rate

- It is the decrease in the output produced by the economy over a period of time
- Negative growth occurs when output decreases from that of the previous year.
- It is expressed as a negative percentage rate.

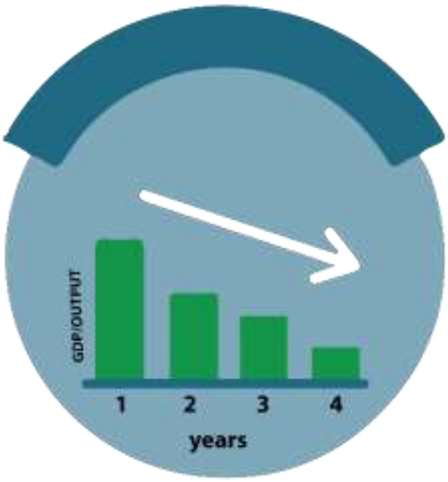


Fig 14.2: Negative Economic growth

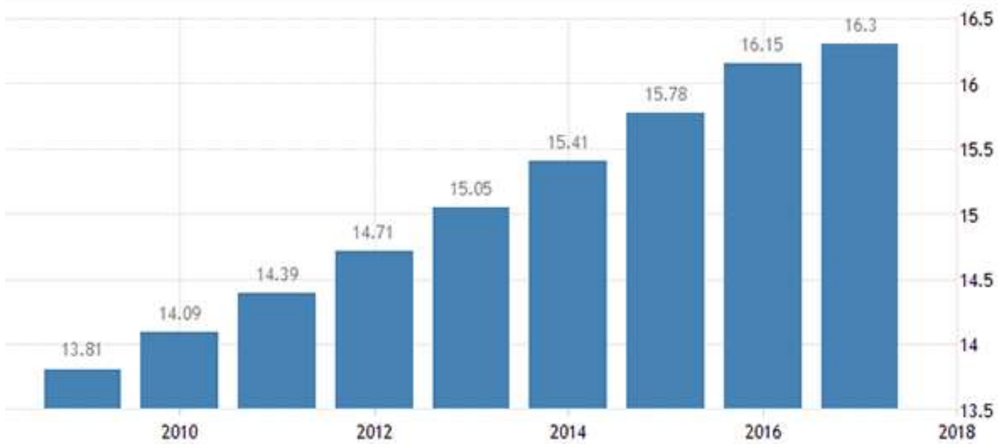
- The diagram above shows the continuous negative trend of economic growth.
- This shows a continuous fall in total output produced in the economy.

A fall in the economic growth rate

- This means the output is rising more slowly than the previous year.
- For example, a fall in growth rate from 5% in 2008 to 2% in 2009, shows a decrease in the real output of an economy.

GDP chart of Zimbabwe from 2007 to 2015

Fig



14.3: Zimbabwe's Gross Domestic Product (GDP)(2007 to 2016)

- The above diagram shows the trend of economic growth in Zimbabwe from 2007 to 2015.
- The economic growth has been measured using Gross Domestic Product (GDP).
- From the figures of GDP shown, we can calculate the economic growth rate per year.

- In 2007, the GDP was 5.29 Billion and fell to 4.42 Billion in 2008. This shows that the amount of output decreased leading to a negative economic growth.
- In 2008, the GDP was 4.42 and increased to 8.16 in 2009, showing a positive economic growth.
- From the chart above, we can calculate the economic growth rate of each year.

Calculating Economic Growth Rate using the information in the chart

Economic growth rate = current output - previous outputprevious output x 1001

Example 14.2

Calculating the economic growth rate of 2008:

Economic growth rate = current output - previous outputprevious output x 1001

= 4.42 -5.295.29 x 1001

= 4.42 -5.295.29 x 1001

Economic growth rate = 16.4%

YEAR	GDP (US BILLION	ECONOMIC GROWTH RATE %
2007	5.29	___
2008	4.42	16.4
2009	8.16	86.6
2010	9.46	15.4
2011	10.96	15.9
2012	12.39	13.0
2013	13.49	8.9
2014	14.2	5.3
2015	14.42	1.5

- The above table shows Zimbabwe's economic growth rate from 2007 to 2015.

Signs of economic growth

- Economic growth means that the output of a nation has increased as compared to the previous year.

Higher employment

- As output increases, it is more likely that there will be higher employment.
- An increase in output results in increased demand for labour, thereby expanding the workforce.

Good living standards

- Increased output leads to the availability of a variety of goods and services, which improves the standard of living of the people.
- The production of more luxury goods such as televisions and fridges improves people's standard of living.

The income per capita increases if the output in the country rises.

- The gross domestic product per capita is obtained by dividing the total output value, measured in common currency, by the total number of people who live in the country.

- The gross domestic product per capita is the average amount of income which each resident of the country could have, if the value of output is shared equally among everyone.
- The higher income per capita is linked to increased standard of living.

Economic growth is associated with an increase in the demand of goods and services.

- If economic activities in the country increase, the spending power of consumers normally rises.
- This is caused by the rise in income of workers.

Economic growth is most likely to be accompanied by improvement in infrastructure.

- As output increases, the government normally collects more revenue through tax which is used for infrastructural development.
- The government may construct more roads, energy plants, communication networks and educational services.

Better environmental management maybe a sign of economic growth.

- When income levels of the people in a country increase, they become more willing to preserve the environment.
- People may need to deal with environmental problems such as pollution, as they have more disposable income.

Economic growth also leads to low rate of inflation and stable prices.

- This is because the existing money supply in the economy chases more goods and services that are produced.

Summary

- Economic growth is the increase in the total output of the country over a specified period of time.
- Gross Domestic Product is the value of final goods and services produced in the country.
- Economic growth is measured by the changes in the Gross Domestic Product from one year to another.
- Economic growth rate = current output - previous output previous output x 1001
- The signs of economic growth include:
    - Reduced unemployment,
    - Good living standards,
    - Low rate of inflation,
    - Increase in output-
    - Stable prices,
    - Increases in infrastructure development, and
    - Increase in demand.

Economic growth

1. Define economic growth,
2. Distinguish between economic growth and development
3. Identify the causes of economic growth and development
4. Explain the causes of economic growth and development.

Economic growth

- Economic growth is the increase in the total output of the country over a specified period of time.

- Economic growth is shown by the change in the gross domestic product, from one period to another.
- Gross Domestic Product measures the total volume of goods and services produced in an economy.
- Economic growth is an expansion of production in the economy.
- When total production increases from the previous year, there is economic growth.
- There are two types of economic growth:
    - Actual economic growth
    - And potential economic growth.

Actual economic growth

- Actual economic growth is an increase in the real Gross Domestic Product from one year to the other.
- This is a change of a country's GDP after adjusting for inflation.
- Actual economic growth occurs as a result of using previously idle resources and reallocation of existing resources to more productive use.

Potential economic growth

- This is an increase in the productive capacity of an economy.
- Potential economic growth is the speed at which an economy can grow.
- This is a rate of increase in inputs used in production which leads to an increase in output.
- This occurs when output is produced using all resources efficiently.
- Potential economic growth is shown by an outward shift of the production possibility curve (PPC).

Economic development

- Countries in the world are at different stages of economic development.
- Economic development is an increase in the welfare of people as a result of economic growth.
- Economic development refers to improvements in a variety of indicators like literacy rates, life expectancy and reduction in poverty rate.
- Most countries aim to achieve sustainable economic growth so that their people have high standard of living.
- Economic development is a qualitative measure that shows change in the welfare of people in an economy.
- Economic development mainly focuses on the following components:
    - economic growth
    - Quality of essential goods produced, including food and shelter.
    - Real income per capita.
    - Improved standard of education and health care.
    - Investment in better infrastructure such as roads and communication systems.
    - High level of economic and social choices.
- Economic development reflects social and economic progress of the economy.
- It requires economic growth to meet these economic and social needs.
- In short, economic development is the progress in the socio-economic activities of the economy.
- In measuring economic development, the following aspects should be considered:
    - Policies that government undertakes to meet broad economic objectives such as:
        - Price stability,
        - Expanded tax rate and
        - Sustainable growth
    - Policies to support infrastructure and services development.

- Policies directed at job creation.

Difference between economic growth and economic development.

ECONOMIC GROWTH	ECONOMIC DEVELOPMENT
Economic growth is an increase in the real output of the country in a particular period of time like one year.	Economic development involves the improvement in living standard and advancement in technology.
Economic growth is one of the features of economic development.	Economic development involves aspects of economic growth and other indicators such as life expectancy.
Economic growth enables an increase in GDP and per capita income.	Economic development enables improvement in the life expectancy rate, infant mortality rate, literacy rate and poverty rate.
Economic growth is measured yearly.	The results of Economic development is observed after a longer period of time.
Economic growth shows the quantity of output produced in a given period of time.	Economic development brings both quantitative (output level) and qualitative (standard of living) changes.

Causes of economic growth

- Economic growth can be positive or negative.

Causes of positive economic growth

- Economic growth can be shown by a shift in the PPC.
- A shift of PPC outwards means that there is increase in output produced in the economy.

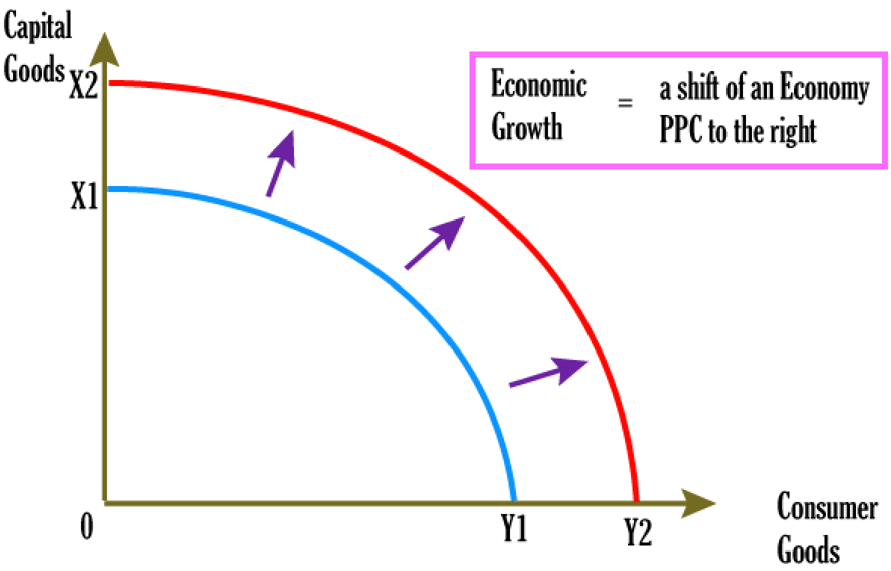


Fig 17.1: Shift of Production Possibility Curve (PPC)

- Fig 17.1 above, a shift of the PPC from Y1 and X1 to Y2 and X2 shows a positive economic growth.
- The outward shift of a PPC occurs when the economy experiences the following:

New technology

- Technological advancement is a major drive of economic growth.

- Advancement in technology increases potential output for all goods and services produced in the economy since new technology is more efficient.

Use of new production methods

- New methods of production can raise the level of output in an economy.
- New production methods can increase productivity using the existing resources.
- For example, more use of computer controlled production methods has improved productivity of many manufacturing companies.

Increasing labour force

- A larger workforce can boost the economic growth of an economy.
- An increase in the size of the working population enables an economy to increase its potential output.
- Improvements in health care can lead to economic growth of an economy because it reduces the days employees will be absent from work.

Discovery of new raw materials

- When the country discovers new key resources, there is an improvement in its ability to produce goods and services.
- The discovery of more natural resources such as oil and mineral deposits helps in increasing the output of an economy.

Reallocation of resources

- The reallocation of resources which are underutilized into full utilization results in increased output in an economy
- Shifting some resources which produce consumer goods and services to producing capital goods increases the productive potential of an economy.

Division of labour and specialization

- Division of labour enables tasks to be done more quickly and efficiently.
- If more tasks are completed, it means more output is produced.
- As workers continue doing the same tasks, efficiency and effectiveness in production improve.

Negative causes of economic growth

- Negative economic growth is a decrease in the output produced by the economy over a period of time.
- Negative growth occurs when output produced is lower than that of the previous year.
- This negative economic growth can be shown by an inward shift of the PPC.
- The following are the causes of negative economic growth:

Resources run out

- If key non-renewable resources are exhausted or depleted, the output in an economy decreases.
- This mainly happens when a country specializes in producing goods from non-renewable resources.

Failure to invest

- The failure of a country to invest in human capital reduces the potential of the country to produce more output in the future.
  - The productivity and quality of human labour depends on the acquisition of new skills and knowledge.
  - If the country does not invest in human capital, the labour in the economy produces less and poor quality products.
- Capital resources like machinery and equipment wear out due to use thereby productivity falls over time.

Natural disasters

- Natural disasters such as drought and volcanic eruptions lead to a reduction in output.
- This shifts the production possibility curve to the left.

Causes of economic development

- The causes of economic growth also affects economic development, since economic growth is the major element of economic development.
- The following are the causes of economic growth which also contribute to economic development:
    - Employment of new technology
    - Reallocation of resources
    - Increasing labour force
    - Political freedom

Social organisation

- Mass participation of individuals in development programs is a pre-condition of accelerating economic development process.
- If people feel that the fruits of economic growth are fairly distributed, they show interest in development activities.

Corruption

- If corruption is rooted out in the administrative systems, economic development increases because most resources benefit many citizens in the country.

Desire to develop

- The rate of economic growth in any country depends on the desire of the people to develop.

Summary

- Economic growth is the increase in the total output of the country over a specified period of time.
- Actual economic growth is an increase in the real Gross Domestic Product from one year to the other.
- Potential economic growth is a rate of increase in inputs used in production which leads to an increase in output.
- Economic development refers to improvements in a variety of indicators like literacy rates, life expectancy and reduction in poverty rate.

The causes of economic growth include:

- New technology
- Use of new production methods
- Increasing labour force
- Discovery of new raw materials
- Reallocation of resources
- Division of labour and specialization

Most of the factors that cause economic growth also cause economic development and include the following:

- Employment of new technology
- Reallocation of resources
- Increasing labour force
- Political freedom
- Social organisation
- Desire to develop

Economic growth and development

1. state indicators of economic growth and development
2. explain the indicators of economic growth and development
3. identify costs and benefits of economic growth and development
4. discuss the costs and benefits

Economic growth and development

- Economic growth is the increase in total output of the country over a specified period of time.
- Economic growth is shown by change in the gross domestic product from one period to another.
- Economic growth leads to economic development.
- Economic development is an increase in the welfare of people as a result of economic growth.
- Economic development refers to improvements in a variety of indicators like literacy rate, life expectancy and reduction in poverty rate.
- The following are the indicators of economic growth and development

Indicators of economic growth and development

- The following are indicators of economic growth and development and living standards in different countries.

Gross domestic product (GDP) per capita

- GDP per capita means average product per person or income per person.
- GDP per capita is a measure of a country's economic output that accounts for number of people within the economy within a given period of time.
- To get GDP per capita we divide the country’s gross domestic product by its total population.
- This is the most common method used to measure and compare the economic growth and development of different countries.
- Usually developed countries tend to have high GDP per capita.
- However, GDP does not take into account economic welfare in a country. This results in biases when making comparisons.
    - GDP does not show how much people can buy with their income.
    - It also does not take into account the access of people to health care and education.

  - GDP per person does not take into account how incomes are distributed among the available populations.
- For example in China, there is a rapid increase in economic growth but more than half of the population have to survive on less than $2 a day.
  - This is caused by a large population.
  - Statistics show that China has four times the number of people as compared to the United States.
- Also, South Arabia has a reasonably high income per capita but most of the wealth in the country is held by less than 3% of the total population.
  - This shows that the country is less developed because most of the people are suffering from poverty.
- Some developed countries have high unequal distribution of income.
- Nine of the world's poorest countries are in Africa. These are Central Africa Republic, Burundi, DRC, Liberia, Tokelau, Malawi, Niger and Mozambique.
  - These countries had GDP per capita which was less than $1300 in 2016.
- In 2017, Zimbabwe had an estimated GDP per capita of $2300.

Life expectancy

- In developed countries, people tend to live longer than those in developing countries.
  - This is because in developed countries people have access to good health care services and better standard of living.
  - Also, people in developing countries suffer from malnutrition, poor sanitation and lack of access to health care services thus their life expectancy is low.
- Currently, in Zimbabwe the life expectancy is 60.4 years according to latest WHO data published in 2017.
  - Life expectancy of males was estimated to be 58.3 years and that of females was 62.5.
  - This makes the average life expectancy of Zimbabweans to be 60.4 years which gives it a world ranking of 160 on life expectancy.
- In most African countries, the average life expectancy is less than 42 years.
- In 2008, almost 65 out of every 1000 children under the age of five died in developing countries whereas in developed countries only 6 out of every 1000 children died below the age of five.

Income per capita

- Income per capita is the amount of money earned per person in a certain area, usually a country.
- It applies to the average income per person for a country, city or region.
- Income per capita can be calculated by dividing the country's national income by the prevailing population.
- However some say, income per capita is not the average income because it includes children and non-working population.
- Most developed countries are associated with high income per capita while developing countries have low income per capita.
- The higher the income per capita, the higher the economic welfare of the citizens.
- Income in most African countries is lower than that of developed countries like USA, Canada and Western Europe.
- Statistics show that countries with low income per capita are poorer than advanced countries.
  - This might be caused by low economic growth and development in under-developed countries.

    - Income per capita in developing countries is about 20% of that of developed countries.
- However, even in developed countries where there is high income per capita, we can also find very poor people and some least developed communities.
- For example, Italy is a developed country but some parts of it are very poor and the average living standard is low.
- The estimated income per capita of Zimbabwe in 2017 was $1 149.72.

Adult literacy rate

- This is another indicator of whether there is economic development in a country or not.
- Economic development of a country can be measured by the adult literacy rate.
- Adult literacy rate is the proportion of the adult population that is able to read and write.
- In 2008, one in every 3 adults living in developed countries was able to read and write.

Ownership of consumer goods

- Ownership of consumer goods such as personal computers, cars and washing machines is lower in developing countries than in developed ones.
- This is due to low incomes and lack of efficiency in production and distribution of consumer goods in under-developed countries.

Access to safe water supply and sanitation

- Usually in developed countries, more people have access to clean and safe water as compared to under-developed countries.

Human poverty index

- In order to compare poverty and economic development of countries, there are two main statistical series which are used to combine measures and indicators.
- These two are the human development index (HDI) and the human poverty index (HPI).

Human development index (HDI)

- HDI combines measures of GDP per capita, life expectancy and years of schooling into one indicator.

Human poverty index (HPI)

- Human poverty index is used to measure and compare the extent of poverty in developed and under-developed economies.
- The following are the indicators of developing economies:
    - High percentage of people who are not able to write and read.
    - High population which is below poverty datum line.
    - Poor access to clean and improved water source.
    - Low employment rate.
- The following are indicators of developed countries.
    - Population above poverty datum line.
    - High percentage of people who can read and write.
    - High employment rate.

Benefits of economic growth and development

- Economic growth brings many benefits to the government, stakeholders, business and all people living in the country.
- The following are advantages of economic growth and development.

Higher living standards

- Economic growth brings economic development in a country which results in high living standards of the citizens.
- Increase in gross national income helps people to get out of extreme poverty.

Creation of employment

- Sustained economic growth creates jobs which contributes to lower unemployment rates in the economy.
- Decrease in unemployment rate reduces income inequality in a country.
- Increase in employment helps people to improve their living standards
- Also, many people can have access to education.

Increase in government revenue

- Higher economic growth will raise tax revenue of the government.
- This is because many firms will be profitable which in turn increases the revenue of the government through tax.
- Reduction in the level of unemployment reduces government spending on unemployment and poverty related welfare benefits.

Increase in investment

- Increase in economic growth attracts domestic and foreign financers to invest in the country thus stimulating new investments.
- Increase in investments creates employment thereby increasing the welfare of the citizens.
- Investments also help people to access quality and cheap products.
- The government also benefits through taxation on investments.
- There is increase in variety of goods and services due to increased investments.
- This can lower government borrowings.

Improved health services

- Economic development brings better health care services as the government build more clinics to cater for citizens in the country.
- This can cause an increase in life expectancy and death rate decreases as well.
- Due to good health, the labour force expands.
- If labour force expands, there will be increased productivity in the economy.

Increased research and development

- Through economic growth and development, firms are able to spend more on research and development.
- Economic growth increases confidence and encourages firms to risk and innovate.

It lowers government borrowing

- Economic growth also lowers government borrowings.
- High production increases tax revenue therefore reducing borrowings.

Costs of economic growth and development

- Usually a rapid growth of an economy can cause undesirable economic and social costs.
- The following are costs which are caused by economic growth and development of an economy.

Environmental effects

- Increase in output can cause negative externalities such as wastes and pollution.
- Rise in production means that pollution on land, air and water increases and also wastes from production processes increase.
- Economic growth can also cause over-utilisation of resources.
- Usually fast growing countries cause long term negative effects on natural resources such as depletion.
- Increase in industrial and household wastes reduces social welfare of people and can lead to market failure.

Inequalities of income and wealth

- Rapid increase in real national income due to economic growth can lead to higher levels of inequality.
- Increase in national income also widens the gap between the poor and the rich.

- Usually unequal distribution of income and other resources can cause some social divisions in the society.
- Many benefits of economic growth would be enjoyed by few groups of individuals.

Higher inflation and higher interest rates

- Increase in disposable income of individuals can cause demand pull-inflation.
- Due to demand pull inflation, the reserve bank decides to raise interest rates to control inflation.

Sustainable development

1. explain meanings of sustainable development
2. initiate a sustainable development project
3. discuss ways of achieving sustainable development

Overview

- Each country has its own specific targets that should be achieved within a specified period of time.
- Some of these goals and targets are universal which means that they apply to all countries around the world.
- These targets are set so that a country can reach them through actions of all sectors.
- These sectors include the government, business, civil society and people within the country.
- Therefore, everyone has a role to play for sustainable development of an economy.
- The concept of sustainable development emerged in the 1960s when environmentalists debated on the impact of economic growth on the environment.

Sustainable development

- Sustainable development is the development of a country that is designed to meet the needs of the present generation without compromising or affecting the ability of future generations to meet their own needs.
- It aims to maintain economic advancement and progress while protecting the long term value of the environment.
- Sustainable development focuses on long term goals of stability of the economy and environment.

- It also provides a framework for the integration of environmental strategies.
- Therefore, one cannot separate environmental sustainability and economic development.
- The main feature of sustainable development is conservation of resources for use by future generations.
- Sustainable development involves concerted efforts towards building an inclusive, sustainable and resilient future for people and earth.
- It tries to minimise the externalities such as environmental degradation.
- This can be achieved through the integration and acknowledgement of the environment, economic and social concern throughout the decision making processes.
    - The government is organised into different ministries and departments for decision making processes.
    - Hence, sustainable development requires the integration of economic, environment and social objectives across these sectors and generations.
- Sustainable development also requires the integration of economic and ecological considerations in decision making processes.
    - The government must make key national, economic and sector specific agencies directly responsible for ensuring that their policies and activities support development which is economically and ecologically sustainable.
- To ensure sustainable development, the government should ensure that environmental costs are minimised wherever possible thus minimising negative externalities.

Five key themes of sustainable development

People

- Sustainable development ensures that all people fulfil their potential in dignity and equity.
- It also tries to ensure that there is a healthy environment for the people.

Planet and environment

- Sustainable development tries to protect the planet so that it cannot be destroyed for the benefit of the future generations.
- The planet is protected through sustainable production and consumption taking urgent action on climate change issues so that it can support the present and future generations.

Prosperity

- Sustainable development ensures that all human beings enjoy prosperous and fulfilling lives and that there is economic, social and technological progress.

Peace

- Sustainable development aims to foster peaceful and inclusive societies which are free from fear and violence.
- There will be no peace in a country if there is no sustainable development.
- Also, there will not be sustainable development if there is no peace in a country.

Partnership

- All individuals in a country should be involved to ensure sustainable development.
- It needs the participation of all countries, all people and all stake holders in order to achieve sustainable development.

Sustainable development initiatives

- These are also called ways or elements to achieve sustainable development in a country.
- It is crucial to harmonise three core elements to ensure sustainable development.
- These elements are:
    - Economic growth
    - Social inclusion
    - Environmental protection

- These core elements for sustainable development are interconnected to each other and are crucial for the well-being of individuals and societies.
- For the economy to achieve sustainable development, these elements should be taken into consideration for the favour of the people.

Fig 17.1: Initiatives For Sustainable Development

Environmental protection

- Environmental sustainability involves decision making and taking actions to protect the natural world.
- It focuses on preserving the capability of the environment to support human life.
- The country should promote proper waste and residual management so that it can achieve sustainable development.
- If wastes are managed properly, the present environment will be clean and safe for the next generation.
- The government should make sure that natural resources are used well to avoid over exploitation for future use.
- Also, the government should carry out programs involving environmental awareness, inculcating environmental ethics and supporting environment management actions.

Economic growth

- Economic growth is the major drive to sustainable development in the economy.
- Sustainable growth is growth in present productivity potential of the economy which does not lead to a fall in the productivity potential of the economy for future generations.
- In order for the economy to achieve sustainable development, it has to maintain a population which is suitable to the available resources.
- The country should maintain productivity of the environment and natural resources.
- The country should use various strategies for optimally employing existing resources so that a responsible and beneficial balance can be achieved over a long time.
- To achieve sustainable development in a country, there should be full employment of human resource, use of technology and investment.
- Economic growth deals with the full utilisation of available resources.
- Industries should use less energy or have to look for new sources of energy to be used in production so that the available sources will be available for the next generation.
    - For example, in Zimbabwe companies are using solar power.
    - This can save coal used to generate electricity hence maintaining sustainable development.
- There should be equitable use of inputs so that there will be no over-exploitation of the available resources.

- Meeting essential needs depends on achieving full economic growth and therefore sustainable development requires economic growth.
- However, high levels of economic activity and widespread poverty can coexist and this can be harmful to the environment.

Social inclusion

- The country should promote access to resources and uphold property rights.
- There should be improvement of institutional capacity to manage sustainable development.
- The government should maintain peace and order in the society.
- The government should also empower people so that they can achieve sustainable development.

Benefits of sustainable development

- Sustainable development involves local people hence they should be provided with rewards, employment, income and education as well.
- It enables firms and business to utilise resources optimally, preventing wastage.
- It helps everyone to be responsible and use resources efficiently.
- Sustainable development goes a long way in reducing major problems being faced by the world like environmental degradation, global warning and economic inequalities.
- It allows next generations to have quality life.
- Development activities will last long thereby increasing the life span of organisations.
- Sustainable development brings appropriate distribution of resources.
- Sustainable development causes economic growth.

Costs of sustainable development

- Sustainable development sometimes causes depletion of resources due to over exploitation.
    - These resources include minerals, animal and plant species.
- There will be over exploitation of renewable resources such as forests, wildlife and fertility.
- Sustainable development results in pollution of the environment.
- It requires research and planning which is costly to the economy.
- Decreasing biodiversity, genetic destruction and degradation are also threats to sustainable development.
- There is loss of ecosystem due to conversion of the natural environment to other human uses.